

**SUPERIOR COURT OF WASHINGTON
KING COUNTY**

SEATTLE VACATION HOME, LLC; and
ANDREW MORRIS,

Plaintiffs,

vs.

CITY OF SEATTLE, et al.,

Defendants.

No. 18-2-15979-2

**PLAINTIFFS' RESPONSE TO
CITY OF SEATTLE'S
SUPPLEMENT TO ITS MOTION
FOR SUMMARY JUDGMENT**

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1 **I. RELIEF REQUESTED**

2 Pursuant to Washington Court Civil Rule 56(b), Plaintiffs Seattle Vacation Home
3 and Andrew Morris move that this Court deny the motion for summary judgment filed
4 by defendant City of Seattle because no rational basis exists to restrict owners of short-
5 term rentals to two units; to treat married couples as one individual for purposes of the
6 two-unit rule; and to allow short-term rentals in some parts of the City while prohibiting
7 them in other, similar areas.

8 **II. INTRODUCTION AND PROCEDURAL HISTORY**

9 Since 2018, Seattle has restricted the number of properties that any individual (or
10 married couple) may offer as short-term rentals (“STRs”). Previously, they could offer
11 an unlimited number of properties as short-term rentals. Now, pursuant to City
12 Ordinance 125490, they may only offer two properties and, if they choose, their own
13 primary residence as short-term rentals. Plaintiffs challenge these restrictions on three
14 grounds: (1) as a violation of Plaintiffs’ right to substantive due process under Article I,
15 Section 3 of the Washington Constitution; (2) as a violation of their federal right to
16 substantive due process under the Fourteenth Amendment; and (3) as a violation of the
17 privileges and immunities clause (Art. I § 12) of the Washington Constitution.

18 On June 21, 2019, the Court heard cross-motions for summary judgment. On
19 July 11, 2019 the Court denied Plaintiffs’ motion¹ and stayed consideration of the City’s
20 motion in order to give Plaintiffs time to develop evidence rebutting the City’s asserted
21 bases for restricting short-term rentals. On August 6, 2019, counsel for Plaintiffs
22 contacted counsel for the City to inform the City that Plaintiffs had retained an expert
23

24 ¹ In so doing, the Court held that the test enunciated in *Presbytery of Seattle v. King*
25 *County*, 114 Wn.2d 320, 787 P.2d 907 (1990), does not control in this case.
26 Specifically, the Court held that the burden prong of *Presbytery* is no longer good law,
27 and that it need not consider the burden of the regulations on Plaintiffs in deciding this
28 case. Plaintiffs do not waive this argument and intend to preserve it for appeal;
 however, since the Court has ruled that it will not consider burden, it is not addressed
 here.

1 witness; to offer to allow the City to depose the expert; and to determine whether the
2 parties could agree on a briefing schedule in light of the Court’s ruling on the cross-
3 motions. On August 27, 2019, counsel for the City, without seeking input from
4 Plaintiffs and without responding to Plaintiffs’ previous offers to depose their witness
5 and set a briefing schedule, contacted the Court to set its renewed motion for a hearing.
6 On August 30, 2019, the City filed its renewed motion. This brief is a response to that
7 renewed motion for summary judgment.

8 **III. COUNTER-STATEMENT OF FACTS**

9 Home-sharing is the rental of one’s property—whether a single room or an entire
10 house—on a short-term basis. Seattle defines a short-term rental as a rental, for pay, of
11 fewer than 30 nights. Seattle, Wash., Mun. Code § 6.600.030.

12 Plaintiff Andrew Morris started conducting short-term rentals in 2015, with one
13 property. *See* Declaration of Andrew Morris filed May 17, 2019 (“Morris Decl.”) ¶ 2.

14 Since then, Andrew and his wife incorporated plaintiff Seattle Vacation Home,
15 LLC. The business has grown to manage 12 properties owned by Andrew (in most cases
16 he is a minority investor together with friends or family), as well as properties that he
17 does not own, but that others entrust Seattle Vacation Home to manage. *Id.* ¶ 3. Seattle
18 Vacation Home lists the properties it manages on multiple digital platforms, including
19 HomeAway, Airbnb, and others. *Id.* ¶ 4. The properties offered by Seattle Vacation
20 Home range from small 1-bedroom apartments to large 8-bedroom single-family homes.
21 *Id.* ¶ 5.

22 Specifically, the short-term rental properties (collectively the “Properties”) that
23 are owned or co-owned by Andrew and are located in Seattle at the following addresses:
24 2606 East Thomas Street, Unit 1; 2606 East Thomas Street, Unit 2; 2606 East Thomas
25 Street, Unit 3; 2606 East Thomas Street, Unit 4; 1728 23rd Avenue; 215A 26th Avenue
26 East; 226B 26th Avenue East; 129A 26th Avenue East; 127A 26th Avenue East; 127B
27 26th Avenue East; 1612 26th Avenue; and, 1116 25th Avenue. *Id.* ¶ 6.

1 The Properties are located within the City of Seattle and are not included in
2 Downtown or First Hill exclusionary zones. *Id.* ¶ 7. Seattle Vacation Home contracts
3 with other local entrepreneurs to maintain and clean the Properties. These entrepreneurs
4 professionally clean every unit after every rental and conduct repairs as necessary. *Id.* ¶
5 8.

6 Over the course of its existence, Seattle Vacation Home has managed
7 approximately 5,300 bookings. The company carefully tracks and responds to any
8 problems with its rentals. Over the course of over 5,300 bookings at the Properties, the
9 police have been summoned only once (by Andrew himself, when a loud party needed to
10 be evicted). Neighbors have complained approximately 10 times over excessive noise;
11 and fewer than 10 complaints have been made regarding any other minor problems like
12 garbage bags being left in the wrong location by renters. *Id.* ¶ 9. The company takes all
13 complaints seriously and works quickly and directly with guests, neighbors, and the City
14 to resolve them. *Id.* ¶ 10. To date, none have related to a serious crime, continuous or
15 repeated noise or other nuisances, or resulted in any fine or prosecution of any sort. *Id.*

16 Seattle Vacation Home is the primary source of income for Andrew and his wife.
17 *Id.* ¶ 11. But on December 11, 2017, Seattle passed sweeping new restrictions on short-
18 term rentals by adopting Ordinance No. 125490, which is the subject of this lawsuit. *Id.*
19 ¶ 12.

20 The new rules are codified at Seattle Municipal Code Chapter 6.600 et seq.
21 Ordinance No. 125490 defines a short-term rental as “a lodging use, that is not a hotel or
22 motel, in which a dwelling unit, or portion thereof, that is offered or provided to a
23 guest(s) by a short-term rental operator for a fee for fewer than 30 consecutive nights.”
24 Seattle, Wash. Mun. Code § 6.600.030.

25 Ordinance No. 125490, which took effect on January 1, 2019, restricts the
26 number of units that a property owner may dedicate to short-term rentals. Under that
27 law, an owner may only rent their primary residence plus two other properties as short-
28 term rentals (the “two-property rule”). *Id.* § 6.600.040.B.1. The restrictions treat

1 married couples as a single person, meaning that Andy and his wife are limited to two
2 properties since they are married, whereas they could own four properties between them
3 if they were not. *Id.* § 6.600.030. The restrictions treat majority owners in a property
4 the same as minority owners. *Id.* Thus, a person who owns only a 1% stake in two
5 different properties would, under the rule, be precluded from owning any more
6 properties for short-term rentals.

7 The penalty for violating the two-property rule is \$500 per day for the first ten
8 days, and \$1,000 per day beyond that. *Id.* § 6.600.110.B.4.a.

9 The two-property rule applies everywhere in the City, with two exceptions. In
10 the Downtown Urban Center and First Hill neighborhoods, existing owners will have all
11 of their short-term rental units grandfathered in, meaning they will not be limited to
12 renting their primary residence plus two units when the Ordinance takes effect. *Id.* §§
13 6.600.040.B.2 & B.3. In other words, if homeowners were renting more than two units
14 prior to September 30, 2017, they can continue to do so—but only if their properties are
15 in the Downtown or First Hill neighborhoods. *Id.*

16 **IV. EVIDENCE RELIED UPON**

17 Plaintiffs' rely on the Declaration of Andrew Morris filed May 17, 2019, the
18 Expert Report of Adrian T. Moore, Ph.D. ("Moore Rpt.") attached as Appendix 1 and
19 supporting articles attached as Appendix 2–4, and the other pleadings and papers on file
20 with the Court in this action.

21 **V. ISSUES**

22 There are two issues before the Court:

- 23 1. Does rational-basis review require the Court to consider the evidence
24 proffered by the parties?
- 25 2. In light of that evidence, do the City's proffered bases for the challenged
26 restrictions survive constitutional scrutiny?

1 **VI. ARGUMENT**

2 **A. The City is wrong about the role of evidence in rational-basis cases.**

3 Courts do not apply the rational basis test purely in the abstract. *Hadix v.*
4 *Johnson*, 230 F.3d 840, 843 (6th Cir. 2000) (“rational basis review is not a rubber
5 stamp.”). Instead, a court facing a rational basis challenge like this one must adjudicate
6 the constitutionality of the challenged law by looking at the evidence and the wider
7 statutory background. “[E]ven in the ordinary equal protection case calling for the most
8 deferential of standards,” courts “insist on knowing the relation between the
9 classification adopted and the object to be attained,” and the answer depends on whether
10 the challenged law is “narrow enough in scope and *grounded in a sufficient factual*
11 *context* for [the Court] to ascertain some relation between the classification and the
12 purpose it serve[s].” *Romer v. Evans*, 517 U.S. 620, 632–33 (1996) (emphasis added).
13 The Court has made clear for 80 plus years that the rational basis test “is a presumption
14 of fact. ... As such it is a *rebuttable* presumption.” *Borden’s Farm Prod. Co. v.*
15 *Baldwin*, 293 U.S. 194, 209 (1934) (emphasis added).

16 The rational basis level of scrutiny is “not a toothless one.” *Matthews v. Lucas*,
17 427 U.S. 495, 510 (1976). While a plaintiff certainly bears the evidentiary burden, the
18 government’s *mere assertion* that a law serves a legitimate purpose is *never* enough to
19 entitle it to judgment, even under the rational basis test. *Craigmiles v. Giles*, 110 F.
20 Supp. 2d 658, 662 (E.D. Tenn. 2000), *aff’d*, 312 F.3d 220 (6th Cir. 2002) (“the mere
21 assertion of a legitimate government interest has never been enough to validate a law.”);
22 *Nunez-Reyes v. Holder*, 646 F.3d 684, 715 (9th Cir. 2011) (Pregerson, C.J., dissenting),
23 *overruled on other grounds, Hernandez-Padilla v. Holder*, 446 F. App’x. 851 (9th Cir.
24 2011) (en banc) (Courts “cannot allow ‘rational basis review’ to serve as a rubber
25 stamp.”)

26 While not requiring an exquisite evidentiary record, a rational basis for a given
27 law must at least be substantiated. *Heller v. Doe*, 509 U.S. 312, 321 (1993) (“even the
28 standard of rationality ... must find some footing in the realities of the subject addressed

1 by the legislation.”). For instance, legislation that is both overinclusive and
2 underinclusive can be struck down under rational basis scrutiny. *See Jimenez v.*
3 *Weinberger*, 417 U.S. 628, 637 (1974). In other cases, a review of the legislative history
4 might reveal that the law in question is not rationally related to a government interest.
5 *Craigmiles*, 312 F.3d at 225–29. And legislation that pursues a government interest in a
6 circuitous and arbitrary way will not survive rational basis scrutiny, particularly when
7 there exists a more direct method of accomplishing that government interest. *City of*
8 *Cleburne, Tex. v. Cleburne Living Ctr.*, 473 U.S. 432, 449–50 (1985) (the Court could
9 not find a reason as to why a classification based on intellectual disability would solve
10 the city’s interest in reducing overcrowding).

11 Plaintiffs may introduce evidence to refute the government’s asserted rationales.
12 *United States v. Carolene Prods. Co.*, 304 U.S. 144, 153–54 (1938) (“Where the
13 existence of a rational basis for legislation whose constitutionality is attacked depends
14 upon facts ... such facts may properly be made the subject of judicial inquiry, and the
15 constitutionality of a statute ... may be challenged by showing to the court that those
16 facts have ceased to exist [or] ... by proof of facts tending to show that the statute ... is
17 without support in reason.” (internal citations omitted)).

18 Likewise, Washington courts do not apply a meaningless, government-always-
19 wins standard to rational basis cases. Even though the test is deferential to the
20 government, the challenging party must still be afforded an opportunity “to show [that
21 the challenged law] is purely arbitrary.” *In re Det. of Thorell*, 149 Wn.2d 724, 749, 72
22 P.3d 708, 721 (2003). This means the Plaintiff may introduce evidence of irrationality
23 by proving facts that negate the government’s proffered justifications.

24 For instance, in *Willoughby v. Dep’t of Labor & Industries of the State of*
25 *Washington*, the Washington Supreme Court rejected *all* of the government’s proffered
26 justifications for denying permanent disability benefits to certain prisoners, but not
27 others, because, in light of the evidence, the government “fail[ed] to provide a rational
28

1 basis for the statutory distinction.” 147 Wn.2d 725, 741, 57 P.3d 611, 619 (2002) (en
2 banc).

3 The Washington Supreme Court has held that a challenging party must be
4 allowed “to show [that a law] is purely arbitrary” in rational basis cases. *Thorell*, 149
5 Wn.2d at 749. That is why the court is sometimes willing to reject *all* of the
6 government’s purported justifications for a law as in *Willoughby*. Federal courts
7 regularly say the same thing. *See, e.g., Craigmiles*, 110 F. Supp. 2d at 662; *Nunez-*
8 *Reyes*, 646 F.3d at 715 (Courts “cannot allow ‘rational basis review’ to serve as a rubber
9 stamp.”). Thus, the question here is whether the City has put forward bases that are both
10 legitimate and actually rationally related to the challenged restrictions. As shown below,
11 it has not.

12 **B. The City has failed to identify any legitimate rational basis for the**
13 **two-unit rule that survives scrutiny.**

14 In its motion for summary judgment, the City identifies four bases for the two-
15 unit rule: lowering housing prices; protecting hotels from competition; maintaining the
16 City’s ability to raise revenue; and preventing nuisances. As shown below, these
17 interests fall into three broad categories: those that are *undermined* by relevant data,
18 those that are *not legitimate*, and those that are *irrelevant*. Accordingly, all of its
19 asserted bases fail to withstand constitutional scrutiny.

20 **1. Short-term rentals do not have a measurable effect on housing**
21 **prices.**

22 The City’s primary argument is that it needs to restrict STRs in order to promote
23 housing affordability in Seattle. City’s Mot. Summ. J. (“MSJ”) at 17–20. But this
24 argument fails the rational basis test for at least two reasons: First, the evidence
25 provided by the City simply does not support its argument that STRs increase housing
26 prices there. Second, studies of housing prices demonstrate that they are a function, not
27 of STRs but of regulation and construction costs; indeed, studies of housing prices do
28 not even consider STRs to be a contributing factor.

1 **a. The evidence cited by the City does not support a link**
2 **between short-term rentals and housing prices in Seattle.**

3 The City cites two articles and one report to support its argument that STRs
4 increase housing prices. The first article was written by Dayne Lee and published in the
5 *Harvard Law & Policy Review*. 10 Harv. L. & Pol’y Rev. 229 (2016). The second
6 article was written by James A. Allen, a student at Brooklyn Law School, and published
7 in the American Bar Association’s *Journal of Affordable Housing and Community*
8 *Development Law*. The City’s other piece of “evidence” is a study from New York City,
9 which concludes that between 2009 and 2016, 9.2% of the total increase in rents in the
10 city was driven by STRs.

11 As explained by Dr. Adrian Moore (Moore Rpt. at 9–11, attached as App. 1), all
12 three studies assume that STRs contribute to a short-term availability shortage on the
13 rental market, and then the City postulates that any *short-term* shock caused by STRs
14 will also lead to a long-term shortage of *long-term* rental units. “Housing supply cannot
15 change much in the short run,” notes Dr. Moore, because construction, permitting,
16 environmental review, and inspections all take time. *Id.* at 9. But this analysis does not
17 apply to *long-term* supply, which is highly flexible based on market demand. The
18 articles cited by the City do not address this at all, assuming instead that housing supply
19 is static, and that if someone removes a unit of potential long-term rentals from the
20 market, there will never be another unit to replace it. As Dr. Moore notes, STRs have
21 not been shown to have *any* effect on long-term housing supply. *Id.* at 18. Instead,
22 long-term supply and cost is driven by governmental land-use decisions and construction
23 costs, as discussed above, and neither of these factors has anything to do with STRs. *Id.*
24 at 12–17.

1 **b. Relevant literature shows that housing prices are driven by**
2 **local land-use regulations and construction costs, not short-**
3 **term rentals.**

4 As shown in the attached report by expert witness Adrian Moore, Ph.D.², housing
5 prices are driven by two things: local-land use regulations and construction costs.
6 Construction costs, which are self-explanatory, account for approximately 10% of local
7 increases in costs. Local land-use regulations account for the remaining 90%. *Id.* at 12.
8 Land-use regulations drive increases in home prices by constraining the supply of
9 available housing, thus causing housing to be under-produced relative to what would be
10 produced without the regulations. *Id.* at 12–17. The chairman of the President’s
11 Council of Economic Advisers, Jason Furman, noted that “after around 1970, more
12 stringent regulations played a much bigger role proportionately, [in housing prices],
13 implying that relaxing zoning constraints could bring house prices more in line with
14 construction costs and reduce the economic rents accruing to landowners.” Jason
15 Furman, *Barriers to Shared Growth: The Case of Land Use Regulation and Economic*
16 *Rents*, The Urban Institute (Nov. 20, 2015) attached as App. 2 at 4. Similarly, Harvard
17 economist Edward Glaeser has observed that high levels of land-use regulation are
18 highly correlated with high housing costs.³ Edward Glaeser, *Reforming Land Use*
19 *Regulations*, Brookings Inst. (Apr. 24 2017) attached as App. 3. *See also*, Elizabeth

20
21 ² Dr. Moore holds a master’s and Ph.D. in economics from the University of California at
22 Irvine. He has performed economic analysis of land use and housing policies at Reason
23 Foundation, a non-profit research organization based in L.A. for the last 22 years. He has
24 supervised and conducted research and published articles on the effects of policies governing
25 housing markets.

26 ³ Indeed, as Dr. Moore explains, if the City were committed to making tangible
27 reductions in housing prices, it could ease its land-use restrictions in order to increase its
28 supply of multi-family housing. As Dr. Moore reports, “most of the problem with lack
 of affordable housing in Seattle and high rents is attributable to decisions by the city that
 raise the cost of housing.” Moore Rpt. at 12. Whatever reasons Seattle may have for not
 increasing the supply of housing in order to reduce its costs, that question is beyond the
 reach of the rational basis test. But what the City may not do is to eliminate the right of
 property owners who are not responsible in any rational sense for those housing costs.

1 Rhodes, *UW Study: Rules Add \$200,000 to Seattle House Price*, Seattle Times (Feb. 14,
2 2008).⁴

3 Tellingly, prominent literature on housing prices does not even consider the effect
4 of STRs on rental prices. For instance, the Harvard Joint Center for Housing Studies
5 issues the “definitive survey of America’s rental housing.” Harvard Joint Center for
6 Housing Studies, *America’s Rental Housing 2017* (2017) attached as App. 4. In its most
7 recent iteration in 2017, the study discusses current challenges to the rental housing
8 market without ever mentioning STRs. If STRs were a driver of increases in rental
9 housing prices, one would expect it to do so. Airbnb was started in 2008 and
10 HomeAway in 2004. Yet the survey has never included STRs as a factor in housing
11 prices. Dr. Moore addresses this absence in his report: “The fact that STRs appear in
12 none [of the leading academic and policy inquiries into the drivers of rental market
13 prices] is a strong indication that neither rental market data nor models of rental market
14 prices show an effect from STRs that is worth mentioning.” Moore Rpt. at 18.

15 Indeed, when Seattle conducted its *own* report about how to promote housing
16 affordability, that report made *no mention at all of STRs*, even though STRs were
17 thriving in the City by that point.⁵ Instead, the report found that the “pace of residential
18 development in Seattle in recent years, although rapid, has not kept up with the pace of
19 population growth, creating increased pressure on housing prices and rent.” This is
20 consistent with the fact that land-use restrictions are the driving cost of housing
21 affordability.

22 This is not a mere dispute about policy, but helps demonstrate the lack of a
23 rational fit between the City’s goals and the means it has chosen. In *Levin v. City &*
24 *County of San Francisco*, 71 F. Supp. 3d 1072, 1085 (N.D. Cal. 2014), the federal

25 ⁴ [https://www.seattletimes.com/business/uw-study-rules-add-200000-to-seattle-house-](https://www.seattletimes.com/business/uw-study-rules-add-200000-to-seattle-house-price/)
26 [price/](https://www.seattletimes.com/business/uw-study-rules-add-200000-to-seattle-house-price/)

27 ⁵ [https://www.seattle.gov/Documents/Departments/OPCD/Demographics/AboutSeattle/20](https://www.seattle.gov/Documents/Departments/OPCD/Demographics/AboutSeattle/2016UnsubsidizedHousingMonitoringReport.pdf)
28 [16UnsubsidizedHousingMonitoringReport.pdf](https://www.seattle.gov/Documents/Departments/OPCD/Demographics/AboutSeattle/2016UnsubsidizedHousingMonitoringReport.pdf)

1 district court found that the city effected a taking of the property owner's land when it
2 forced the owner to pay a monetary penalty for removing property from the housing
3 market. The court noted that the city's purported rationale for imposing the fee was to
4 compensate evicted tenants for increased housing costs, but those housing costs were the
5 fault of the City, not the owner. *Id.* ("Having chosen to regulate only some rents in the
6 manner that it did, the City's rent control scheme results in many tenants, but not all,
7 temporarily enjoying a lower-than-market rent.") This fact helped undermine the City's
8 argument that the withdrawal of rental property was responsible for the increased cost of
9 rent in the City. The withdrawal of a rental property, the court said, had an
10 "infinitesimally small impact" on such costs, yet the ordinance challenged in that case
11 "require[d] an enormous payout untethered in both nature and amount to the social harm
12 actually caused by the property owner's action." *Id.* *Levin* was a takings case, not a due
13 process case, but a similar analysis applies here: STRs have no effect, or an
14 infinitesimally small effect, on housing prices in Seattle—and the Ordinance imposes an
15 economically devastating cost on the Plaintiffs. That is an arbitrary act.

16 **2. Protecting hotels from competition is not a legitimate** 17 **governmental interest.**

18 The City argues that restrictions on short-term rentals are necessary in order to
19 protect the interests of hotels that operate in the City. But the City has no legitimate
20 governmental interest in protecting private industries against legitimate economic
21 competition. Several Federal Circuits have affirmed this principle. *See St. Joseph Abbey*
22 *v. Castille*, 712 F.3d 215, 222 (5th Cir. 2013) ("[N]either precedent nor broader
23 principles suggest that mere economic protection of a particular industry is a legitimate
24 governmental purpose."; *Merrifield v. Lockyer*, 547 F.3d 978, 991, n.15 (9th Cir. 2008)
25 ("[M]ere economic protectionism for the sake of economic protectionism is irrational
26 with respect to determining if a classification survives rational basis review.");
27 *Craigsmiles*, 312 F.3d at 224 ("[P]rotecting a discrete interest group from economic
28 competition is not a legitimate governmental purpose.").

1 Like the Federal Circuits above, Washington state does not recognize
2 protectionism as a legitimate governmental interest. When a law impairs the rights of
3 many while granting beneficial treatment to a select few, that law cannot stand. In
4 *Birkenwald Distributing Co. v. Heublein, Inc.*, 55 Wn. App. 1, 8, 776 P.2d 721, 725
5 (1989), the Washington Legislature passed an Act granting wine and liquor distributors
6 extensive protection from their contractual obligations. *Id.* at 3–4. Under the new law,
7 wine and liquor sellers were to state all reasons for terminating their distributor
8 contracts, with at least 60 days prior written notice. *Id.* This altered Heublein’s original
9 contract which allowed him to terminate his distributor at-will. *Id.* Heublein brought an
10 action under the Washington state Contracts Clause to vindicate his contractual right to
11 at-will termination. *Id.*

12 The Court found that Heublein’s right to at-will termination could only be
13 impaired if the Act were “justified by a broad societal purpose.” *Id.* at 8. “The
14 requirement of a legitimate public purpose guarantees that the State is exercising its
15 police power, rather than providing a benefit to special interests.” *Id.* at 9 (citation
16 omitted). “When an impairment is sufficiently severe, and there is no showing of an
17 important general social problem, the presumption favoring legislative judgment as to
18 the necessity and reasonableness of a particular measure, simply cannot stand.” *Id.*
19 (internal quotation marks and citation omitted).

20 The Act in *Birkenwald* granted wine distributors contractual rights in excess of
21 the market practice of at-will termination. Distributors were insulated from their
22 competition through protectionist legislation. Here, the City wishes to grant huge hotel
23 chains primacy in the short-term stay market, while severely limiting the rights of those
24 who wish to rent out their homes. Like in *Birkenwald*, it is impossible to “conclude the
25 Act is a legitimate exercise of police power rather than an exercise in special interest
26 legislation.” *Id.* Like the Court found in *Birkenwald*, there is no “broad societal
27 purpose” behind favoring one group of companies over another. In June 2019, the
28 Supreme Court recognized a “broad societal purpose” in “eradicating barriers to the

1 equal treatment of all citizens in the commercial marketplace.” *State v. Arlene’s*
2 *Flowers, Inc.*, 193 Wn.2d 469, 532 ¶ 107, 441 P.3d 1203, 1236 (2019).

3 More than 100 years ago, Washington recognized a legitimate governmental
4 interest in promoting lawful competition. “Under an economic system founded upon
5 competition, every general restriction—that is, every restriction covering all or a
6 controlling fraction of a given commodity—is essentially unreasonable.” *Fisher*
7 *Flouring Mills Co. v. Swanson*, 76 Wn. 649, 654, 137 P. 144, 146 (1913). Fisher sold
8 flour to his distributor on the condition that his distributor resell the flour at a fixed
9 price. *Id.* at 650. The distributor alleged that this was a contract in restraint of trade. *Id.*
10 at 651. The Washington Supreme Court found that the contract was valid solely because
11 a contract to fix the price of one brand of flour is very different from fixing the price of
12 all flour. *Id.* at 669. “The one means destruction of all competition and of all incentive
13 to increased excellence. The other means heightened competition and intensified
14 incentive to increased excellence.” *Id.* The Court resolved this case in the way that best
15 promoted lawful competition. The Court reasoned that “[t]he public interest can only be
16 secured by a prohibition of all contracts having a tendency to create or foster a
17 monopoly by a control of any given market.” *Id.* at 654. A restraint “however slight,
18 within a given market, is essentially invalid because it must either result from, or tend to
19 produce, a monopoly.” *Id.*

20 The City’s restraints on STRs likewise tend to produce a monopoly and are not
21 slight in the least. Giving hotels the right to occupy the entire short-term stay market
22 serves no identifiable *public* interest—it serves only *private* interests. The City’s
23 scheme is one step removed from a government-created monopoly.

24 **3. Seattle derives significant revenue from short-term rentals, and**
25 **Plaintiffs do not challenge its ability to do so.**

26 In its motion for summary judgment, the City lists “depriving local government
27 of a source of revenue” as a harm that arises from STRs. City’s Mot. For Summ. J. at 3.
28 However, far from being deprived of anything, Seattle derives *substantial* revenue from

STRs and their operators. A 15.6% tax rate applies to stays of fewer than 30 days, Wash. Admin. Code 458-20-166(7),⁶ and a business and operations tax of 0.222% applies to operators, Wash. Admin. Code 458-20-166(4)(a). Additionally, the City now charges \$75 per license. Seattle, Wash., Municipal Code § 6.600.090(A)-(B). And City-mandated inspections cost \$175 per unit. Seattle, Wash., Municipal Code § 22.900H.060. It is clear that Seattle can and does derive significant revenue from short-term rentals, at rates thus-far unchallenged by Plaintiffs or anyone else. Accordingly, “depriving local government of a source of revenue” cannot be a rational basis that the Court can consider when evaluating the City’s motion for summary judgment. Indeed, the City would receive *more* revenue without the restrictions than it does with them.

4. Plaintiffs do not challenge Seattle’s right to prohibit nuisances at short-term rentals, which it can do using a bevy of existing laws.

Existing city code allows Seattle to regulate nuisances on private property, regardless of whether or not that property is used as a short-term rental. The Seattle Municipal Code prohibits public nuisances like “excessive” and “unreasonable” noise,⁷ illegal vehicle or pedestrian traffic,⁸ dangerous pets,⁹ the accumulation of litter at vacant homes,¹⁰ or noxious odors caused by dysfunctional sewers¹¹ or malfunctioning drainage systems.¹² An entire chapter of the Municipal Code is dedicated to regulating “Chronic Nuisance Properties.”¹³ Given the plethora of nuisance regulations, it is difficult to see

⁶ For the Seattle-specific percentage, see Wash. State Dep’t of Revenue, King County Convention and Trade Center Tax Reporting Change (effective January 1, 2019) https://dor.wa.gov/sites/default/files/legacy/Docs/Pubs/SpecialNotices/2019/2019_Jan_KingCo.pdf.

⁷ Seattle, Wash., Municipal Code § 25.08.

⁸ Seattle, Wash., Municipal Code §§ 10.09.010(5)(c)(5), 11.50, 11.72.

⁹ Seattle, Wash., Municipal Code § 9.25.092.

¹⁰ Seattle, Wash., Municipal Code § 22.206.200(F)(5).

¹¹ Seattle, Wash., Municipal Code § 21.16

¹² Seattle, Wash., Municipal Code § 22.807.090

¹³ Seattle, Wash., Municipal Code § 10.09. If the Chief of Police determines a property is a “chronic nuisance property” (a property with at least three “nuisance activities,” such as drug use or parking violations), the Chief of Police may, after appropriate notice to

1 how Seattle can argue the city cannot appropriately react to the alleged nuisances caused
2 by some short-term rentals.

3
4 Seattle is more than able to protect its citizens from public nuisance complaints
5 by enforcing current city codes. For example, Seattle's existing "Noise Control"
6 ordinance protects citizens from "excessive noises."¹⁴ A "public nuisance noise" is an
7 "unreasonable sound which either annoys, injures, interferes with or endangers the
8 comfort, repose, health or safety of an entire community or neighborhood."¹⁵ The
9 statute contains an extensive list of noises which are "unreasonable."¹⁶ The statute also
10 includes measurable, objective standards for sound-measuring instruments,¹⁷
11 demonstrating the city's capability of dealing with noise complaints. If a noise is
12 "unreasonable," the city issues a citation and imposes fines on the property owners.¹⁸

13 Existing city code is more than sufficient to respond to noise complaints, whether
14 these complaints are about the neighbor's garage-rock band or the short-term renters
15 across the street.¹⁹ If a neighbor complains about a loud party at the house next door,
16 Seattle police are able under existing ordinances to investigate whether the noise is
17 unreasonable, "loud or raucous, and frequent, repetitive, or continuous,"²⁰ and can write
18 the property owners a citation, applying the relevant penalties to the property owners,

19 the owner, file an action to abate the public nuisance. Seattle, Wash., Municipal Code §
20 10.09.030.

21 ¹⁴ Seattle, Wash., Municipal Code § 25.08.010.

22 ¹⁵ Seattle, Wash., Municipal Code § 25.08.280.

23 ¹⁶ Seattle, Wash., Municipal Code § 25.08-500(A)-(F).

24 ¹⁷ Seattle, Wash., Municipal Code § 25.08.680. Unreasonable noises are measured in a
25 unit called a "leq", or the "constant sound level in a given time period that conveys the
26 same sound energy as the actual time-varying A-weighted sound." Seattle, Wash.,
27 Municipal Code § 25.08.160.

28 ¹⁸ Seattle, Wash., Municipal Code § 25.08.960.

¹⁹ Additionally, further restrictions on curfew or other regulations on short-term rental
properties are unnecessary. Amplified noise which could be heard in another house is
already prohibited between 10:00 PM and 7:00 AM. Seattle, Wash., Municipal Code §
25.08.501.

²⁰ Seattle, Wash., Municipal Code § 25.08.500(D).

1 whether or not the unreasonable noise was caused by inconsiderate renters or teenagers
2 living across the street.²¹ Not only is Seattle’s current city code capable of regulating
3 unreasonable noise, but Seattle’s authority to enforce these provisions does not change
4 when a property is used as a short-term rental.

5 **C. The married-couples rule violates equal protection.**

6 The City makes no serious effort to defend its rule that treats married couples as
7 one individual for purposes of the number of homes they may own. Seattle, Wash.,
8 Mun. Code § 6.600.030. This rule presents Andy Morris and his wife with a stark
9 choice: either remain married and be limited to conducting STRs from two of their
10 homes; or divorce and conduct STRs from four homes total. The only interest identified
11 by the City is “preventing [married individuals] ... from essentially double-dipping.”
12 MSJ at 22. But it is completely unclear what “double-dipping” is, or what interest the
13 government may have in preventing it. Laws that treat married couples differently from
14 other individuals do receive heightened scrutiny in Washington. *See, e.g., Andersen v.*
15 *King Cnty.*, 158 Wn.2d 1, 67 ¶ 160, 138 P.3d 963, 998 (2006), *abrogated on other*
16 *grounds by Obergefell v. Hodges*, 135 S. Ct. 2584 (2015). Even under rational-basis
17 review, the law “must constitute a rational means of furthering a legitimate government
18 purpose.” *Nielsen v. Wash. State Dep’t of Licensing*, 177 Wn. App. 45, 56 ¶ 18, 309
19 P.3d 1221, 1227 (2013). The City provides no clues as to how Plaintiffs or the Court
20 should determine what is meant by “preventing ... double-dipping” or how such an
21 interest could possibly be legitimate. Accordingly, because the City has failed to
22 identify a *legitimate* interest served by the restriction, it cannot survive constitutional
23 scrutiny.

24 Instead of discussing the reasons why married couples should be treated
25 differently than two single individuals, the City spends this portion of its motion arguing
26 about whether the fundamental right to marry is implicated by its restriction. MSJ at 16–

27
28 ²¹ Seattle, Wash., Municipal Code § 25.08.960.

1 18. But this argument completely misses the mark. Plaintiffs do not invoke their
2 fundamental right to marry, nor claim that the ordinance violates it. Indeed, their
3 argument is not premised on whether someone has a right to get married. Their
4 argument is premised on the fact that Seattle has no reason to treat married couples
5 differently, and the City has done nothing to demonstrate any need for the married-
6 couple rule.

7 **D. The First Hill carve-out violates equal protection.**

8 Similarly, with regard to the grandfathering of the First Hill neighborhood, the
9 City has not identified a legitimate interest of the disparate treatment. Instead, it admits
10 that First Hill was grandfathered *only* in order to eliminate a group of vocal opponents to
11 its legislation. MSJ at 21 (“the First Hill ‘grandfathering’ provision served a legitimate
12 interest in removing an obstacle to enacting the Ordinance”). But the City’s chosen
13 cases do not support the proposition that eliminating opposition to legislation is *in itself*
14 a basis for treating two groups differently for equal protection purposes. On the
15 contrary, that is categorically barred by the rational basis test. *Fowler Packing Co. v.*
16 *Lanier*, 844 F.3d 809, 815–16 (9th Cir. 2016).

17 In *Fowler Packing*, the Plaintiffs challenged the constitutionality of a statute
18 regarding overtime pay. The statute had been designed to create exemptions for
19 particular entities whose political opposition would have ensured the statute would not
20 pass. *Id.* at 815. The court found that this violated the rational basis test. “Although we
21 defer to legislatures” under the test, the court said, “legislatures may not draw lines for
22 the purpose of arbitrarily excluding individuals,” and because the statutory exemptions
23 “can only be explained as a concession ... in exchange for [the entity’s] support for [the
24 bill], [that exemption] does not reasonably further [the statute’s] suggested justification.”
25 *Id.* at 815.

26 *Fowler* relied on *Merrifield*, *supra*, for the proposition that a statute enacted for
27 one purpose, that includes exceptions that contradict that purpose, cannot satisfy rational
28 basis scrutiny. “We cannot simultaneously uphold the licensing requirement under due

1 process based on one rationale,” said the *Merrifield* court, “and then uphold [the]
2 exclusion from the exemption based on a completely contradictory rationale.” 547 F.3d
3 at 991. Here, the First Hill carve-out fails for the same reason. The City’s concession
4 that the carve-out was created solely to obtain support for the Ordinance categorically
5 conflicts with *Fowler*, and the fact that the City would prohibit STRs purportedly to
6 combat high housing prices, but exempt STRs in one area “in connection with a
7 rationale so weak that it undercuts the principle of non-contradiction, fails to meet the
8 relatively easy standard of rational basis review.” *Id.*

9 The City relies on *Lundeen v. Canadian Pacific R. Co.*, 532 F.3d 682 (8th Cir.
10 2008), but the quote that the City cites is not referring to an equal protection challenge at
11 all. It was about retroactive legislation, and whether a legislature could extinguish a due
12 process challenge by retroactively amending a law in order to address a legitimate
13 governmental interest. *Id.* at 690. *Lundeen* never held that carving out a certain group—
14 as the City did with First Hill—for political reasons is *in itself* a legitimate purpose.
15 Likewise, in *Continental Coal, Inc. v. Cunningham*, 553 F. Supp. 2d 1273, 1279 n.2 (D.
16 Kan. 2008), also cited by the City, the holding was *not* that the “local board of
17 commissioners was not irrational when it treated one party in one way to settle a lawsuit,
18 but did not accord that same treatment to the plaintiff.” MSJ at 21. Rather, the Kansas
19 district court held that there were other facts that might justify the disparate treatment,
20 which the plaintiff did not address. Finally, the City’s third case is *Miles v. Idaho Power*
21 *Co.*, 778 P.2d 757, 768 (Idaho 1989). But that case did not hold that preventing
22 litigation is *ipso facto* a legitimate governmental interest. Rather, the Idaho Supreme
23 Court held that legislation was legitimate because it “settle[d] a major and long-standing
24 dispute over a significant volume of water.” *Id.* at 768. This is a far cry from the
25 meaning the City would like to attribute to the case.

26 As the U.S. Supreme Court has held, “[f]ear of litigation alone cannot justify”
27 granting special privileges to one class at the expense of another. *Ricci v. DeStefano*,
28 557 U.S. 557, 592 (2009). The City has therefore failed to identify a legitimate

1 justification for grandfathering the First Hill neighborhood and that act, accordingly,
2 violates Plaintiffs equal protection rights.

3 **VII. CONCLUSION AND REQUEST FOR RELIEF**

4 Seattle's restrictions on short-term rentals harm responsible operators like the
5 Plaintiffs, while serving no countervailing legitimate governmental purpose. As shown
6 above, the restrictions do not promote affordable housing in Seattle. Plaintiffs do not
7 challenge the City's right to receive revenues from STRs, as it currently does. And to
8 the extent that the City needs to protect neighborhoods from nuisances, it already has all
9 the tools it needs to do so. The rest of the City's asserted interests—protecting hotels,
10 preventing "double dipping," and reducing its litigation exposure—are simply not
11 legitimate. Accordingly, the City's motion for summary judgment should be denied.

12 *I certify that this memorandum was prepared using MS Word 2016 and that this*
13 *memorandum contains 6,340 words, in compliance with the Local Civil Rules.*

14 DATED this 19th day of September, 2019.

15
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1 **CERTIFICATE OF SERVICE**

2 I certify that I electronically filed Plaintiffs' Response to City of Seattle's
3 Supplement to Motion for Summary Judgment with the Clerk of the Court using the
4 ECR system.

5 I also certify that on this date, I sent a copy of this document by email to the
6 following parties.

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15

16 DATED this 19th day of September, 2019,

17 /s/ Kris Schlott
18 Kris Schlott, Paralegal
19
20
21
22
23
24
25
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28

Expert Report of Adrian T. Moore, Ph.D.

1. Opinions to be expressed:

- a. The studies shared by defendant are few, mostly rely on New York City data—which may not be representative—and find very small effects of home sharing on rents.
- b. Seattle has long suffered a shortage of affordable housing with no evidence the problem is worse since the advent of home sharing.
- c. An extensive literature finds that housing price increases beyond construction costs (which are stable) are driven predominantly—90% by best estimate—by local land use and housing regulations.
- d. City of Seattle has many policy options to address land use and housing regulations that could reduce housing costs and rents. Housing markets are dynamic if not fast-moving and will adapt to the technology change of home sharing if allowed to.

2. Basis for opinions to be expressed:

The economic theories and literature on housing supply and regulation have been part of my career's work with state and local jurisdictions on affordable housing issues. I have 22 years of experience analyzing housing markets and regulations, including testifying before local and state government bodies on their effects.

In preparing these opinions I reviewed the most important and the most recent academic literature on licensing of firms and regulations concerning licensing and market entry, including (in order cited):

Dayne Lee, "How Airbnb Short-Term Rentals Exacerbate Los Angeles's Affordable Housing Crisis: Analysis and Policy Recommendations," *Harvard Law & Policy Review*, Vol. 10, 2016, pp.229-253.

James A. Allen, "Disrupting Affordable Housing: Regulating Airbnb and Other Short-Term Rental Hosting in New York City," *Journal of Affordable Housing and Community Development Law*, 2017, v26. 151-92.

Office of the New York City Comptroller Scott M. Stringer, *The Impact of Airbnb on NYC Rents*, April 2018.

Kyle Barront, Edward Kung, and Davide Proserpio, “The Sharing Economy and Housing Affordability: Evidence from Airbnb,” Available at Social Science Research Network, April 1, 2018.

Morgan Stanley, “Global Insight: Who Will Airbnb Hurt More—Hotels or OTAs?,” November 15, 2015.

Daniel Guttentag, Steven Smith, Luke Potwarka, and Mark Havitz, “Why Tourists Choose Airbnb: A Motivation-Based Segmentation Study,” *Journal of Travel Research*, 2018, 57(3), pp.342–359 found that over 80% of Airbnb users are on leisure travel.

City of Seattle Office of Housing and Office of Planning & Community Development, *2016 Monitoring Report: Affordability of Unsubsidized Rental Housing in Seattle*, 2016.

Geoff Spelman, “How the heck did we get here? A history of affordable housing in Seattle,” *Crosscut*, June 4, 2014.

Seattle City Council, *Creating Affordable Housing with a Linkage Fee*.

Mike Eliason, “This is How You Slow-Walk Into a Housing Shortage,” *Sightline*, 2018.

Up for Growth National Coalition, Holland Government Affairs, ECONorthwest, *Housing Underproduction in the U.S.: Economic, Fiscal and Environmental Impacts of Enabling Transit-Oriented Smart Growth to Address America’s Housing Affordability Challenge*, 2018.

William A. Fischel, *Do Growth Controls Matter? A Review of the Empirical Evidence on the Effectiveness and Efficiency of Local Government Land Use Regulation*, Lincoln Institute of Land Policy, 1990.

Harvard Joint Center for Housing Studies, *America’s Rental Housing: Expanding Options for Diverse and Growing Demand*, 2015.

Jason Furman, “Barriers to Shared Growth: The Case of Land Use Regulation and Economic Rents,” The Urban Institute, November 20, 2015.

Christopher J. Mayer and C. Tsurriel Somerville, “Land Use Regulation and New Construction,” *Regional Science and Urban Economics*, 2000 30, (6), pp.639-662.

John M. Quigley and Steven Raphael, “Regulation and the High Cost of Housing in California,” *The American Economic Review*, 2005, 95 (2), pp.323–328.

Edward L. Glaeser and Bryce A. Ward, “The Causes and Consequences of Land Use Regulation: Evidence from Greater Boston,” *Journal of Urban Economics*, 2009, 65, pp.265-278.

Vicki Beena, Ingrid Gould Ellenb and Katherine O’Reganb, “Supply Skepticism: Housing Supply and Affordability,” *Housing Policy Debate*, 2019, 29, #1, pp.25–40.

Edward L. Glaeser and Joseph Gyourko, “The Impact of Building Restrictions on Housing Affordability,” *FRBNY Economic Policy Review*, June 2003.

Edward L. Glaeser, “Reforming Land Use Regulations,” Brookings Institution, April 2017.

Edward L. Glaeser, Joseph Gyourko, and Raven Saks, “Why is Manhattan so expensive? Regulation and the rise in housing prices,” *The Journal of Law and Economics*, 2005, 48, no. 2, pp. 331-369.

Keith R. Ihlanfeldt, “The Effect of Land Use Regulation on Housing and Land Prices,” *Journal of Urban Economics*, 2007, 61.3, pp.420-435.

Adam Millsap, Samuel Staley, and Vittorio Nastasi, *Assessing the Effects of Local Impact Fees and Land-use Regulations on Workforce Housing in Florida*, James Madison Institute, 2018.

Harvard Joint Center for Housing Studies, *America’s Rental Housing 2017*, 2017.

Whitney Airgood-Obrycki & Jennifer Molinsky, *Estimating the Gap in Affordable and Available Rental Units for Families*, Harvard Joint Center for Housing Studies, April 2019.

Andrew Aurand, Abby Cooper, Dan Emmanuel, Ikra Rafi, and Diane Yentel, *Out of Reach 2019*, National Low Income Housing Coalition, 2019.

Sandra J. Newman, “Affordable Rental Housing Policy,” *Housing Policy Debate*, 2019, 29, 1, pp.22–24.

Rent.com, *2015 Rental Market Report*.

RentCafe, *Apartment Market Report July 2019*.

Andrea Riquier, “Still too damn high: how can we address rising rents?,” *MarketWatch*, Apr 11, 2019.

Catharine Smith, “3 Reasons Why Your Rent Is So High,” *Huffington Post*, June 26, 2019.

Christina Sandefur, “Life, Liberty, and the Pursuit of Home-Sharing,” *Regulation*, Fall 2016, 39(3), pp.12-15.

3. Qualifications

I hold a master’s and Ph.D. in economics from the University of California at Irvine. I have performed economic analysis of land use and housing policies at Reason Foundation, a non-profit research organization based in Los Angeles, for the last 22 years, the last 17 of which as vice-president in charge of the research division.

I have served on local, state, and federal advisory commissions on regulatory and economic policy issues, and published many reports and articles in professional, trade, academic and popular magazines on regulatory and economic issues.

In particular, I have supervised and conducted research and published articles on the effects of policies governing housing markets.

3.1. Publications Authored Within the Preceding 15 Years

A Legislative Guide to Competitive Sourcing in the States (and Elsewhere), with Geoffrey F. Segal and Rebecca Bricken, National Federation of Independent Businesses, July 2005.

Offshoring and Public Fear: Assessing the Real Threat to Jobs, with Ted Balaker, Reason Foundation, May 2005.

Rebuilding After Katrina: Policy Strategies for Recovery, with Lisa Snell, and Geoffrey Segal, Reason Foundation, October 2005.

Addressing California’s Transportation Needs, with Ted Balaker, George Passantino, Robert W. Poole, Jr., Adam Summers, and Lanlan Wang, Reason Foundation, September 2006.

Undermining the Future: Problems with November’s Bond Initiatives, and Alternatives, with George Passantino and Adam B. Summers, September 2006, Reason Foundation, September 2006.

The Bond Propositions on California’s November Ballot: Where Would the Money Be Spent?, Reason Foundation, September 2006.

The Emerging Paradigm: Financing and Managing Pennsylvania’s Transportation Infrastructure and Mass Transit, with Geoffrey Segal and Matthew Brouillette, Commonwealth Foundation, March 2007.

The California High-Speed Rail Proposal: A Due Diligence Report, with Wendell Cox and Joseph Vranich, Reason Foundation, September 2008.

Ten Principles of Privatization, with Len Gilroy, Reason Foundation, July 2010.

Restoring Trust in the Highway Trust Fund, with Robert W. Poole, Reason Foundation, August, 2010.

19th Annual Highway Report: The Performance of State Highway Systems (1984-2008), with David T. Hartgen, Ravi K. Karanam and M. Gregory Fields, Reason Foundation, September 2010.

Corrections 2.0: A Proposal to Create a Continuum of Care in Corrections through Public-Private Partnerships, with Leonard Gilroy, Reason Foundation, January 2011.

Reducing Greenhouse Gas Emissions from Automobiles, with Wendell Cox, Reason Foundation, November 2011.

Impacts of Transportation Policies on Greenhouse Gas Emissions in U.S. Regions, with David T. Hartgen and M. Gregory Fields, Reason Foundation, Nov. 2011.

Reducing Traffic Congestion & Increasing Mobility in Chicago, with Samuel Staley, Reason Foundation, July 2012.

The XpressWest High-Speed Rail Line from Victorville to Las Vegas: A Taxpayer Risk Analysis, with Wendell Cox, Reason Foundation, August 2012.

California Voters' Guide: November 2012 Ballot Propositions, Reason Foundation, October 2012.

California High-Speed Rail: An Updated Due Diligence Report, with Joseph Vranich and Wendell Cox, Reason Foundation, April 2013.

Savings for Fresno: The Role of Privatization, with Leonard Gilroy, Reason Foundation, May 2013.

20th Annual Highway Report on the Performance of State Highway Systems, with David Hartgen, Gregory Fields, and Elizabeth San José, Reason Foundation, July 2013.

Still A Loser: The Tampa to Orlando High-Speed Rail Proposal, with Wendell Cox, Reason Foundation, December 2013.

Pension Reform Handbook: A Starter Guide for Reformers, with Lance Christensen, Reason Foundation, July 2014.

Occupational Licensing Kills Jobs, with Matthew Laird and Samuel Staley, February 2016.

Urban Containment: The Social and Economic Consequences of Limiting Housing and Travel Options, with Wendell Cox, March 2016.

The Changing Workplace and the New Self-Employed Economy, with Teri Moore, May 2018.

Cannabis Legalization and Juvenile Access, May 2018.

A Common Sense Approach to Marijuana-Impaired Driving, with Teri Moore, January 2019.

The Link Between Home Sharing and Long-Term Rental Supply Is Weak and Small, Overwhelmed by Other Policy Decisions

1. Summary

Defendant argues that studies indicate that home sharing reduces affordable long-term rental supply.

I argue that:

- a. The studies cited by defendant to justify STR's effects on long-term rental markets are poor and the only empirical one is an analysis in New York City—which may not be representative, and which at any rate finds a small effect. Census data clearly show the scale and scope of STRs in the housing market in Seattle is tiny.
- b. Seattle has long suffered a shortage of affordable housing with no evidence the problem is worse since the advent of STRs.
- c. An extensive literature finds that housing price increases beyond construction costs (which are stable) are driven predominantly—90% by best estimate—by local land use and housing regulations.
- d. City of Seattle has many policy options to address land use and housing regulations that could reduce housing costs and rents. Housing markets are dynamic if not fast moving and will adapt to the technology change of home sharing if allowed to.

2. City of Seattle's Argument

City of Seattle, in its Motion for Summary Judgment (June 2019) argues “STRs exacerbate affordable housing shortages by removing full-time dwelling units from the market and reducing the housing supply.”

To support this statement, defendant points to:

- A 2016 article that points to correlation between increasing listings of Airbnb and lower vacancy rate of apartments in Los Angeles. It argues that, unlike many other commodities, a shortage of housing supply cannot be quickly resolved with new construction, so rapid growth of short-term rentals like Airbnb constitutes a supply shock to the rental housing market.¹

¹ Dayne Lee, “How Airbnb Short-Term Rentals Exacerbate Los Angeles’s Affordable Housing Crisis: Analysis and Policy Recommendations,” *Harvard Law & Policy Review*, Vol. 10, 2016, pp.229-253.

- A 2017 article that argues “short-term rental units are important to address because they have the direct potential of further decreasing the rental vacancy rate.”²
- A 2018 report by the New York City comptroller that says of Airbnb, “the trendy replacement for hotels and hostels in effect removes housing units from the overall supply.” It finds that between 2009 and 2016 rental rates rose dramatically in most neighborhoods of New York City and its empirical analysis attributes 9.2% of the rental rate increase to Airbnb.³

Defendant goes on to argue that STR’s affordable housing impact in Seattle is of particular concern due to STR growth, finding:

- *As of August 2017, Airbnb listed 4,829 whole units (ones that could be used for long-term housing), accounting for 69 percent of its Seattle listings.*
- *Hosts managing multiple units are growing more quickly than those managing only one unit, with multiple-unit hosts operating 56 percent of all units.*
- *Based on those trends, one analysis predicted at least 1,000 – 1,600 long-term housing units in Seattle could be converted or built as short-term rentals from 2016 through 2019.*
- *Areas where households are at high risk of displacement have high or steady growth in STR whole-unit Airbnb listings, raising the prospect of speculative STR investment in gentrifying neighborhoods and threatening the stability of immigrant, refugee, and minority communities at risk of displacement.*

3. Reasons to Doubt the Linkage of Home Sharing and Affordable Housing Supply and the Appropriate Degree of Policy Response

In the presence of economic and population growth such as Seattle has experienced for decades, the main policy space influencing housing prices are those that affect supply. If housing supply is allowed to fully meet demand, housing prices will rise only commensurate with construction costs.

² James A. Allen, “Disrupting Affordable Housing: Regulating Airbnb and Other Short-Term Rental Hosting in New York City,” *Journal of Affordable Housing and Community Development Law*, 2017, v26. pp.151-92.

³ Office of the New York City Comptroller Scott M. Stringer, *The Impact of Airbnb on NYC Rents*, April 2018.

Housing supply cannot change much in the short run—construction takes time, as does permitting, environmental review, inspections, etc. Though there is almost always a certain amount of housing units that owners have not made available in the market, which can be brought to market more quickly than new construction if conditions change. The argument that property owners shifting housing units from long-term rentals to home sharing replaces the supply of long-term rental housing with the short- to medium-term seems to make internal sense, but the key questions are:

- Does defendant provide adequate evidence that STRs are reducing long-term rental supply, the effects of STRs on rental prices substantial, and restricting the supply of STRs is the best response?
- Are affordable housing shortages in Seattle new or appreciably worse since the advent of Airbnb?
- What policy choices determine home prices and rents, and how large are those effects relative to home sharing?
- Do analyses of rental housing markets consider home sharing a significant factor?

3.1. Defendant’s evidence is weak and problematic

Defendant states that severely restricting STRs is necessary because “STRs exacerbate affordable housing shortages by removing full-time dwelling units from the market and reducing the housing supply.”

To support this statement, they rely on Lee (2016) and Allen (2017), two articles that do not examine any data or evidence on the effect of STRs on long-term rental supply or affordability, but rather simply assert an effect.

Defendant also points to a single study with empirical results, the 2018 NYC comptroller report that finds STRs account for 9.2% of rental rate increases in New York City during the period examined. Of course, that means that over 90 percent of the rental rate increases were due to other factors and addressing them would likely be far more efficacious than restricting STRs and striving to reduce that 9.2% to a smaller figure. Moreover, New York City has the most extreme housing market in the nation, tending to be an outlier in almost every housing-related data set. As a result, the scale of the effect of STRs in New York City is not likely to be the same in other locations. For example, a 2018 Social Science Research Network working paper using national data finds that “a 1% increase in Airbnb listings leads to a 0.018% increase in rent and a 0.26% increase in house prices at the median owner occupancy rate zipcode.”⁴

⁴ Kyle Barront, Edward Kung, and Davide Proserpio, “The Sharing Economy and Housing Affordability: Evidence from Airbnb,” Available at Social Science Research Network, April 1, 2018.

Defendant is relying on a single study that provides evidence of limited utility outside New York City and which at any rate finds a small effect which can only be partially addressed by restricting STRs. Based on their own evidence, defendant's decision to impose dramatic restrictions on owners' use of their property to strive for a small effect on a small percentage of the problem would appear to have very high costs relative to benefits.

Defendant goes on to argue that STR's affordable housing impact in Seattle is of particular concern due to STR growth, finding:

- *As of August 2017, Airbnb listed 4,829 whole units (ones that could be used for long-term housing), accounting for 69 percent of its Seattle listings.*
- *Hosts managing multiple units are growing more quickly than those managing only one unit, with multiple-unit hosts operating 56 percent of all units.*
- *Based on those trends, one analysis predicted at least 1,000–1,600 long-term housing units in Seattle could be converted or built as short-term rentals from 2016 through 2019.*
- *Areas where households are at high risk of displacement have high or steady growth in STR whole-unit Airbnb listings, raising the prospect of speculative STR investment in gentrifying neighborhoods and threatening the stability of immigrant, refugee, and minority communities at risk of displacement.*

Census data show Seattle with 334,739 housing units in 2017, so the 4,829 listed by Airbnb constitute 1.4% of the housing units, after considerable growth. Meanwhile, Seattle added 7,638 housing units in 2017 and 26,900 new people. The assertion without citation that 1,000–1,600 units could be converted to STRs over four years also indicates a very small problem. Census data show about 35,000 housing units added in Seattle during those years. This means that, at the high end, 5% of new units would provide all the STR growth predicted. In summation, while housing growth is not keeping up with population growth, it is overwhelming growth in STR listings and demand.

There is no logical or economic reason why hosts managing multiple units would change the outcome for long-term rental rehousing supply. Total STR listings are driven by demand; if that demand is met by thousands of homeowners or just a handful, the number of units supplied is the same and the effect on the supply of long-term rental units is the same.

Finally, the assertion that STR listings present a particular threat to vulnerable communities is unsupported by evidence or citation and does not make sense. Traveler demand for STRs is driven by business and vacation travel, neither of which is seeking units in poorer neighborhoods

at the bottom of the housing market.⁵ Indeed, the apartments at the bottom of the market where the most vulnerable people live are typically not in the places close to key business centers and tourist sites that Airbnb users seek. As a result, while conversion to home sharing might affect the total rental housing market, it's unlikely that those effects are sufficiently strong among the population of renters most vulnerable to disruption. The mid- and higher-end units in demand as STRs are markets where long-term renters typically have a wide range of options about where to seek rental housing.

3.2. Seattle's affordable housing problems began long before STRs

While STRs are blamed for affordable housing in Seattle, a recent extensive analysis by the city's Office of Housing documenting the extent of its affordable housing challenges makes no mention of short-term rentals.⁶ Yet the affordable housing shortage was severe enough then to merit a number of special city policies and programs.

An article providing a timeline of the history of affordable housing in Seattle pegs the first public outcries about affordable housing at 1978, with a steadily rising focus by the city on policies to address it over the subsequent decades.⁷ Another city report on affordable housing traces programs back to 2001.⁸ Meanwhile an in-depth history of zoning in Seattle covering more than a century of changes, attributes an inflexible zoning policy to preventing housing supply from keeping up with demand and fueling a rising affordability problem.⁹

⁵ Middle class tourists visiting a city like Seattle likely from a suburban community or small city, are almost certainly not looking for apartments in the poorest neighborhoods. A Morgan Stanley analysis in 2015 found “~66% of U.S. Airbnb users earning over \$75k/year,” Morgan Stanley, *Global Insight: Who Will Airbnb Hurt More—Hotels or OTAs?*, November 15, 2015. Daniel Guttentag, Steven Smith, Luke Potwarka, and Mark Havitz, “Why Tourists Choose Airbnb: A Motivation-Based Segmentation Study,” *Journal of Travel Research*, 2018, 57(3), pp.342–359 found that over 80% of Airbnb users are on leisure travel.

⁶ City of Seattle Office of Housing and Office of Planning & Community Development, *2016 Monitoring Report: Affordability of Unsubsidized Rental Housing in Seattle*, 2016.

⁷ Geoff Spelman, “How the heck did we get here? A history of affordable housing in Seattle,” *Crosscut*, June 4, 2014, <https://crosscut.com/2014/06/history-affordable-housing-seattle>

⁸ Seattle City Council, *Creating Affordable Housing with a Linkage Fee*, <http://www.seattle.gov/council/issues/past-issues/creating-affordable-housing-with-a-linkage-fee#background>

⁹ Mike Eliason, “This is how you slow-walk into a housing shortage,” *Sightline*, 2018.

3.3. The major movers of rental prices are land use regulations

An extensive literature finds that the cost of constructing housing is relatively stable compared to the economy as a whole, and that housing is very affordable in much of the United States but that some cities experience considerably higher prices and affordable housing shortages. As explained further on, land-use and growth restrictions, zoning, and housing regulations explain roughly 90% of the home price differentials between markets with similar amenities, with 10% due to construction cost differentials. In other words, most of the problem with lack of affordable housing in Seattle and high rents is attributable to decisions by the city that raise the cost of housing.

Housing Underproduction in the U.S., a very thorough 2018 study, finds that “from 2000 to 2015, 23 states under-produced housing at the rate of 7.3 million units, or roughly 5.4% of the total housing stock of the U.S., which has created the supply and demand imbalance that is reflected in today’s home prices.”¹⁰

An important 1990 review of research on prices in housing and land markets first drew attention to how land-use regulations, zoning, and growth controls have significant and substantial effects on home prices—and those effects increase with the degree of restriction of the market.¹¹ More recently, the Harvard Joint Center for Housing Studies 2015 report on America’s rental market pointed out that:

Local land use restrictions often restrict the area available for multifamily development, particularly in the suburbs, which can increase the competition for available sites and raise land costs. Parcel assemblage and acquisition are also costly in locales where demand for market-rate rentals is strong. In addition, development economics rest heavily on allowable densities, but local zoning restrictions often limit the number of units in multifamily development. This raises

¹⁰ Up for Growth National Coalition, Holland Government Affairs, ECONorthwest, *Housing Underproduction in the U.S.: Economic, Fiscal and Environmental Impacts of Enabling Transit-Oriented Smart Growth to Address America’s Housing Affordability Challenge*, 2018.

¹¹ William A. Fischel, *Do Growth Controls Matter? A Review of the Empirical Evidence on the Effectiveness and Efficiency of Local Government Land Use Regulation*, Lincoln Institute of Land Policy, 1990.

*per unit construction costs and ultimately the rents the developers must charge to be profitable.*¹²

The California Legislative Analyst's Office examined the causes of high housing prices in California, concluding that "[C]ommunity resistance to housing, environmental policies, lack of fiscal incentives for local government to approve housing, and limited land constrains (sic) new housing construction. A shortage of housing along California's coast means households wishing to live there compete for limited housing. This competition builds up home prices and rents." Of course, this is true of large downtowns like Seattle as well.

Jason Furman, while chairman of the President's Council of Economic Advisers in 2015, spoke to the Urban Institute about the causes of high housing and rental costs and provided a great review of the literature.¹³ Among the findings he discussed are that:

When construction markets are relatively competitive, the gap between house prices and construction costs should largely reflect the cost of buying land – a cost that increases with tighter land-use restrictions... [T]he gap between real house prices and construction cost has grown over time, even if we exclude the period of rapid house price increases in the mid-2000s... Real house prices in 2010 to 2013 are 56% above real construction costs... [A]fter around 1970, more stringent regulations played a much bigger role proportionately, implying that relaxing zoning constraints could bring house prices more in line with construction costs and reduce the economic rents accruing to landowners.

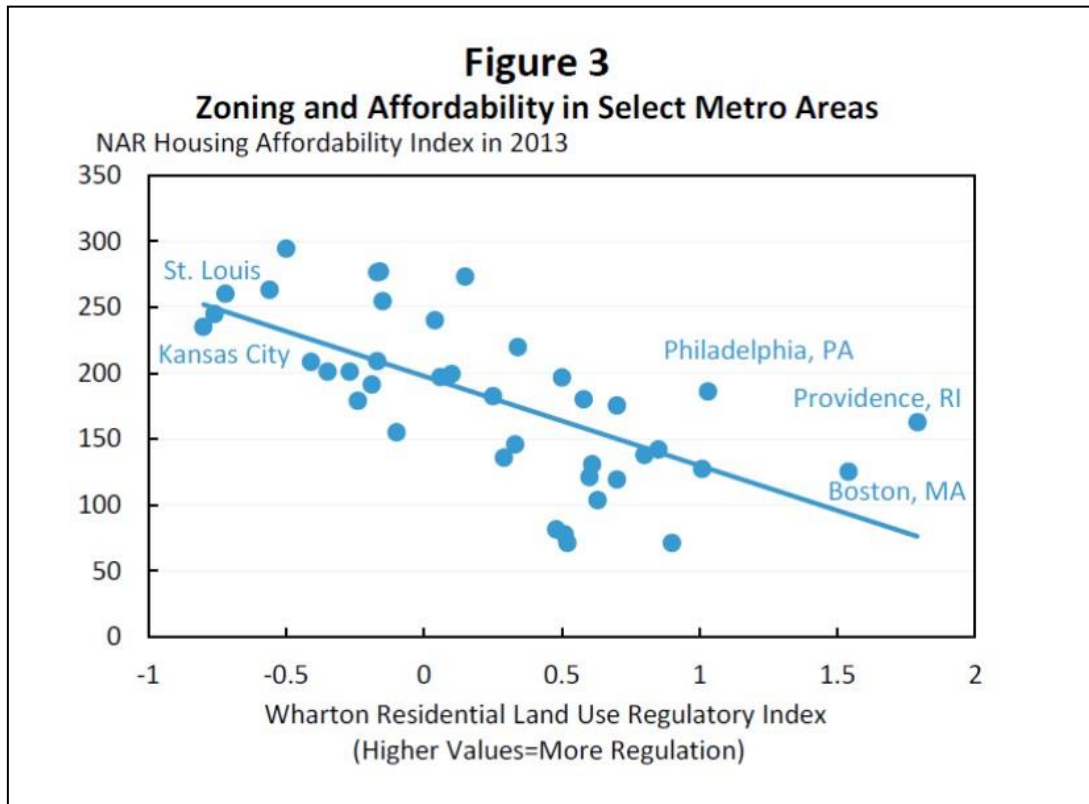
Cross-sectional evidence also provides a similar picture... We can observe that some of the largest US cities with both restrictive zoning rules and desirable public goods tend to have persistently high housing prices relative to the cost of construction. Moreover, more cities saw an increase in these price markups than saw a decrease during the 1990s.

Zoning restrictions...are supply constraints. Basic economic theory predicts—and many empirical studies confirm—that housing markets in which supply cannot keep up with demand will see housing prices rise. Mayer and Somerville (2000) conclude that land-use regulation and levels of new housing construction are

¹² Harvard Joint Center for Housing Studies, *America's Rental Housing: Expanding Options for Diverse and Growing Demand*, 2015.

¹³ Jason Furman, "Barriers to Shared Growth: The Case of Land Use Regulation and Economic Rents," The Urban Institute, November 20, 2015.

inversely correlated, with the ability of housing supply to expand to meet greater demand being much lower in the most heavily regulated metro areas. Quigley and Rafael (2005) show that new construction is not as prevalent in areas characterized by growth restrictions. Glaeser and Ward (2009) found that an increase in one acre in a Greater Boston town's average minimum lot size is associated with about 40% fewer new permits.¹⁴



Source: Furman, “Barriers to Shared Growth.”

Furman goes on to compare the National Association of Realtors Housing Affordability Index to the Wharton Residential Land Use Regulatory Index, and concludes that “restricted supply leads to higher prices and less affordability... this house price appreciation experienced especially in

¹⁴ Furman elegantly summarizes these important works so I need not. See Christopher J. Mayer and C. Turiel Somerville, “Land Use Regulation and New Construction,” *Regional Science and Urban Economics*, 2000 30, (6), pp.639-662; John M. Quigley and Steven Raphael, “Regulation and the High Cost of Housing in California,” *The American Economic Review*, 2005, 95 (2), pp.323–328; and Edward L. Glaeser and Bryce A. Ward, “The Causes and Consequences of Land Use Regulation: Evidence from Greater Boston,” *Journal of Urban Economics*, 2009, 65, pp.265-278.

those cities towards the right of the figure presents affordability challenges for nearly all but they can hit the poorest Americans the hardest.” His analysis is shown in his Figure 3 above.

Seattle has a Wharton Residential Land Use Regulatory Index score of 1.01, the 5th most restrictive housing market in the index. The cities scoring best on the Housing Affordability Index are around twice as affordable as Seattle. This shows that Seattle has many policy options available to loosen up the housing market and lower home prices and rents.

A very useful literature review on affordable housing research in 2019 concluded, “In sum, the preponderance of the evidence shows that restricting supply increases housing prices and that adding supply would help to make housing more affordable.”¹⁵

Harvard economist Edward Glaeser has published dozens of papers on land use regulations and policies and costs.¹⁶ In a joint paper with Joseph Gyourko for the Federal Reserve Bank of New York in 2003 examining the evidence of the impact of building restrictions on housing affordability they find that:

- Zoning and other restrictions on building account for 90% of increasing costs of new homes, while 10% is due to rising construction costs.
- High levels of land use regulation are highly correlated with high housing costs.
- The market would lead to higher density in high cost areas, but cost and density are poorly correlated, indicating that policies prevent the market outcome.¹⁷

In a 2017 report for the Brookings Institution Glaeser summarizes his years of research and states:¹⁸

¹⁵ Vicki Beena, Ingrid Gould Ellenb and Katherine O’Reganb, “Supply Skepticism: Housing Supply and Affordability,” *Housing Policy Debate*, v29, #1, 2019, pp.25–40.

¹⁶ Too many to list, including two books: *Housing Markets and the Economy: Risk Regulation, and Policy*, Cambridge, MA: Lincoln Land Institute (2009) and *Rethinking Federal Housing Policy: How to Make Housing Plentiful and Affordable*, Washington, D.C.: The AEI Press (2008). For more, see his CV at https://scholar.harvard.edu/files/glaeser/files/ed_glaeser_cv_2.10.15.pdf

¹⁷ Edward L. Glaeser and Joseph Gyourko, “The Impact of Building Restrictions on Housing Affordability,” *FRBNY Economic Policy Review*, June 2003.

¹⁸ Edward L. Glaeser, “Reforming Land Use Regulations,” Brookings Institution, April 2017.

If demand alone drove prices, then we should expect to see places that have high costs also have high levels of construction. The reverse is true. Places that are expensive don't build a lot and places that build a lot aren't expensive.

Naturally, there are also a host of papers showing the correlation between different types of rules and either reductions in new construction or increase in prices or both. The problem with empirical work on any particular land-use control is that there are so many ways to say no to new construction. Since the rules usually go together, it is almost impossible to identify the impact of any particular land use control. Moreover, eliminating one rule is unlikely to make much difference since anti-growth communities will easily find ways to block construction in other ways.

Empirically, there is also little evidence that these land use controls correct for real externalities. For example, if people really value the lower density levels that land use controls create, then we should expect to see much higher prices in communities with lower density levels, holding distance to city center fixed. We do not. (Glaser and Ward, 2010) Our attempt to assess the total externalities generated by building in Manhattan found that they were tiny relative to the implicit tax on building created by land use controls (Glaeser, Gyourko and Saks 2005).¹⁹

Reforming local land use controls is one of those rare areas in which the libertarian and the progressive agree. The current system restricts the freedom of the property owner, and also makes life harder for poor Americans. The politics of zoning reform may be hard, but our land-use regulations are badly in need of re-thinking.

Examining a pair of Florida cities shows these results are not confined to studies in the Midwest and Northeast. A 2007 study examined data from 112 Florida jurisdictions in 25 counties and found that land use regulations have substantial effects on the price of housing and vacant residential land.²⁰ Building on that work, another study used data from Florida cities to examine the home price effects of regulation and construction delay due to permitting and licensing

¹⁹ See Edward L. Glaeser, Joseph Gyourko, and Raven Saks, "Why is Manhattan so expensive? Regulation and the rise in housing prices," *The Journal of Law and Economics*, 2005, 48, no. 2, pp. 331-369 and Glaeser and Ward, "The Causes and Consequences of Land Use Regulation."

²⁰ Keith R. Ihlanfeldt, "The Effect of Land Use Regulation on Housing and Land Prices," *Journal of Urban Economics*, 2007, 61.3, pp.420-435.

processes, finding a range of 4% to 11% increase from regulatory costs and another almost 2% increase from delay.²¹

In summary, a rich literature digging into what drives high housing costs in some cities that finds the vast majority of the blame rests on land use restrictions and housing regulations. Recall the Glaeser and Gyourko conclusion that zoning and other restrictions on building account for 90% of increasing costs of new homes, while 10% is due to rising construction costs.

3.3. STRs are not considered important in analyses of rental market prices.

It is notable that the most prominent research literature and market discussions on affordable rental housing supply do not discuss STRs. The most prominent analysis of rental markets is Harvard's Joint Center for Housing Studies' definitive survey of America's rental housing, most recently in 2017. The JCHS finds rental vacancies are increasing nationwide and thoroughly discusses the challenges that the rental housing market faces with no mention of Airbnb or the rise of home sharing.²² More telling, a 2019 JCHS report, *Estimating the Gap in Affordable and Available Rental Units for Families*, also examines the causes of rising rents and shortage of available units with no mention of STRs.²³

The most prominent national advocates for low income housing in America are the National Low Income Housing Coalition and their annual report on the shortage of affordable rental housing in America has not yet mentioned STRs as a factor.²⁴ At the same time, a 2019 academic review of literature on the causes of high rents and insufficient affordable housing discusses limited supply and inflexible housing markets, but does not mention STRs at all.²⁵

²¹ Adam Millsap, Samuel Staley, and Vittorio Nastasi, *Assessing the Effects of Local Impact Fees and Land-use Regulations on Workforce Housing in Florida*, James Madison Institute, 2018.

²² Harvard Joint Center for Housing Studies, *America's Rental Housing 2017*, 2017.

²³ Whitney Airgood-Obrycki & Jennifer Molinsky, *Estimating the Gap in Affordable and Available Rental Units for Families*, Harvard Joint Center for Housing Studies, April 2019.

²⁴ Andrew Aurand, Abby Cooper, Dan Emmanuel, Ikra Rafi, and Diane Yentel, *Out of Reach 2019*, National Low Income Housing Coalition, 2019.

²⁵ Sandra J. Newman, "Affordable Rental Housing Policy," *Housing Policy Debate*, 2019, 29, 1, pp.22–24.

These are leading academic and policy inquiries into the drivers of inadequate and high-priced rental markets. The fact that STRs appear in none of them is a strong indication that neither rental market data nor models of rental market prices show an effect from STRs that is worth mentioning.

This is reinforced by looking at articles aimed at investors and owners in rental property markets. Rent.com pointed out the causes of low vacancy rates and limited availability of rental units in 2016, a year before the AirBnB boom began: “The reasons are manifold, but 64% of landlords surveyed identified two main factors: the twin pressures of increased demand for units and low inventory.”²⁶ In 2019 RentCafe concludes the cause of rising rents and declining vacancy rates is “The number of households is now rising at the same level as in the 1990s and early 2000s, but apartment development is not keeping up with demand, leading to rising prices.”²⁷ That same year a *MarketWatch* article on how to address rising rents and a *Huffington Post* article on three reasons why rents are so high both discussed addressing housing supply shortages as the most crucial problem, and made no mention of STRs.²⁸

4. Conclusion

Analyses of the housing market, and particularly of rental housing markets, do not consider home sharing to be even worth mentioning as a factor influencing the market. Research on the causes of housing shortages and high housing costs attribute 90% to overly restrictive land use and housing regulations. Meanwhile, the measured effects of home sharing on housing are real, but quite small.

Housing markets are dynamic, if not as fast-moving as other goods markets. Technology, supply, and demand all change over time. Property owners are responding to profit opportunities to get more return on their investment in apartments and other homes by taking advantage of the technology of home sharing. Their property right enables them to take advantage of this

²⁶ Rent.com, *2015 Rental Market Report*, <https://www.rent.com/blog/2015-rental-market-report/>

²⁷ RentCafe, *Apartment Market Report July 2019*, <https://www.rentcafe.com/blog/rental-market/apartment-rent-report/apartment-rents-lose-steam-july-rent-report/>

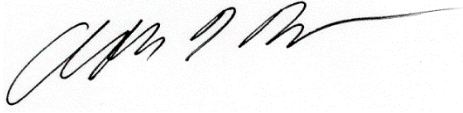
²⁸ Andrea Riquier, “Still too damn high: how can we address rising rents?,” *MarketWatch*, Apr 11, 2019, <https://www.marketwatch.com/story/rent-is-accelerating-again-what-can-be-done-2019-04-10> ; Catharine Smith, “3 Reasons Why Your Rent Is So High,” *Huffington Post*, June 26, 2019, https://www.huffpost.com/entry/high-rent-reasons_n_5d03d65ae4b0304a120f25e4

opportunity, and such shifts are part of what drives changes in the market. For example, it creates incentives for property owners to improve their properties in order to increase revenue.²⁹ It also creates more incentive to expand housing supply, which is precisely the thing that helps address rising housing costs and homelessness.

A short-term effect such as a shift from long-term rentals to home sharing will create a response in the market. If supply and demand are allowed to move and are not restricted by over regulation of land use and housing, supply and price differentials will close. The immediate profit opportunity that home sharing represents relative to long-term rentals is then offset by the higher operational costs such as frequent cleanings, etc. compared to the convenience and income stability of long-term renters. Large and long-running interventions in the market during a time of transition driven by technological innovation such as home sharing will prevent market dynamics from moving toward beneficial outcomes for all.

²⁹ Christina Sandefur, “Life, Liberty, and the Pursuit of Home-Sharing,” *Regulation*, Fall 2016, 39(3), pp.12-15.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and that this disclosure was executed on September 4, 2019.

A handwritten signature in black ink, appearing to read 'Adrian T. Moore', with a long horizontal flourish extending to the right.

Adrian T. Moore, Ph.D.

Barriers to Shared Growth: The Case of Land Use Regulation and Economic Rents

Remarks by Jason Furman¹
Chairman, Council of Economic Advisers

The Urban Institute
November 20, 2015

This is an expanded version of these remarks as prepared for delivery.

I am pleased to be at the Urban Institute today to discuss how conditions in the housing market relate to broader trends in inequality, productivity, and mobility, with a particular focus on the impact of land use regulations.

Before I turn to longer-term structural trends, let me highlight that the housing recovery has been strong in recent years, aided by a wide range of countercyclical policies from the Administration and general improvement in the economy. Residential investment rose solidly at a 4.6 percent annual rate in the last two years, reflecting further increases in housing construction, which has surpassed an average pace of 1 million units per year. In addition, household formation, which had been depressed since the recession, has begun to pick up and points to additional demand for housing. A solid recovery in house prices has boosted home equity and strengthened household balance sheets, such that the share of homeowners underwater today is now less than half of what it was in 2010 and 2011. Rising housing wealth has also supported consumer spending, a bright spot in the economy. And with financial and mortgage market reforms in place to prevent a repeat of earlier market excesses, access to mortgage credit continues to expand, although at a pace that is still too gradual; including the fact that gains in mortgage credit have been slow to reach minority and lower-income households.

The fact that this cyclical recovery in the housing market is well underway makes it a good time to step back and examine broader trends and features of the housing market. For one, expanding affordable and fair housing—giving families the ability to live in economically thriving communities and housing choices free from discrimination—remains an ongoing concern and focus for the Administration. As researchers right here at the Urban Institute pointed out this past June, not one county in the country has a large enough stock of affordable housing for renters with extremely low incomes (Leopold et al., 2015).

In today's remarks, I will focus on how excessive or unnecessary land use or zoning regulations have consequences that go beyond the housing market to impede mobility and thus contribute to rising inequality and declining productivity growth.

While land use regulations sometimes serve reasonable and legitimate purposes, they can also give extranormal returns to entrenched interests at the expense of everyone else. As such, land

¹ I want to thank Sam Himel, Claudia Sahm, and Eric Van Nostrand for assistance in preparing these remarks; Raven Molloy and Daniel Shoag for sharing data from their research; and Elaine Buckberg, Jane Dokko, Karen Dynan, and Jay Shambaugh for comments.

use regulations are an example of a broader range of situations that may give rise to economic rents. By this I do not mean the check you write to your landlord every month, but a situation in which any factor of production—in this case, land—is paid more than is needed to put it in production. Economic rents can take many other forms, such as in excessively high profits for certain firms, and I explored rents more generally in a recent [paper](#) with Peter Orszag (Furman and Orszag 2015). One reason to study economic rents more carefully is that policy to address rents or rent-seeking behavior could make the economy more competitive by removing artificial barriers, thus improving both the distribution of income and the productive capacity of the economy.

I want to be clear from the outset, some land use regulations can be beneficial to communities and the overall economy. There can be compelling environmental reasons in some localities to limit high-density or multi-use development. Similarly, health and safety concerns—such as an area’s air traffic patterns, viability of its water supply, or its geologic stability—may merit height and lot size restrictions. But in other cases, zoning regulations and other local barriers to housing development allow a small number of individuals to capture the economic benefits of living in a community, thus limiting diversity and mobility. The artificial upward pressure that zoning places on house prices—primarily by functioning as a supply constraint—also may undermine the market forces that would otherwise determine how much housing to build, where to build, and what type to build, leading to a mismatch between the types of housing that households want, what they can afford, and what is available to buy or rent.

The tradeoffs inherent in land use regulations are well known and have been of concern to policymakers and academics for decades, since at least 1961, when Jane Jacobs wrote *The Death and Life of Great American Cities*. In it, she argued that limits on density and mixed-use development, as well as an imbalance between preservation and new construction, can reduce housing affordability, socioeconomic diversity, and economic activity. In today’s discussion I will point to a broader set of ramifications as well.

The Rise of Inequality, Decline of Productivity, and the Link to Reduced Mobility

Understanding the connections among zoning, affordability, mobility, and income inequality is important because of the substantial rise in overall inequality observed over the last several decades. In 1973, the bottom 90 percent received 68 percent of the income, a share that fell to 52 percent of income in 2013. The narrowing slice of the pie going to most American households has been compounded by the fact that the pie is growing more slowly, with labor productivity growing at an average 1.8 percent annual rate between 1973 and 2014, as opposed to the average 2.8 percent annual rate at which it grew in the quarter century before 1973.

Reduced labor mobility may be a contributing factor to both increased inequality and lower productivity growth in the United States. This reduction in mobility has manifested itself in a wide variety of ways, including the fact that individuals are less likely to change jobs, to switch occupations or industries, or to move within States or across State lines. Businesses are creating and destroying jobs at a lower rate and fewer new businesses are being formed, both of which could be causes or consequences of a decline in labor mobility.

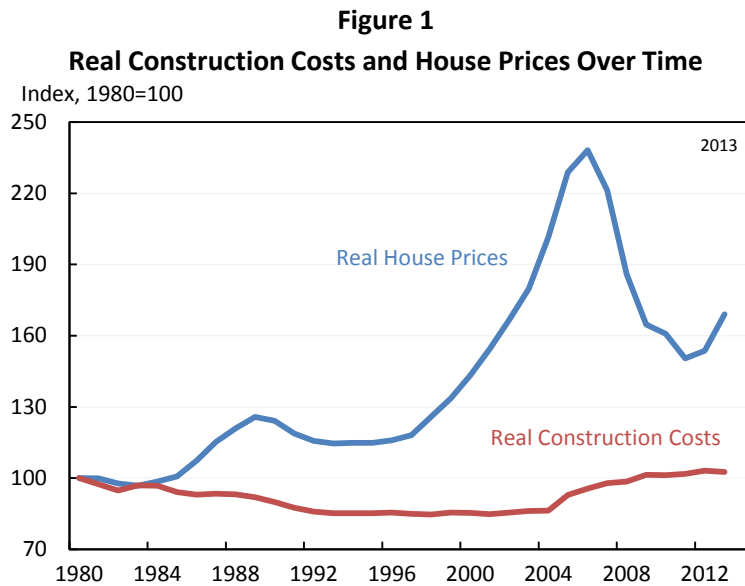
Some of the trends in fluidity may be good for the economy or reflect positive developments. For example, if matching in the labor market has become more successful, then people will be less likely to move between jobs, and retaining workers will increase productivity and wages. But to the degree that the reduced fluidity is caused by economic barriers, it can interfere with productivity growth by reducing the reallocation of labor to where it has the highest return and can increase inequality by reducing one of the channels through which workers get a raise, specifically moving from job to job.

We do not fully understand what is causing these reductions in fluidity in the U.S. economy and absent an understanding of these causes, one cannot be completely confident about assessing the consequences of these changes. But if specific and unjustified barriers to mobility have grown over time, it follows that the decline in fluidity is a public policy problem that potentially reduces efficiency and increases inequality.

One such barrier that is plausibly playing a role in reduced fluidity is zoning. Zoning and other land use regulations, by restricting the supply of housing and so increasing its cost, may make it difficult for individuals to move to areas with better-paying jobs and higher-quality schools. Barriers to geographic mobility reduce the productive use of our resources and entrench economic inequality. Zoning is not the only or even necessarily the main factor in the broad-based reductions in fluidity we have witnessed. Another barrier I have explored elsewhere is the fact that the percentage of jobs that require a State license has grown from 5 percent in the 1950s to 25 percent in 2008, a trend that—like zoning—may reflect a combination of sound reasons but adverse outcomes.

The Rise of Zoning and Other Land Use Restrictions

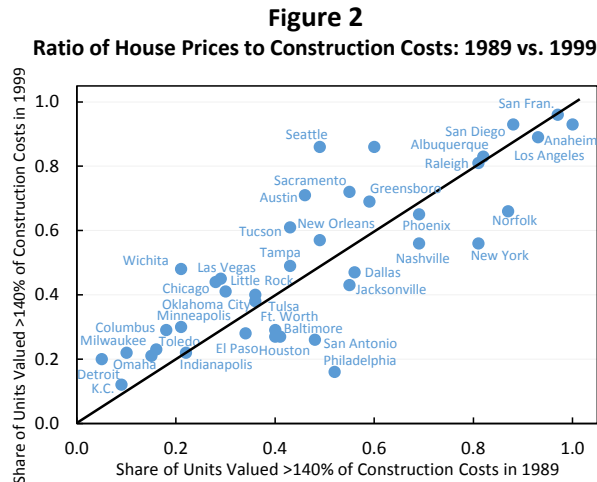
A time series of land use regulations for the country as a whole does not exist, because it is a complex task to collect, summarize, and then track over time the wide range of local regulations. But a range of observations, circumstantial evidence, and specific case studies suggest they have become more restrictive in recent decades, particularly in cities with growing demand for housing. An indirect way to gauge the impact of land use restrictions and other supply constraints for buildable land, including the local topography, is to compare the sales price of houses to the cost of materials and labor to build the structure. When construction markets are relatively competitive, the gap between house prices and construction costs should largely reflect the cost of buying land—a cost that increases with tighter land use restrictions. As Figure 1 from Gyourko and Molloy (2015) shows, the gap between real house prices and construction costs has grown over time, even if we exclude the period of rapid house price increases in the mid-2000s. Real house prices in 2010 to 2013 were 56 percent above real construction costs, a 23 percentage point increase over the average gap during the 1990s.



Consistent with these data, Glaeser, Gyourko, and Saks (2005) found that while house prices have been rising since 1950, construction costs and quality improvements in housing stock drove this appreciation between roughly 1950 and 1970. The authors conclude that after around 1970, more stringent regulations played a much bigger role proportionally, implying that relaxing zoning constraints could bring house prices more in line with construction costs and reduce the economic rents accruing to landowners.

Several studies with direct measures in specific cities of the change in land regulations are consistent with the indirect national measures. In the Greater Boston area, Glaeser and Ward (2009) find that three forms of regulatory barriers related to wetlands, septic systems, and subdivision requirements, as well as cluster zoning have all increased dramatically since the mid-1970s. In addition, Been et al. (2014) find that the growth of historic preservation designations in New York City neighborhoods have brought about house price appreciation both in these neighborhoods as well as in those surrounding it.

Cross-sectional evidence also provides a similar picture. Figure 2 below, reproduced from Glaeser and Gyourko (2003), plots cities on a graph based on the share of their homes in 1989 and in 1999 with prices at least 40 percent higher than construction costs. We can observe that some of the largest U.S. cities with both restrictive zoning rules and desirable public goods tended to have persistently high housing prices relative to the cost of construction. Moreover, more cities saw an increase in these price markups than saw a decrease during the 1990s (i.e., more dots are in the upper left hand part of the figure), consistent with the stylized fact that economic rents in the overall housing market have been on the rise in recent decades.



This timing of tighter land use regulations may not have been a coincidence. After a turbulent decade of the 1960s in the United States that saw racial tensions flare, with rioting in many urban areas around the country that damaged or destroyed both residential and commercial structures, thousands of high income, predominantly white families moved out of many cities, spurring the continued rise of racially and socioeconomically homogenous communities. These communities were also strictly zoned, a choice which may very well have been part of a conscious or unconscious attempt to maintain this homogeneity through the affordability channel.

Zoning Gives Rise to Rents by Restricting Supply

Zoning restrictions—be they in the form of minimum lot sizes, off-street parking requirements, height limits, prohibitions on multifamily housing, or lengthy permitting processes—are supply constraints.² Basic economic theory predicts—and many empirical studies confirm—that housing markets in which supply cannot keep up with demand will see housing prices rise. Mayer and Somerville (2000) conclude that land use regulation and levels of new housing construction are inversely correlated, with the ability of housing supply to expand to meet greater demand being much lower in the most heavily regulated metro areas. Quigley and Raphael (2005) show that new construction is not as prevalent in areas characterized by growth restrictions. Glaeser and Ward (2009) found that an increase of one acre in a Greater Boston town’s average minimum lot size is associated with about 40 percent fewer new permits.³

Land use restrictions themselves are endogenous and at least partly the result of active rent seeking behavior by homeowners. In his 2001 book *The Homevoter Hypothesis*, William Fischel asserts that homeowners propose and vote for zoning policies to mitigate housing market-specific risks faced in their investment portfolios. Homeowners whose homes have the highest

² Quigley and Raphael (2004) highlight another, more esoteric form of regulation that they term “fiscal zoning,” by which municipalities create community development plans that set aside large tracts of undeveloped land for revenue-positive commercial uses only, since without residents, these areas will at the same time not require substantial outlays on public goods provision such as education.

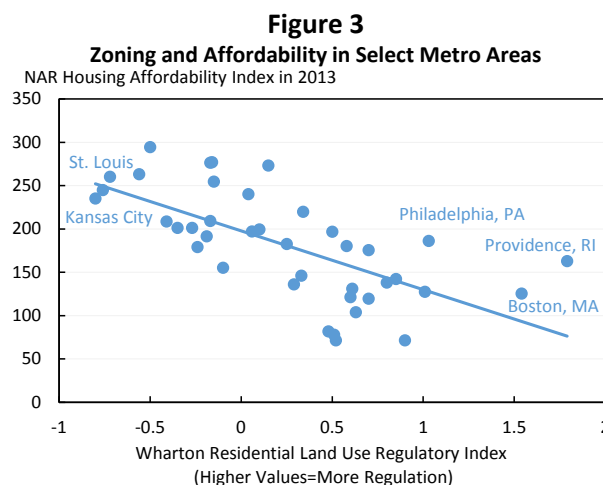
³ Glaeser and Ward (2009) also show that over the past few decades, the prevalence of such zoning restrictions in Massachusetts is on the rise.

property values are both most invested and most likely to support stringent zoning policies (Fennell, 2002). This behavior fits the definition of rent-seeking, as it suggests people are trying to raise the value of their properties at the expense of greater building. The homeowners are not acting out of some nefarious intent—they are trying to safeguard an asset, but the net effect can be to choke off housing supply and mobility.

Moreover, this rent seeking behavior is often framed as serving some meritorious purpose, complicating the community’s ability to determine whether a particular proposed regulation is merited or misguided.⁴ With high house prices and further hedges against property value depreciation in local regulations, some individuals are priced out of the market entirely, and homes in highly zoned areas also become even more attractive to wealthy buyers. Thus, in addition to constraining supply, zoning shifts demand outward, exerting further upward pressure on prices and thus also, economic rents (Quigley and Raphael, 2004).

Supply Restrictions Reduce Affordability

Restricted supply leads to higher prices and less affordability. We see the association in the relationship between land use regulations and affordability in several dozen U.S. metro areas (Figure 3).⁵ As just discussed, this could both reflect land use restrictions leading to higher prices or higher prices leading people to seek more land use restrictions or other factors. This house price appreciation experienced especially in those cities towards the right of the figure presents affordability challenges for nearly all, but they can hit the poorest Americans the hardest.⁶



⁴ So-called Not-In-My-Backyard (NIMBY) activists tend to fit this description. They may approve of a particular development project in the abstract but simply do not want to risk its effects on the quality of life in their immediate communities. This situation can in some instances be thought of as a specific case of the free-rider problem.

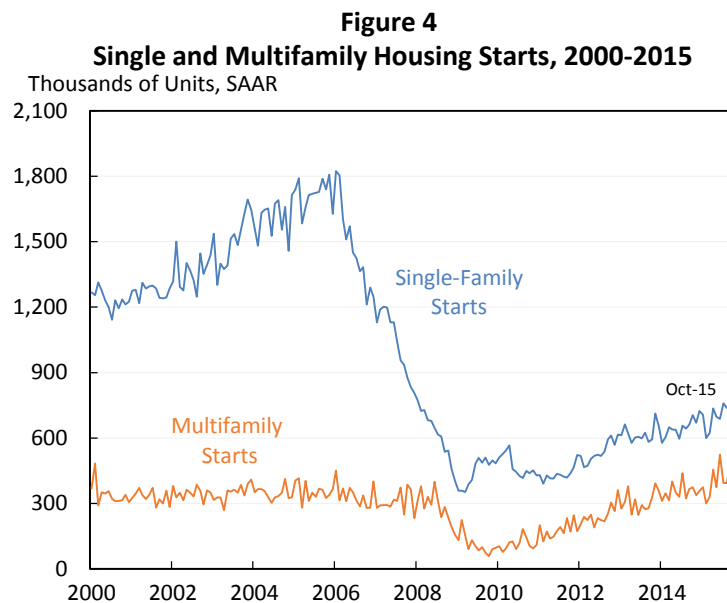
⁵ To measure housing affordability, we rely on the National Association of Realtor’s index measure, which essentially compares median incomes with median home prices, while for a regulatory stringency variable, we make use of Gyourko, Saiz, and Summers’ (2008) Wharton Residential Land Use Regulatory Index.

⁶ Ten years ago, the Department of Housing and Urban Development summarized the literature then available on regulatory barriers to affordable housing. Sundig and Swoboda (2004) found that housing regulations depressed housing market supply and increased prices by as much as \$40,000. Similarly, Malpezzi (1996) concludes that home values in tight regulatory environments are more than 50 percent higher than in lax ones. Luger and Temkin (2000) find similar results in New Jersey, where excessive regulation can raise new home prices by up to 35 percent.

As the figure makes clear, the affordability challenge is not evenly distributed across the country. There is considerable variation across the United States in zoning policies and associated markup of prices above construction costs, both geographically and in different types of construction. As a result of zoning as well as differences in labor markets, housing demand, and natural supply constraints resulting from land itself, economic rents and thus housing affordability vary substantially across the country's states and metro areas. Moreover, this dispersion appears to have grown over time. Gyourko et al. (2013) shows how the real home price distribution has widened over the last several decades, coinciding with increased variation in land use restrictions as some communities have added them and others have not.

The Shift Towards Multifamily Housing and Other Trends Exacerbate the Problems Associated With Land Use Restrictions

A variety of changes—some due to the Great Recession and so likely temporary and others more structural—have led to growing demand for multifamily, rental, shared occupancy, and home modifications. Multifamily housing starts have risen back up to where they were prior to the crisis, while the single-family category still has yet to recover fully (Figure 4). Much of the recovery in multifamily, however, may be the result of shifting preferences, with Americans desiring greater density, as evidenced by the growing share of people choosing to live in urban areas. Accordingly, these preferences may necessitate an even higher steady-state level for multifamily housing than there had been prior to the Great Recession.



The looming problem, though, is that multi-family housing units are the form of housing supply that is most often the target of regulation, thus restricting the potential for sustained long-run growth in this category (Quigley and Raphael, 2005). This undesirable possibility shows more broadly how economic rents and rent-seeking can often not only provide for an unequal

distribution of wealth and income but also can be welfare-reducing for all prospective market participants.

The Urban Institute's report on headship and homeownership (Goodman et al., 2015) highlighted several other demographic-driven areas of the housing market that are potentially impeded by the supply constraints that result from zoning. As the Baby Boomer generation ages into retirement, many more elderly Americans will require modifications to the homes they currently live in or may opt for shared occupancy with another family, often their own. Both of these practices would benefit from changes in zoning policies in some areas of the country so as to make home modification and shared occupancy feasible for a larger number of seniors. The report also notes that the size and demographic composition of the Millennial generation imply that demand for rental construction is likely to pick up in the coming decade and a half as well. As a result, certain housing markets may benefit from a relaxation of zoning restrictions so that such construction can be more rapidly increased to meet demand. Otherwise, implied demand increases accompanied by an inelastic supply would likely result in larger sized economic rents, manifesting as rapid price appreciation, worsening affordability, and downward pressure on household formation, particularly among the millennial generation.

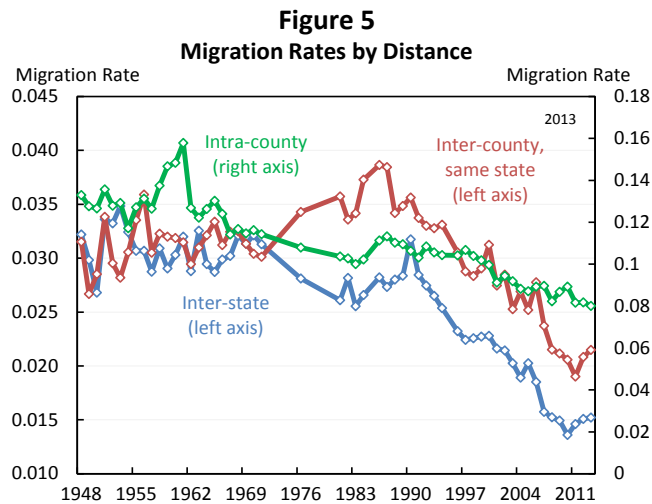
Zoning Impacts Labor Markets, Productivity, and Inequality

The topics I have covered so far are not just issues for housing markets—these issues directly affect the broader economy. Zoning can reinforce divergence across labor markets by impeding market forces that would otherwise help reduce income inequality and boost productivity. High-productivity cities—like Boston and San Francisco—have higher-income jobs relative to low-productivity cities. Normally, these higher wages would encourage workers to move to these high-productivity cities—a dynamic that brings more resources to productive areas of the country, allows workers in low-productivity areas to earn more, improves job matches and competes away any above-market wages (another type of economic rents) in the high-productivity cities. But when zoning restricts the supply of housing and renders housing more expensive—even relative to the higher wages in the high productivity cities—then workers are less able to move, particularly those who are low income to begin with and who would benefit most from moving. As a result, existing income inequality across cities remains entrenched and may even be exacerbated, while productivity does not grow as fast it normally would.⁷ This last result—from a paper out this past year by Chang-Tai Hsieh and Enrico Moretti—frames excessively restrictive zoning policies as hindrances to productivity growth. More on this in a moment.⁸

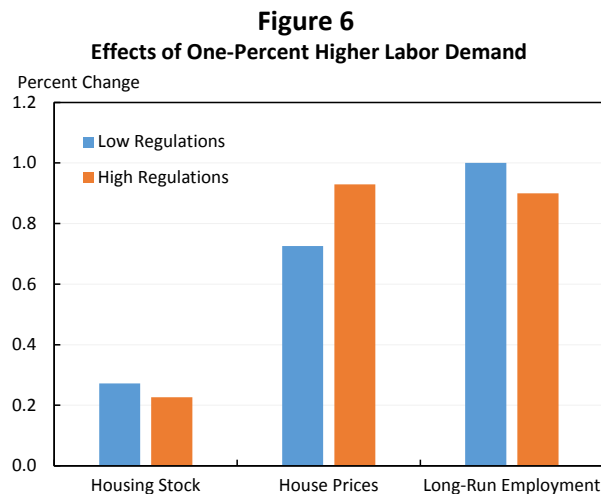
⁷ High-productivity cities would often have higher house prices relative to low-productivity cities. Productivity growth leads to higher wages and higher wages are then capitalized in house prices (Rosen, 1979; Roback, 1982). Yet, affordability measures are relative to wages in an area not levels of house prices across cities.

⁸ The reasons for the growing gap in productivity across cities are not fully understood—this is what Enrico Moretti of UC Berkeley termed the “Great Divergence” in his 2012 book, *the New Geography of Jobs*. The Tiebout Hypothesis may play a role (Fischel, 2001). Economist Charles Tiebout's 1956 model of “sorting” posits that people select communities based on where they maximize their subjective well-being, including through public goods and government regulations. Sorting is especially relevant in the zoning context because it offers a concise explanation of why zoning can beget demographic disparities, and thus why high-productivity, high-skill people may choose to live in areas with strict zoning laws or support strict zoning laws once they are already there; Zoning may protect

Over the same time period that the prevalence and intensity of zoning regulations have increased—since the 1970s—Figure 5 illustrates how migration rates across the country have been declining (Molloy, Smith, and Wozniak, 2014). Although this trend reflects many causes, housing supply restrictions and the resultant reductions in housing affordability lower the benefits of moving to higher-paying jobs and so likely play some role in these migration trends.



Additional suggestive evidence on this relationship between land use constraints and the labor market can be found in Saks (2008), which shows that an increase in labor demand in high regulation cities leads to a smaller increase in the housing stock, greater house price appreciation, and lower employment growth than in low regulation cities (Figure 6).

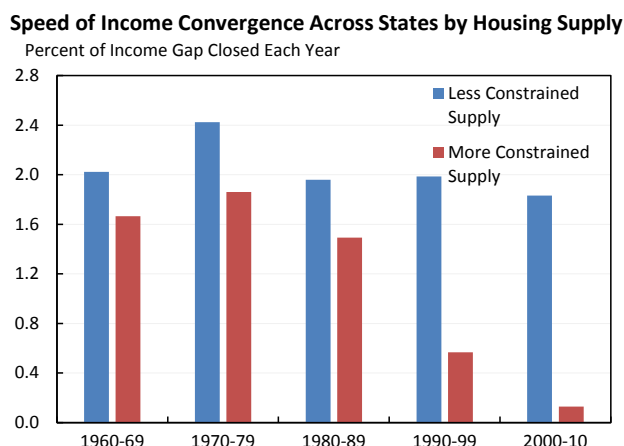


Another area in which to see the impact of stricter land use regulation on inequality is in the slowing convergence of income across states. Ganong and Shoag (2015) find that States with less constrained supply of housing (including from looser land use regulations) experienced a

both their wages and home prices from the depreciation that would occur if zoning constraints were relaxed and it were easier for lower income workers to move into their communities.

more consistent and substantial pace of income convergence over the last fifty years, closing about 2 percent of the across-state income gap on average per year (Figure 7). In contrast, States with more constrained supply of housing (including from tighter land use regulations) have experienced a substantial decline in the speed of income convergence. In fact, over the last twenty years, incomes across States with more constrained supply of housing have hardly converged at all. One story for this lack of any convergence is that only high-income workers can afford to relocate to the high-productivity cities that have tight land use regulations, which reinforces existing inequality.

Figure 7



The costs of zoning, in the context of this decline in labor mobility, are quite substantial. The Hsieh and Moretti paper I mentioned above documents that from 1964 to 2009, wage dispersion across cities has increased by a factor of two (Hsieh and Moretti, 2015). If workers and capital had moved over time to keep the relative wage distribution at its 1964 level, these researchers estimate that output would be more than 10 percent higher in 2009. Much of this “lost” output is attributed to zoning regulations that restricted the supply of housing, although this output estimate is tentative and would imply counterfactual employment increases absent housing restrictions in some cities of quite a large magnitude. Nevertheless, the logic of their calculation is helpful: output is lost when the supply of workers to high-productivity cities is restrained. Over time, this effect from the unrealized productivity gains of agglomeration can be large enough to reduce the country’s overall output noticeably. Of course, foregone economic output via less efficient labor markets is only one possible effect on living standards of reduced housing supply. There can also be some welfare costs from greater population density.

Zoning can also reduce intergenerational mobility. We know from the work on geographic variation in economic mobility by Chetty et al. (2014) that some areas are demonstrably high mobility and others less so. Moreover, moving from a low to a high mobility area confers lifelong socio-economic benefits on the children whose families move (Chetty et al., 2015). Yet the limited mobility brought about by zoning can contribute to putting these high-opportunity areas outside the reach of the families whose children would benefit most, although Chetty et al. do note that a number of high mobility areas do have low rents suggesting that some arbitrage opportunities still exist.

The constraints that zoning creates on mobility are exacerbated by the fact that zoning restrictions are not distributed randomly but instead tend to be more prevalent in high-income communities for the reasons I discussed earlier. This fact, coupled with the income gains for the rich over the past four decades, have worked toward pricing middle- and lower-income families out of the communities with the best schools. Studies by Watson (2009) and Reardon and Bischoff (2011) establish that higher income inequality leads to higher levels of residential segregation by income, and particularly allows affluent households to self-segregate within metropolitan areas. Thus, within the broader context of declining migration rates, divergence across labor markets, and worsening housing affordability, pursuing more prudent zoning policies could also reduce inequality that is entrenched across generations.

Other Consequences of Land Use Restrictions

I have described what I see to be the consequences of zoning regulation for housing markets, affordability, labor productivity, and inequality. But the consequences of zoning are much broader and include:

- *Greater environmental damage:* when strict zoning policies cap a city's density, they ensure that the city's residents must on average occupy more land than they otherwise would and travel greater distances to and from work as well, both of which increase carbon production, all else equal (Glaeser, 2011).
- *Worsening of house price bubbles:* tighter land use regulations may exacerbate house price bubbles. Gyourko, Glaeser, and Saiz (2008) demonstrate that cities with more restrictive zoning and thus a more inelastic housing supply have historically been more likely to experience house price bubbles and that these episodes of elevated prices tend to last longer.
- *Reduced public good provision:* zoning that restricts multi-use may also prevent the expansion of public goods provision. New retail, commercial, or industrial tenants may bring not only increased tax revenue but also may necessitate public or private investment in infrastructure to facilitate the flow of goods and people from their locations.

The Administration's Agenda

Before concluding, I want to describe in some more detail the policies that the Administration is pursuing to support affordable and fair housing. Land use regulations are largely, and legitimately, in the jurisdiction of State and local governments. But we can provide information, incentives, and expanded access to credit that can lead to increased pressure to reform and reverse the most problematic land use restrictions.

First, the Department of Housing and Urban Development (HUD) instituted substantially greater transparency through its Affirmatively Furthering Fair Housing (AFFH) rule, which was finalized this past summer. The Fair Housing Act of 1968 required any group receiving federal housing funds, as well as federal agencies overseeing such programs, to actively work toward increasing fair housing and equal opportunity. After many decades of progress, the new HUD rule, finalized this year, will give communities new tools to quantify the remaining inequities in local housing markets and achieve greater clarity in setting goals for the future. As a central part of this initiative, HUD will provide publicly open data and mapping tools to community members and local leaders, so that they can assess conditions in their housing markets. These data—alongside the ability to compare a locality with other nearby localities—should make it easier to identify disparities in access to opportunity, including those that may be entrenched due to land use policies and protection of economic rents. The goal is to provide easy-to-use and broad-based information on communities, on par with the data used in recent academic studies on economic mobility. Communities will use these detailed data to determine the reasons for any current imbalances and to establish specific goals and timelines to increase fair housing. Depending on the circumstances, this could mean changes in land use regulations and increasing the overall supply of housing in a community.

Second, the President proposed \$300 million in incentive funding through Local Housing Policy Grants in his FY 2016 Budget. These grants are designed to provide an incentive to encourage more relaxed land use regulations and increase the overall supply of housing. These grants would be provided specifically to those localities and regional coalitions that supported new zoning and land use regulations to create an expanded, more flexible, and diverse housing supply.

Third, land use regulations are not the only potential barrier to an increase in the supply of housing and reduction in the quantity of economic rents in a community's housing market. The limited supply of credit, particularly for multi-family developments at the lower end of the market, can also restrain an increase in affordable housing. The Multifamily Risk-Sharing Mortgage program, a partnership between HUD and the Treasury, reduces financing costs and channels capital into previously underserved housing markets, with financing provided by the Federal Financing Bank. The first transaction of this program was completed last fall with the New York City Housing Development Corporation and the program is expected to grow to at least \$250 million in FY 2016. Extensions of this program also seek to include smaller properties, which are a critical component of the multifamily rental housing stock but often face difficult financing terms.

These are only three examples of the wide ranging policies to support and improve housing markets undertaken by the Administration. Broadly speaking, we remain committed to helping communities identify barriers to opportunity and to providing the assistance necessary to reduce those barriers.

Notes to Figures

Figure 1

Source: Gyourko and Molloy (2015).

Figure 2

Source: Glaeser and Gyourko (2003).

Figure 3

Source: National Association of Realtors, Housing Affordability Index (2013); Wharton Residential Land Use Regulatory Index (Gyourko, Saiz, and Summers, 2008); CEA calculations.

Figure 4

Source: U.S. Census Bureau.

Figure 5

Source: Molloy, Smith, and Wozniak (2014).

Figure 6

Source: Saks (2008); CEA calculations.

Figure 7

Source: Ganong and Shoag (2015); CEA calculations.

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BROOKINGS

Report

Reforming land use regulations

Edward Glaeser Monday, April 24, 2017

Editor's Note:

This report is part of the Series on Market and Government Failures and was produced by the Brookings Center on Regulation and Markets.

Arguably, land use controls have a more widespread impact on the lives of ordinary Americans than any other regulation. These controls, typically imposed by localities, make housing more expensive and restrict the growth of America's most successful metropolitan areas. These regulations have accreted over time with virtually no cost-benefit analysis. Restricting growth is often locally popular. Promoting affordability is hardly a financially attractive aim for someone who owns a home. Yet the maze of local land use controls imposes costs on outsiders, and on the American economy as a whole.

New York City enacted its pioneering zoning code in 1916. The Supreme Court only established the constitutionality of Euclidean zoning, which restricts neighborhoods to single uses, in 1926. Yet, these restrictions didn't meaningfully prevent new building in much of America until the 1970s. Abundant new construction, not just in Texas but also in New York, Los Angeles and greater San Francisco, ensured that as late as 1970, prices remained close to the physical costs of construction in much of America.

Yet starting in the 1960s, a property rights revolution occurred in the U.S. Backed by environmentalist rhetoric in the suburbs and preservationist priorities in the cities, American localities increasingly restricted the rights of property owners to build. We changed from a country in which landowners had relatively unfettered freedom to add density to a country in which veto rights over new projects are shared by a dizzying array

of abutters and stakeholders. Consequently, we now build far less in the most successful, best educated parts of the country, and housing prices in these areas are far higher than construction costs or prices elsewhere.

In ordinary conversation, people usually just discuss nominal housing prices. Housing advocates often discuss affordability, which is defined by linking the cost of living to incomes. But the regulatory approach on housing should compare housing prices to the Minimum Profitable Construction Cost, or MPPC. An unfettered construction market won't magically reduce the price of purchasing lumber or plumbing. The best price outcome possible, without subsidies, is that prices hew more closely to the physical cost of building.

In a recent paper with Joseph Gyourko, we characterize the distribution of prices relative to Minimum Profitable Construction Costs across the U.S. These costs are based on R.S. Means, which estimates building costs and sells these estimates to the construction industry. We base our estimates on an "economy" quality home, and assume that builders in an unregulated market should expect to earn 17 percent over this purely physical cost of construction, which would have to cover other soft costs of construction including land assembly.

We then compare these construction costs with the distribution of self-assessed housing values in the American Housing Survey. The distribution of price to MPPC ratios shows a nation of extremes. Fully, 40 percent of the American Housing Survey homes are valued at 75 percent or less of their Minimum Profitable Production Cost. This finding is not that surprising. Most homes are old and we are comparing them to the cost of building new housing. Most used cars also sell for much less than the price of building a new car. Another 33 percent of homes are valued at between 75 percent and 125 percent of construction costs.

Other data seems to support that most American homes do not seem to have been valued for much more than replacement costs in 2013 view. In 2014, seventy percent of the metropolitan areas covered by the National Association of Realtors had median sales

prices below \$200,000, and these typically reflect somewhat newer, nicer homes. We also found that 85 percent of the metropolitan areas in our sample had median price to MPPC ratios that were below 125 percent. Price growth has been steady since 2013, which is unfortunately, the last year for which we have both R.S. Means and American Housing Survey data, but the basic point that much of America remains quite affordable is still true today.

But most productive parts of America are unaffordable. The National Association of Realtors data shows median sales prices over \$1,000,000 in the San Jose metropolitan area and over \$500,000 in Los Angeles. One tenth of American homes in 2013 were valued at more than double Minimum Profitable Production Costs, and assuredly the share is much higher today. In 2005, at the height of the boom, almost 30 percent of American homes were valued at more than twice production costs. Our painful housing bust eliminated some of the affordability problem in our most expensive areas, but that problem has returned.

America's affordability problem is local, not national, but that doesn't mean that land use regulations don't have national implications. Historically, when parts of America experienced outsized economic success, they built enormous amounts of housing. New housing allowed thousands of Americans to participate in the productivity of that locality. Between 1880 and 1910, bustling Chicago's population grew by an average of 56,000 each year. Today, San Francisco is one of the great capitals of the information age, yet from 1980 to 2010, that city's population grew by only 4200 people per year.

Land use controls that limit the growth of such successful cities mean that Americans increasingly live in places that make it easy to build, not in places with higher levels of productivity.

Land use controls that limit the growth of such successful cities mean that Americans increasingly live in places that make it easy to build, not in places with higher levels of productivity. Hsieh and Moretti (2015) have estimated that “lowering regulatory constraints” in areas like New York and Silicon Valley would “increase U.S. GDP by 9.5%.” Whether these exact figures are correct, they provide a basis for the claim that America’s most important, and potentially costly, regulations are land use controls.

How do we know that high housing costs have anything to do with artificial restrictions on supply? Perhaps the most compelling argument uses the tools of Economics 101. If demand alone drove prices, then we should expect to see places that have high costs also have high levels of construction.

The reverse is true. Places that are expensive don’t build a lot and places that build a lot aren’t expensive. San Francisco and urban Honolulu have the highest ratios of prices to construction costs in our data, and these areas permitted little housing between 2000 and 2013. In our sample, Las Vegas was the biggest builder and it emerged from the crisis with home values far below construction costs.

The primary alternative to the view that regulation is responsible for limiting supply and boosting prices is that some areas have a natural shortage of land.

Albert Saiz’s (2011) work on geography and housing supply shows that where geography, like water and hills, constrains building, prices are higher. He also finds that measures of housing regulation predict less building and higher prices.

But lack of land can’t be the whole story. Many expensive parts of America, like Middlesex County Massachusetts, have modest density levels and low levels of construction. Other areas, like Harris County, Texas, have higher density levels, higher construction rates and lower prices. Across Massachusetts towns, Glaeser and Ward (2009) found that there was more construction in places, like Chelsea and Revere, with higher initial density levels and modest prices.

If land scarcity was the whole story, then we should expect houses on large lots to be extremely expensive in America's high priced metropolitan areas. Yet typically, the willingness to pay for an extra acre of land is low, even in high cost areas. We should also expect apartments to cost roughly the cost of adding an extra story to a high-rise building, since growing up doesn't require more land. Typically, Manhattan apartments are sold for far more than the engineering cost of growing up, which implies the power of regulatory constraints (Glaeser, Gyourko and Saks, 2005).

Naturally, there are also a host of papers, including Glaeser and Ward (2009), showing the correlation between different types of rules and either reductions in new construction or increases in prices or both. The problem with empirical work any particular land use control is that there are so many ways to say no to new construction. Since the rules usually go together, it is almost impossible to identify the impact of any particular land use control. Moreover, eliminating one rule is unlikely to make much difference, since anti-growth communities would easily find ways to block construction in other ways.

Land use controls may be benign even if they restrict growth and increase prices. Their proponents argue that they prevent environmental damage and reduce the downsides of local growth to the community. Theoretically, it is at least conceivable that America's web of locally-constructed zoning codes have worked out to be a finely tuned system that functions like a perfect Pigouvian tax internalizing all the offsetting externalities of all new construction.

Yet such a view seems untenable. Getting the right national policy requires comparing the social costs of building in one location versus the costs of building elsewhere. Few localities seriously consider the negative impact that restricting buying will have on non-residents of their town. No locality considers the impact that their local rules may induce more building elsewhere.

California builders have faced an onerous Environment Impact Review process since the 1972 Friends of Mammoth Case. When environmental rules prevent building in highly productive, highly restricted coastal California, homes get built elsewhere, like Las Vegas

and Houston. Carbon emissions per household are lower in coastal California than elsewhere in the country, primarily because of a benign Mediterranean climate (Glaeser and Kahn, 2010). California's land use restrictions don't eliminate new construction, they merely move it elsewhere, so it isn't enough to have a purely local perspective. In California's case, preventing local construction for environmental reasons only ends up increasing carbon emissions by pushing building to less salubrious climes.

Empirically, there is also little evidence that these land use controls correct for real externalities. For example, if people really value the lower density levels that land use controls create, then we should expect to see much higher prices in communities with lower density levels, holding distance to the city center fixed. We do not (Glaeser and War, 2010). Our attempt to assess the total externalities generated by building in Manhattan found that they were tiny relative to the implicit tax on building created by land use controls (Glaeser, Gyourko and Saks, 2005).

Reforming land use controls is so difficult, because they are generated at such a low level of government. Washington didn't make these rules, and constitutionally, H.U.D. doesn't have the authority to rewrite them. Most localities like the rules that they have, so there is little chance of regulatory reform from either the top down or the bottom up.

The right strategy is to start in the middle. States do have the ability to rewrite local land use powers, and state leaders are more likely to perceive the downsides of over regulating new construction. Some state policies, like Massachusetts Chapter 40B, 40R and 40S, explicitly attempt to check local land use controls. In New Jersey, the state Supreme Court fought against restrictive local zoning rules in the Mount Laurel decision.

If states do want to reform local land use controls, they might start with a serious cost benefit analysis and then require localities to refrain from any new regulations without first performing cost-benefit analyses of their own. Once the state has decided that current rules are too restrictive, there are two plausible models.

The first, more powerful model is to override local land use controls entirely if a community has prices that are too high and permits too little. Massachusetts Chapter 40B provides a model, where builders can bypass local rules if a community doesn't have enough affordable housing. This bypass is effective, but it is also unpopular.

A somewhat softer approach is to provide stronger incentives for permitting building, which is the model provided by Massachusetts Chapter 40R and 40S and the Mount Laurel decision. In this model, high price communities that permit too little new construction would pay a transfer to the state that would be transferred to communities that build more. This process is more politically palatable, but also less sure to yield immediate impact.

Reforming local land use controls is one of those rare areas in which the libertarian and the progressive agree. The current system restricts the freedom of the property owner, and also makes life harder for poorer Americans. The politics of zoning reform may be hard, but our land use regulations are badly in need of rethinking.

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AMERICA'S RENTAL HOUSING 2017



Joint Center for Housing Studies of Harvard University

JOINT CENTER FOR HOUSING STUDIES OF HARVARD UNIVERSITY

HARVARD GRADUATE SCHOOL OF DESIGN
HARVARD KENNEDY SCHOOL

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Online Tables and Exhibits: www.jchs.harvard.edu/americas-rental-housing

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1 | EXECUTIVE SUMMARY

After a decade of broad-based growth, renter households are increasingly likely to have higher incomes, be older, and have children. The market has responded to this shift in demand with an expanded supply of high-end apartments and single-family homes, but with little new housing affordable to low- and moderate-income renters. As a result, part of the new normal emerging in the rental market is that nearly half of renter households are cost burdened. Addressing this affordability challenge thus requires not only the expansion of subsidies for the nation's lowest-income households, but also the fostering of private development of moderately priced housing.

RENTER HOUSEHOLD GROWTH IN A SLOWDOWN

Rental housing markets have seen an unprecedented run-up in demand over the last decade, with growth in renter households averaging just under one million annually since 2010. But the surge in demand now appears to be ending, with the three major government surveys reporting a sharp slowdown in renter household growth to the 136,000–625,000 range in 2016. Early indications for 2017 suggest a further deceleration, with one survey showing essentially no increase and another posting a substantial decline (**Figure 1**). While these estimates are notoriously volatile from year to year, the consistent trend across surveys provides some confidence that growth in renter households is indeed cooling.

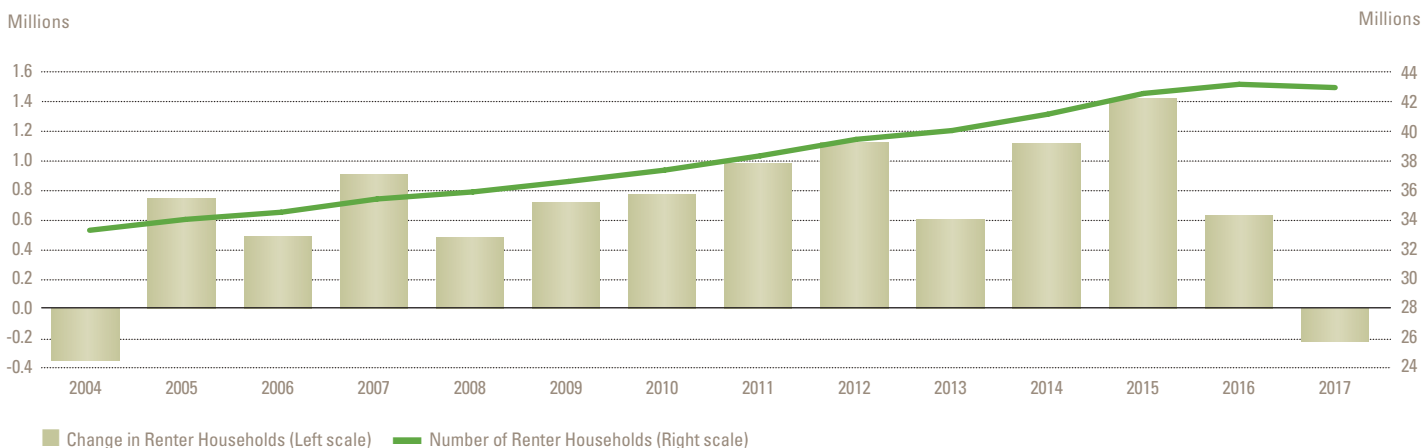
The recent wave in renter household growth reflects in part the sharp drop in the national homeownership rate after 2004. While many factors drove that decline, the massive wave of foreclosures after the housing crash was a key contributor. This drag on homeownership has now eased. And with the economy near full employment and incomes on the rise, more households that want to buy homes are able to do so.

Still, the housing crisis no doubt generated renewed appreciation for the advantages of renting that will help sustain demand in the years ahead. Indeed, even as the homeownership rate stabilizes, renters are still likely to account for slightly more than a third of household growth. According to Joint Center projections, the number of renter households will increase by nearly 500,000 annually over the ten years from 2015 to 2025—a still robust pace by historical standards.

The sweeping changes in the nature of rental demand, however, seem likely to persist. In particular, renting now appears to have greater appeal for households that could afford to buy homes if they desired. In 2006, 12 percent of households earning \$100,000 or more were renters. In 2016, that share exceeded 18 percent, a cumulative increase of 2.9 million renters in this top income category. Indeed, these high-income households drove nearly 30 percent of the growth in renters over the decade. Even so, renting remains the primary housing option for those with the least means. A majority (53 percent) of households earning less than \$35,000 rent their housing, including over 60 percent of households earning less than \$15,000.

FIGURE 1

After a Decade of Expansion, the Pace of Growth in Renter Households Has Slowed



Note: Estimate for 2017 is the average of second- and third-quarter data.
Source: JCHS tabulations of US Census Bureau, Housing Vacancy Survey.

In addition, renters are now much older on average than a decade ago, reflecting both an increase in middle-aged households that rent and the overall aging of the population. The median age of renters thus increased from 38 in 2006 to 40 in 2016. Although roughly a third of renters are under age 35, nearly as many are now age 50 and over.

With renting more common across age and income groups, renter households are more representative of the broad cross-section of US families. Most notably, families with children now make up a larger share of households that rent (33 percent) than own (30 percent). Married couples without children, in contrast, make up 37 percent of homeowners and just 12 percent of renter households. Single persons are still the most common renter household type, accounting for fully 37 percent of all renter households.

While whites accounted for a large share of the overall growth in renters, renter households are quite racially and ethnically diverse. Unlike homeowners, who are overwhelmingly white, renter households include a large share (47 percent) of minorities. At the same time, one in five renter households is foreign born, reflecting the importance of rental housing to new immigrants.

EVOLUTION OF THE RENTAL SUPPLY

Soaring demand sparked a sharp expansion of the rental stock over the past decade. Initially, most of the additions to supply came from conversions of formerly owner-occupied units, particularly single-family homes, which provided housing for the increasing number of families with children in the rental market. Between 2006 and 2016, the number of single-family homes available for rent increased by

nearly 4 million, lifting the total to 18.2 million. While single-family homes have always accounted for a large share of rental housing, they now make up 39 percent of the stock.

More recently, though, growth in the single-family supply has slowed. The American Community Survey shows that the number of single-family rentals (including detached, attached, and mobile homes) increased by only 74,000 units between 2015 and 2016, substantially below the 400,000 annual increase averaged in 2005–2015. With this slowdown in single-family conversions and a boom in multifamily construction, new multifamily units have come to account for a growing share of new rentals. Indeed, completions of new multifamily units intended for rent averaged 300,000 annually over the last two years, their highest level since the end of the 1980s.

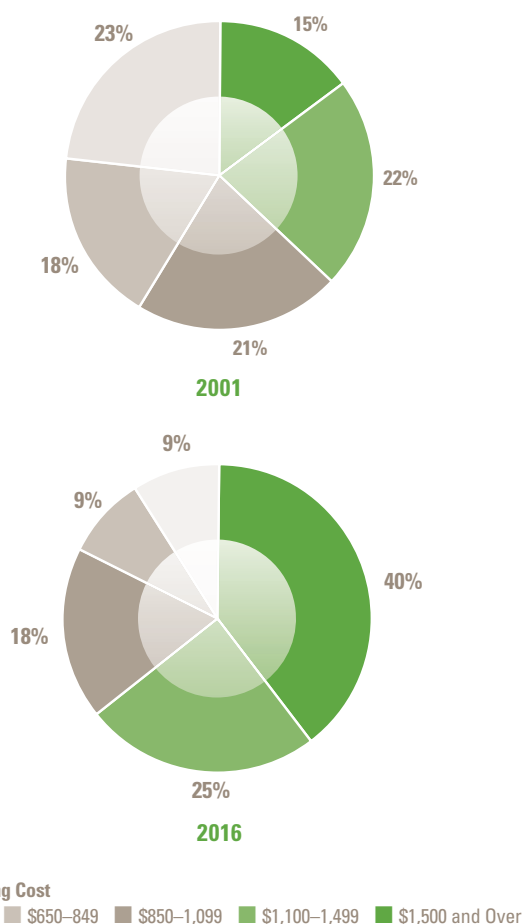
Much of this new housing is targeted to higher-income households and located primarily in high-rise buildings in downtown neighborhoods. Given that construction and land costs are particularly high in these locations, the median asking rent for new apartments increased by 27 percent between 2011 and 2016 in real terms, to \$1,480. Using the 30-percent-of-income standard for affordability, households would need an income of at least \$59,000 to afford these new units, well above the median renter income of \$37,300.

At the same time, the supply of moderate- and lower-cost units has increased only modestly (**Figure 2**). While the share of new units renting for at least \$1,100 jumped from 37 percent in 2001 to 65 percent in 2016, the share renting for under \$850 shrank from just over two-fifths to under one-fifth. The lack of new, more affordable rentals is in part a consequence of sharply rising construction costs, includ-

FIGURE 2

Additions to the Rental Stock Are Increasingly at the Higher End

Share of Recently Built Units



Notes: Recently built units in 2001 (2016) were constructed in 1999–2001 (2014–2016). Monthly housing costs include rent and utilities and are in constant 2016 dollars, adjusted for inflation using the CPI-U for All Items Less Shelter. Data exclude vacant units and units for which no cash rent is paid.
 Source: JCHS tabulations of US Census Bureau, 2001 and 2016 American Community Survey 1-Year Estimates.

ing labor and materials. According to estimates from RS Means, the costs of building a basic, three-story apartment building increased by 8 percent from 2016 to 2017 alone. Tight land use regulations also add to costs by limiting the land zoned for higher-density housing and entailing lengthy approval processes.

Given these high development costs, most of the demand for low-priced rentals must be met by older units. Only a fifth of existing units rented for under \$650 a month in 2016, and nearly half of these units were built before 1970. Affordably priced rentals are frequently located in smaller multifamily structures, with one-quarter of low-cost units in buildings with 2–4 apartments.

In many cases, the supply of these so-called naturally occurring affordable rentals is replenished as rents on older housing fall due to aging and obsolescence. But with overall rental demand strong, particularly in centrally located communities, rents for an increasing number of once-affordable units have become out of reach for lower-income households. At the same time, the rents charged for units in neighborhoods with weak demand may not support adequate maintenance, leaving those rentals at risk of deterioration and loss. Given the lack of new construction of lower-cost rentals, preserving the existing stock of privately owned affordable units is increasingly urgent.

RENTAL MARKETS AT A TURNING POINT

Rental construction led the housing recovery, rebounding nearly four-fold from the market trough in 2009 to 400,000 units in 2015—the highest annual level since the late 1980s. But after moving sideways in 2016, the pace of multifamily starts has fallen 9 percent through October 2017. The slowdown has occurred in markets across the country, but is most evident in metros where multifamily construction had been strongest.

In addition to the slowdown in construction, a variety of measures suggest that the rental boom is cresting. RealPage reports increasing slack in the professionally managed apartment market, with vacancy rates rising over the past year in 94 of the 100 metros tracked. The clearest signs of loosening are in the higher-priced Class A segment, where the vacancy rate was up 1.5 percentage points year over year in the third quarter of 2017, to 6.0 percent (Figure 3). Vacancy rates in the lower-cost Class C segment also rose but remain quite low at 4.1 percent.

Apartment rents are also increasing more slowly in all three segments of the market (Figure 4). This deceleration has appeared in all four regions of the country and in large and small markets alike. Even so, conditions in selected markets—particularly smaller metros and locations in the Midwest, such as Cincinnati and Minneapolis—were still heating up.

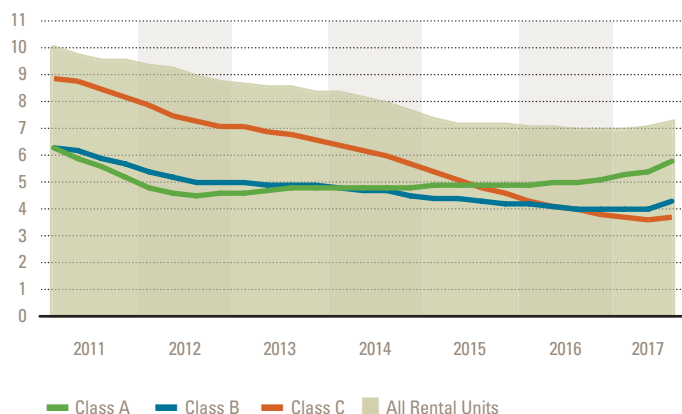
Over the last six years, increases in the median rent have exceeded inflation in non-housing costs by more than a full percentage point annually, with the largest gains in the South and West. Median rents have risen at twice the national pace in markets with rapid population growth, such as Austin, Denver, and Seattle. And within these fast-growing metros, rents in previously low-cost neighborhoods rose nearly a percentage point faster each year than in high-cost neighborhoods.

Meanwhile, rental property owners continue to benefit from still healthy increases in operating incomes and property values. According to the National Council of Real Estate Investment Fiduciaries, net

FIGURE 3

As Vacancy Rates Begin to Climb...

Rental Vacancy Rate (Percent)



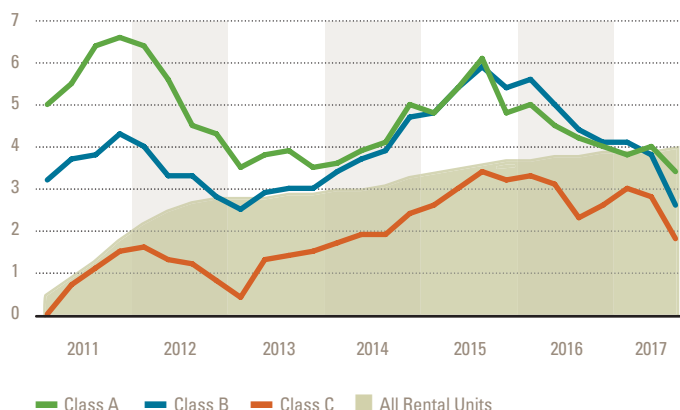
Notes: Vacancy rates are calculated as smoothed four-quarter trailing averages. Vacancy rate for all rental units is from the HVS. RealPage data cover professionally managed apartments in buildings with five or more units.

Sources: JCHS tabulations of US Census Bureau, Housing Vacancy Survey (HVS), and RealPage, Inc.

FIGURE 4

... Rent Growth Appears Set for a Steeper Slowdown

Change in Rents (Percent)



Notes: Growth in rents for all units is measured by the CPI for Rent of Primary Residence, including utilities. RealPage data cover professionally managed apartments in buildings with five or more units.

Sources: JCHS tabulations of Bureau of Labor Statistics, and RealPage, Inc.

operating incomes were up 3.8 percent in the third quarter of 2017 from a year earlier. In addition, Real Capital Analytics reports that real apartment prices climbed 6.3 percent in the second quarter of this year. Although declining, rates of return on investment remained relatively strong at 6.2 percent. The pace of investment, however, appears to be slowing, with the volume of large international and institutional deals falling in many major apartment markets.

Even so, multifamily financing remains at an all-time high. According to the Mortgage Bankers Association, the volume of outstanding multifamily mortgage debt increased by about 20 percent in 2015–2016, rising to nearly \$1.2 trillion in early 2017. Federally backed debt rose by 25 percent, while bank and thrift lending was up 29 percent. Meanwhile, multifamily loan delinquencies are extremely low. Some caution appears to be creeping into the market, however, with the latest Federal Reserve loan officer surveys pointing to tightening credit and slowing demand.

SLIGHT EASING OF AFFORDABILITY PRESSURES

With the economy continuing to improve and income growth accelerating, the share of renters with cost burdens (paying more than 30 percent of income for housing) fell in 2016 for the fourth time in five years, to 47 percent (**Figure 5**). The number of cost-burdened renters also fell for the second consecutive year, declining from 21.3 million in 2014 to 20.8 million in 2016, with the number of severely burdened households (paying more than 50 percent of income for housing) dipping from 11.4 million to 11.0 million. However, this progress comes

only after a decade of steep increases. At the average rate of improvement from 2014 to 2016, it would take another 24 years for the number of cost-burdened renters to return to the 2001 level.

The high incidence of cost burdens reflects the divergent paths of rental housing costs and household incomes. Between 2001 and 2011, median rental housing costs rose 5 percent in real terms while median renter incomes dropped 15 percent. Since 2011, however, real housing costs have increased 6 percent while income growth has picked up 16 percent (due in part to the increasing share of renters with higher incomes). But even with the recent turnaround in incomes, the cumulative increase in rental housing costs since 2001 has been far larger.

The rental market thus appears to be settling into a new normal where nearly half of renter households are cost burdened. An important element of this trend is that more middle-income renters are spending a disproportionate share of income for housing. Indeed, the share of renters earning \$30,000–45,000 with cost burdens jumped from 37 percent in 2001 to 50 percent in 2016, and the share earning \$45,000–75,000 nearly doubled from 12 percent to 23 percent. In addition, the cost-burdened share of lowest-income households (earning less than \$15,000) was still a stunning 83 percent, with the vast majority experiencing severe burdens.

Given the fundamental need for shelter, rent is typically the first bill paid each month. High housing costs erode renters' purchasing power, leaving little money left over for other essentials such as food, childcare, and healthcare. In 2016, the median renter in the bottom

income quartile had just \$488 per month to spend on other essentials—18 percent less than in 2001 after adjusting for inflation. The added costs of utilities and transportation further strain household budgets. Low-income households with children and older adults with severe rental cost burdens are in a particularly precarious position and may be unable to afford other goods and services that are critical to health and well-being.

SHORTFALL IN RENTAL ASSISTANCE

Need for housing assistance continues to grow. HUD's Worst Case Housing Needs 2017 Report to Congress shows that the number of very low-income households receiving rental assistance increased by 600,000 from 2001 to 2015. Over the same period, the number of very low-income households (making less than 50 percent of area median) grew by 4.3 million, with extremely low-income households (making less than 30 percent of area median) accounting for more than half (2.6 million) of this increase. As a result, the share of renters potentially eligible for assistance and that were able to secure this support declined from 28 percent to 25 percent (**Figure 6**). Meanwhile, the share of very low-income renters facing worst case needs—that is, paying more than half their incomes for housing and/or living in severely inadequate units—increased from 34 percent to 43 percent.

Making matters worse, much of the subsidized rental stock is at risk of loss either due to under-maintenance or expiring affordability periods. Public housing is particularly under threat, with a backlog of deferred repairs last estimated at \$26 billion in 2010. In fact, the

number of occupied public housing units fell by 60,000 between 2006 and 2016. The Rental Assistance Demonstration (RAD) program was launched in 2012 to convert public housing into long-term project-based Section 8 contracts in order to provide more flexible financing for improvements. The RAD program quickly reached its initial cap of 60,000 units, which has since been increased to 225,000 units.

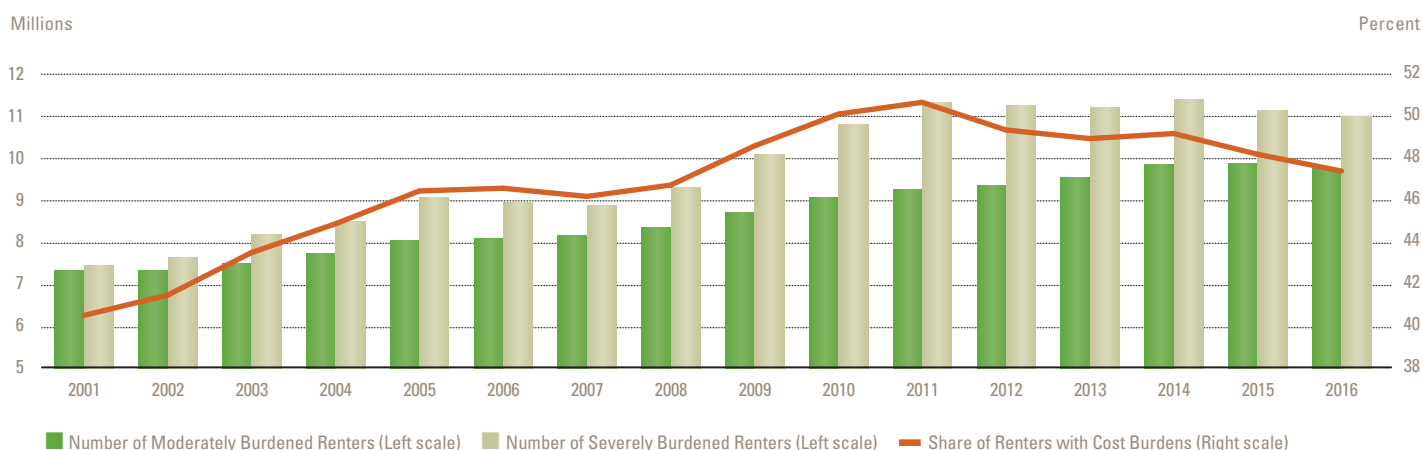
The two main sources of rental housing assistance are the Housing Choice Voucher and Low Income Housing Tax Credit (LIHTC) programs. Vouchers enable recipients to choose units on the open market as long as they meet rent and quality standards. Despite a 6.8 percent increase in funding between 2011 and 2016, rising rents kept growth in the number of voucher holders to just 5.8 percent.

In contrast, the LIHTC program provides funding for new construction as well as rehabilitation and preservation of existing assisted housing. In recent years, the LIHTC program has supported 70,000 affordable rental units per year, with roughly 55 percent added through new construction. But over the next decade, nearly 500,000 LIHTC units, along with over 650,000 other subsidized rentals, will come to the end of their required affordability periods. The need for funding to help rehabilitate and preserve this important stock will fuel significant demand for LIHTC funding, thus limiting opportunities to build new affordable rentals.

In recognition of the important role that the LIHTC program plays, the Congress is considering a bipartisan proposal to expand funding while also introducing reforms that would improve the ability of the program to serve both lower- and moderate-income households

FIGURE 5

Despite Recent Declines, the Number and Share of Cost-Burdened Renters Remain Well Above Levels a Decade Ago

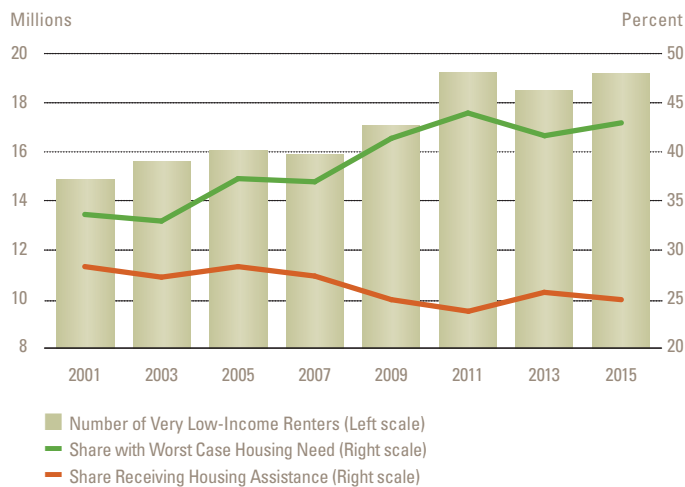


Notes: Moderately (severely) cost-burdened households pay 30–50% (more than 50%) of income for housing. Households with zero or negative income are assumed to have severe burdens, while households paying no cash rent are assumed to be without burdens.

Source: JCHS tabulations of US Census Bureau, American Community Survey 1-Year Estimates.

FIGURE 6

Growth of Very Low-Income Renters Continues to Outpace Availability of Housing Assistance



Notes: Very low income is defined as less than 50% of area median. Households with worst case housing needs are very low-income renters paying more than 50% of income for rent or living in severely inadequate conditions, and do not receive housing assistance.

Source: US Department of Housing and Urban Development, 2003–2017 Worst Case Housing Needs Reports to Congress.

in high-cost markets. However, tax reform proposals also under debate call for elimination of the 4 percent LIHTC program, which accounted for just under half of production in 2015.

THE CHALLENGE OF REBUILDING AFTER DISASTERS

The series of disasters this past year—including devastating hurricanes in Texas, Florida, and Puerto Rico, and massive wildfires in densely populated areas of California—have affected millions of owners and renters alike. A key lesson from previous disasters is that rental property owners are slower than homeowners to rebuild or replace their units. For example, five years after Hurricanes Katrina and Rita ravaged the Gulf coast, three-quarters of severely damaged owner-occupied housing in Louisiana and Mississippi had been rebuilt, compared with only 60 percent of small rental properties.

A recent report by the Community Preservation Corporation recommends a series of improvements to the federal disaster response process, including provision of additional housing vouchers to help displaced renters and special allocation of LIHTC authority to speed rebuilding of affordable housing. The study notes that the awarding of additional LIHTC authority supported development of 30,000 rentals on the Gulf Coast after Katrina. In contrast, the Northeast was without similar authority after Hurricane Sandy and has subsequently struggled to rebuild its affordable stock.

The incidence and severity of natural disasters is on the rise. In developing their recovery plans to improve resiliency after such events, governments at all levels must keep in mind the needs of renters—particularly very low-income renters—for replacement housing.

THE OUTLOOK

Slower growth in rental housing demand could be good news if it helps to check the rapid rise in rents. But even if the homeownership rate stabilizes near current levels, the number of renter households is likely to continue to increase at a healthy clip, driving up the need for additional supply. And given that a broader array of households has turned to renting, this also means a growing need for a range of rental housing options.

With the divergence between housing costs and household incomes after 2001, cost burdens are a fact of life for nearly half of all renters (**Online Figure 1**). The lack of affordable rental housing is a consequence of not only strong growth in the number of lower-income households, but also steeply rising development costs. The complex set of forces driving these increases includes the escalating costs of inputs and a lack of innovation in production methods, the design of homes, and the means of financing housing. Addressing all of these challenges requires action on the parts of both the public and private sectors. Government at all levels has a role to play in ensuring that the regulatory environment does not stifle much-needed innovation, and that tax policy and public spending support the efficient provision of moderately priced housing. Industry has its own part to play in fostering and advancing new approaches.

However, the market simply cannot supply housing at prices affordable to the nation's lowest-income households. The best means of supporting these families and individuals depends on both local market conditions and the value placed on other policy goals, such as helping to revitalize communities and improving the geographic distribution of permanently affordable housing. Another consideration for policymakers is to find ways for housing assistance programs to enable and encourage economic mobility.

While there is much to debate about the best approaches to pursue, the current level of rental housing assistance is grossly inadequate. It is concerning that discussions about federal tax reform have not addressed ways to expand the availability of affordable housing, and proposed measures could even erode the limited support that currently exists. As a growing body of evidence shows, the costs that poor-quality, unstable housing situations impose on individuals and families—as well as on broader society in terms of lost productivity and the strain on public budgets—are simply too high to ignore.



2 | RENTER HOUSEHOLDS

More than a third of US households live in rental housing. After the Great Recession and housing market crash, the number of renters surged across all ages, races/ethnicities, and household types, with especially large increases among higher-income and older households. Nevertheless, younger, lower-income, and minority households are still the most likely to rent and thus make up large shares of renters. While growth in rental demand now appears to be slowing, demographic changes will continue to drive strong increases in the number of renter households over the coming decades.

A DECADE OF SOARING DEMAND COMING TO AN END

Rental housing demand has grown at an unprecedented pace for more than a decade. According to the Census Bureau's Housing Vacancy Survey, the number of renter households jumped by nearly a third, or roughly 10 million, between the homeownership peak in 2004 and 2016. From 2010 through 2016, growth has averaged 976,000 renters per year, far exceeding the 430,000–500,000 added annually in the 1970s and 1980s when the baby boomers started to enter the rental market. As of mid-2017, the number of US renters stood at 43 million.

The surge in renter households erased a decade of declining demand between 1994 and 2004, when the national rentership rate fell from 36 percent to just 31 percent (**Figure 7**). The share of renter households was back up above 36 percent by early 2015, where it has stabilized now that fewer owners are losing their homes to foreclosure and more young households are buying first homes. As a result, rental markets generally are drawing less demand from homeowner markets.

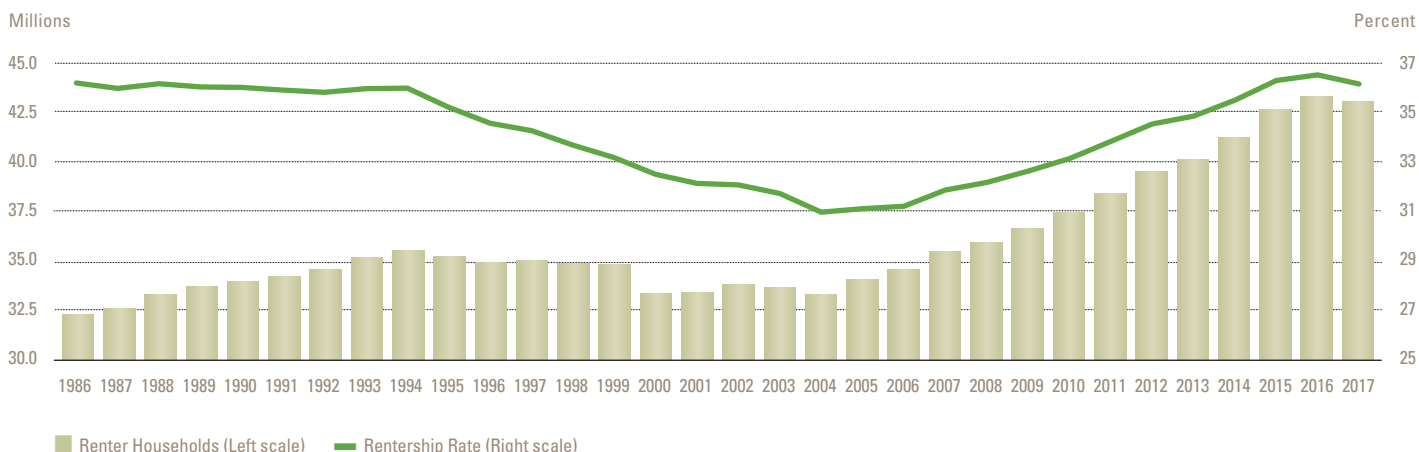
The latest survey data are beginning to reflect these trends. All of three annual Census Bureau household surveys reported slowdowns in renter growth in 2016. Indeed, the Housing Vacancy Survey showed a year-over-year decline in the number of renter households in mid-2017. But given that the trend is new and survey data are unprecise, the full extent and duration of the decline in rental demand are still unclear. Assuming that the homeownership rate does stabilize, renters should continue to account for roughly a third of household growth in the years ahead.

THE SURGE IN HIGH-INCOME RENTERS

Households of all ages, incomes, races/ethnicities, and family types helped to fuel the recent growth in renters, but the role of high-income households is particularly noteworthy. According to the Current Population Survey, households with real annual incomes of \$50,000 or more—a group that accounted for just one-third of all renter households in 2006—drove well over half (60 percent) of the growth in renter households from 2006 to 2016. Moreover, house-

FIGURE 7

The Wave of Growth Since 2004 Has Lifted the Number and Share of Renter Households



Note: Estimate for 2017 is the average of second- and third-quarter data.
Source: JCHS tabulations of US Census Bureau, Housing Vacancy Survey.

holds with real annual incomes of \$100,000 or more—making up just 9 percent of renters in 2006—were responsible for 29 percent of the 9.9 million increase in renters over the decade (**Figure 8**).

Many, though not all, of the outsized increases in higher-income renters were concentrated in high-cost metro areas. For example, households earning \$100,000 or more accounted for 65 percent of the growth in renter households in the New York City metro and fully 93 percent in San Francisco (**Figure 9**). But even in metros where they were less prevalent, higher-income households were responsible for significant shares of renter growth, including Miami (15 percent) and Phoenix (20 percent).

Strong growth in high-income renter households was driven in large measure by sharply higher rentership rates among this group. Indeed, the share of households with incomes of at least \$75,000 that rented their housing jumped by 6.9 percentage points in 2006–2016, more than twice the 3.3 percentage point increase among households earning less than \$50,000. Without this increase in rentership rates among high-income households, there would be 3.4 million fewer renters today.

The strong growth in higher-income households altered the distribution of renter household types. Unlike lower-income renters, who primarily live in single-person households, higher-income renters live in a variety of household settings that are likely to include multiple adults, such as married couples or unmarried partners. These types of households, which are apt to have at least two earners, made up half of the growth in renters earning \$50,000 or more over the past decade.

ROLES OF OLDER AND WHITE HOUSEHOLDS

While the largest increase in rentership rates was among young, high-income households, much of the overall growth in renter households was driven by older households. Indeed, adults age 50 and over accounted for half of the increase in the total number of renters in 2006–2016 (**Figure 10**). Although much of this increase simply reflects changes in the age structure of the population, rising rentership rates among this age group lifted the number of older renters well above what population aging alone would suggest. In addition, higher rentership rates among households in their 30s and 40s also helped to offset what would have otherwise been declines among that age group as the youngest baby-boomers moved into their 50s.

Given that older adults are likely to live alone, the increase in older renters added significantly to the number of single-person households. Single persons accounted for 37 percent of renter household growth overall in 2006–2016, but fully 52 percent of the growth in renter households age 50 and over. By comparison, single persons made up only 20 percent of the increase in renter households under age 50. As a result, three out of every four single-person renter households added over the decade were at least age 50.

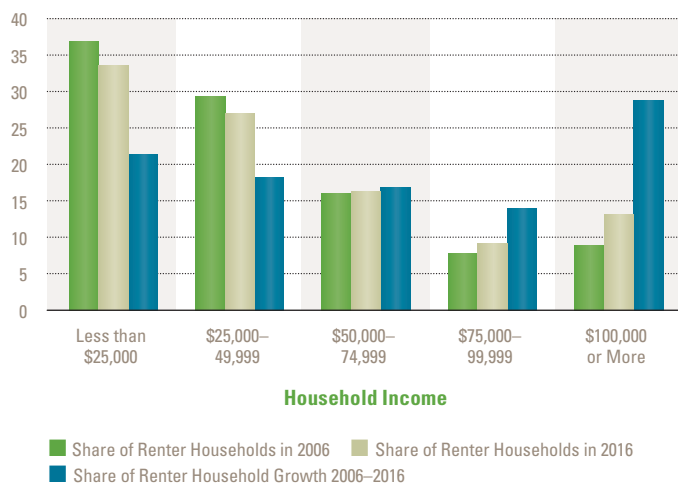
After single persons, married couples without children accounted for the next-largest share of renter growth (17 percent). This group includes older renter households with adult children no longer living at home. Running a distant third, married couples with children made up just 10 percent of the growth in renter households.

A resurgence of renting among white households also helped to keep demand on the rise. The number of renter households headed by a

FIGURE 8

Higher-Income Households Represent a Growing Share of Renters...

Percent

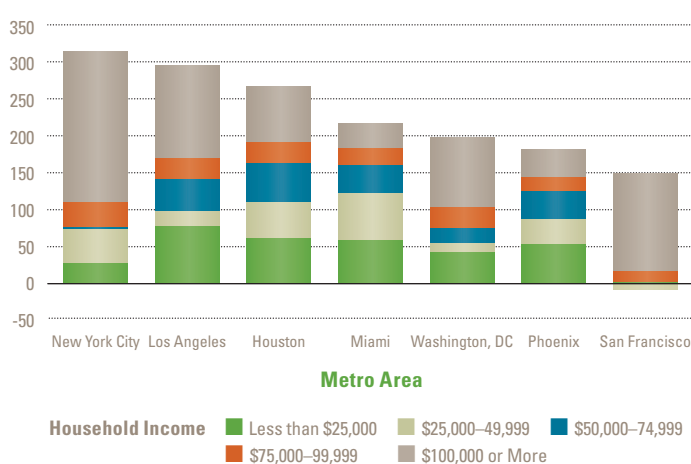


Note: Household incomes are in constant 2015 dollars, adjusted for inflation using the CPI-U for All Items.
 Source: JCHS tabulations of US Census Bureau, Current Population Surveys.

FIGURE 9

...Particularly in High-Cost Metros Like New York, San Francisco, and Washington, DC

Growth in Renter Households, 2006–2016 (Thousands)

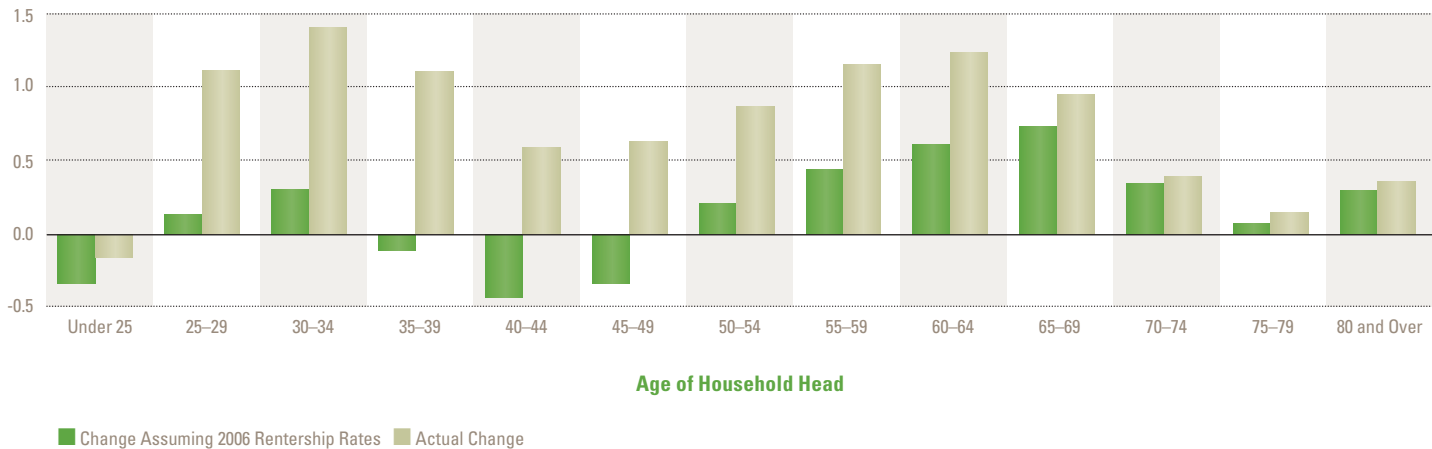


Note: Household incomes are in constant 2016 dollars, adjusted for inflation using the CPI-U for All Items.
 Source: JCHS tabulations of US Census Bureau, 2016 American Community Survey 1-Year Estimates using the Missouri Census Data Center MABLE/Geocorr14.

FIGURE 10

With Rising Rentership Rates and a Growing Adult Population, Households Age 50 and Over Accounted for Half of the Recent Surge in Renters

Change in Renter Households, 2006–2016 (Millions)



Source: JCHS tabulations of US Census Bureau, Current Population Surveys.

white person was up by 3.6 million in 2006–2016, more than offsetting the 2.6 million decline that had occurred over the previous 20 years. While minority renters collectively drove most of the increase in renter households over the decade, white households were responsible for the largest share of growth (37 percent), followed by Hispanics (27 percent), blacks (21 percent), and Asians/others (15 percent). The majority of the increase in white renters (65 percent) was among households age 50 and over, but younger households—particularly those in the 25–34 year-old age group—also contributed significantly to growth.

PROFILE OF RENTER HOUSEHOLDS

Despite the changing composition of renter household growth over the past decade, households that rent their housing differ in systematic ways from those that own homes (**Figure 11**). In particular, renters tend to be younger, with a median age of 40 in 2016 compared with 56 for homeowners. Rentership rates decline with age, dropping from more than two-thirds (68 percent) of households under age 35 to less than a quarter (24 percent) of households age 55 and over. Nevertheless, the overall aging of the population has meant that one in three renters is now over the age of 50.

Although the majority of renter households are white, the minority share of renters (47 percent) is twice that of homeowners. As measured by the Current Population Survey, rentership rates of Hispanic, black, and all other minority households are higher than for whites

both overall and across age groups. Renters are also more apt to be foreign born than homeowners, with immigrants accounting for 20 percent of renters but just 12 percent of owners.

Renter households are smaller on average than owner households. Over a third of renter households (37 percent) are single persons living alone—far higher than the 23 percent share among owners. Still, families make up a significant share of renter households, and families with children in fact account for a larger share of renter households (33 percent) than homeowner households (30 percent) in the 2016 ACS.

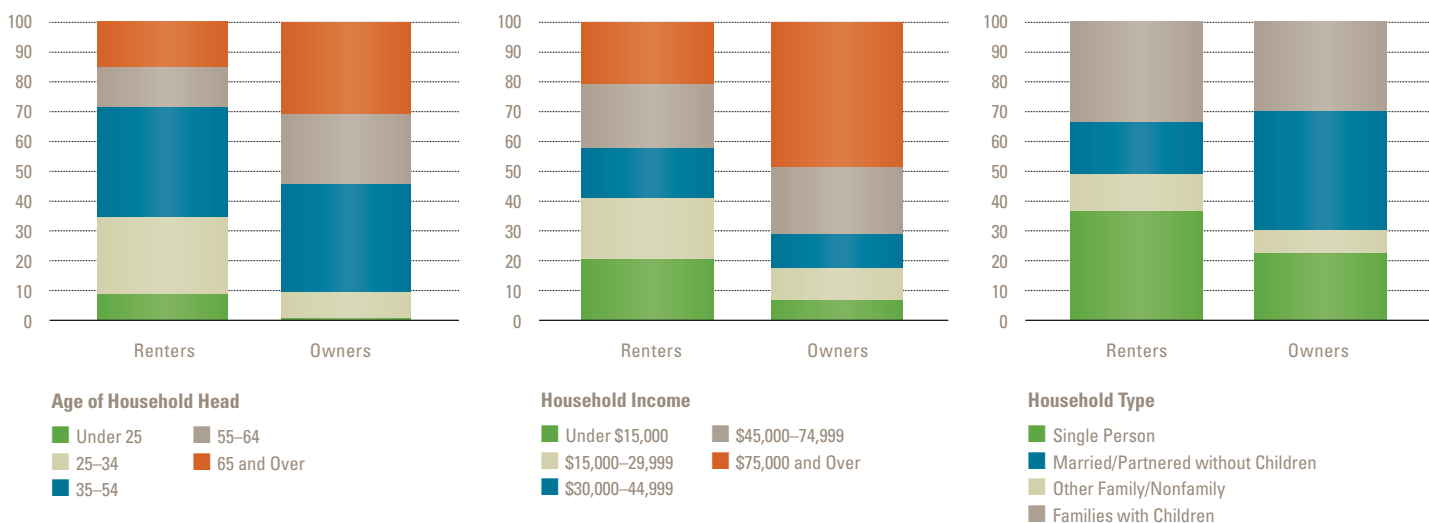
Household incomes for renters are lower than for owners. According to the American Community Survey, the median income for cash renters in 2016 was \$37,300—more than 49 percent below the median income of owners of \$73,100. In addition, two-thirds of all renter households (30.5 million) were in the bottom half of the income distribution (below the US median household income). As measured by HUD’s Worst Case Housing Needs 2017 Report to Congress, 64 percent of renters had low incomes (80 percent or less of area medians) and 26 percent had extremely low incomes (30 percent or less of area medians).

In addition to their lower incomes, renter households have very little savings and wealth. The latest Survey of Consumer Finances indicates that the median net worth of renter households was only \$5,000 in 2016, a small fraction of the median owner’s net worth of

FIGURE 11

Renters Are More Likely than Owners to Be Young, Low Income, and Single

Share of Households (Percent)



Note: Families with children include any household with a child under the age of 18.

Source: JCHS tabulations of US Census Bureau, 2016 American Community Survey 1-Year Estimates.

\$230,000. The median amount of cash savings held by renters was similarly low at just \$800, compared with \$7,300 for owners.

The discrepancy in wealth is even greater among households headed by adults age 65 and over, who generally need to draw down their assets in retirement. The median net wealth of older renters was \$6,700 in 2016, compared with a median for older homeowners of \$319,200. Not all of this difference is due to housing wealth, however. The non-housing wealth of renters in all age groups is also several times lower than that of homeowners.

THE GEOGRAPHY OF RENTING

The 2016 American Community Survey indicates that just under half (46 percent) of all renter households reside in principal cities of metropolitan areas. By comparison, about a quarter (26 percent) of homeowner households live in these locations.

Among the nation's 100 largest metro areas, the highest rentership rates are in high-cost markets such as Los Angeles (52 percent) and New York City (49 percent), as well as in fast-growing areas such as Las Vegas (49 percent) and Austin (42 percent). The shares of renters are much smaller in low-cost and slow-growth areas like Detroit (32 percent), Grand Rapids (29 percent), and Pittsburgh (31 percent). Rentership rates are also relatively low in metros with large shares of older householders, such as Cape Coral, Deltona, and several other Florida metros, consistent with the high homeownership rates among this age group.

Higher-income households are more apt to rent in high-cost housing markets (**Figure 12**). This makes the renter population in these areas somewhat more economically diverse than the US average. However, these metros still have large numbers of low-income renters and the highest rates of renting among low-income households.

Given their greater income diversity, renters in high-cost metros are also more diverse in terms of household type. Nearly half (45 percent) of all married couples with children that live in Los Angeles and San Diego rent their housing. By comparison, the share of married couples with children that rent is just 15 percent in Pittsburgh and 18 percent in Philadelphia. At the same time, high-cost markets tend to have larger shares of nontraditional households, which may include extra workers to help afford the high rents. For example, households with three or more adults made up 13 percent of renter households nationally in 2015, but 23 percent in the Los Angeles metro area.

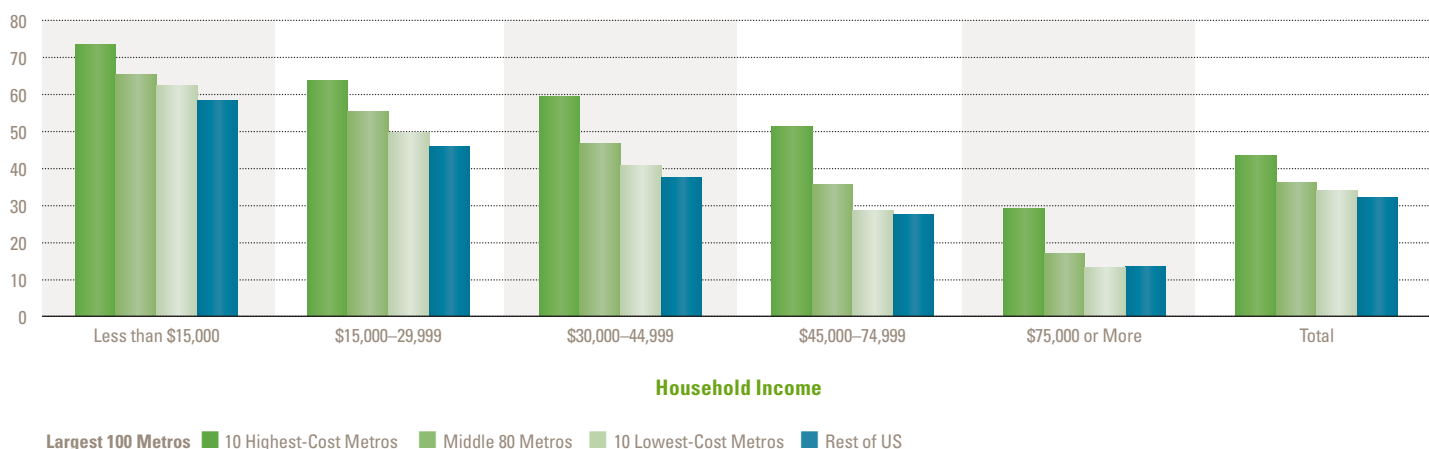
RENTING THROUGH THE LIFECYCLE

The vast majority of households rent at some point in their lives. According to a JCHS analysis of the Panel Study of Income Dynamics (PSID), about half (49 percent) of owners under age 60 in 2015 had been renters at some point within the previous 20 years. Among owners under age 50, the share was even higher at nearly three-quarters (72 percent).

FIGURE 12

Renting Is More Common in High-Cost Housing Markets, Especially Among Higher-Income Households

Rentership Rate (Percent)



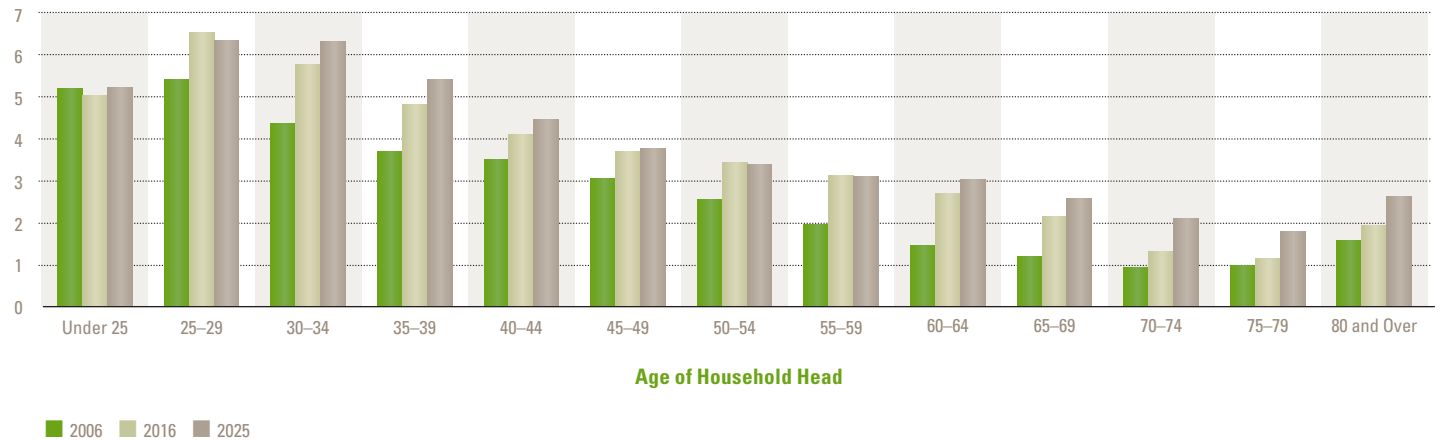
Note: Metros are the 100 largest by population as defined in the 2016 American Community Survey.

Source: JCHS tabulations of US Census Bureau, 2016 American Community Survey 1-Year Estimates using the Missouri Census Data Center MABLE/Geocorr14.

FIGURE 13

Over the Next Ten Years, Aging of the Baby Boomers and Millennials Will Drive Growth in Renter Households

Renter Households (Millions)



Note: JCHS projection for 2025 assumes homeownership rates by five-year age group and race/ethnicity hold at current values.
Sources: JCHS tabulations of US Census Bureau, Current Population Surveys; JCHS 2016 Household and Tenure Projections.

Without the downpayment and other costs entailed in buying and selling homes, renting is often an affordable housing option for young adults. Indeed, the 2015 American Housing Survey shows that 86 percent of all newly formed households were renters. Low transaction costs also make renting a good choice for households that move frequently. As measured by the Current Population Survey, renters accounted for three out of four residential moves in 2016, as well as for the majority of moves made by all age groups.

But renting is not merely a life phase or a steppingstone to homeownership for all households. The JCHS analysis of PSID data also indicated that 17 percent of renters in 1995 remained renters through 2015. In addition, 23 percent of homeowners in 1995 switched to renting sometime in the ensuing two decades, often in response to changes in family structure and other life events. For instance, renters made up over 80 percent of recent movers who were divorced or separated. Other owners shifted to renting to have less responsibility for home maintenance. This preference, along with the desire to downsize or to meet accessibility needs, is reflected in the increasing shares of renters among the oldest age groups. PSID data indicate that 1 in 12 owners age 55–64, 1 in 8 owners age 65–74, and 1 in 5 owners age 75 and over made own-to-rent transitions between 2005 and 2015.

THE OUTLOOK

Given the sharp swings in rentership rates over the past two decades, predicting future rental demand is difficult. Shifting preferences, macroeconomic conditions and government policy

help to shape many of the factors that determine rates of renting and owning, including housing affordability, mortgage accessibility, labor markets, and household incomes. As a starting point, though, future rental demand depends on the rate of household growth. JCHS projections suggest that overall household growth will be strong over the next 10 years as increasing numbers of the large millennial generation reach adulthood (**Figure 13**). At the same time, the aging of the baby-boom generation will lift the number of older households. Household growth is therefore expected to total 13.6 million in 2015–2025, before moderating to 11.5 million in 2025–2035 when losses of older households begin to accelerate.

Despite the aging of the adult population (which tends to favor higher homeownership rates), certain other demographic forces should support healthy growth in rental demand. Over the next 10 years, the younger half of the millennial generation—the largest generation in US history—will move into their 20s and 30s, the age groups most likely to rent. In addition, minority households are expected to account for nearly three-quarters of household growth in 2015–2025 and fully 90 percent in 2025–2035. If minority homeownership rates remain at current levels, the national rentership rate will increase in the coming decades.

Taking all of these forces into account, the base scenario from the 2016 JCHS household tenure projections shows that, if homeownership rates stabilize at their 2015 levels, underlying demographics—that is, growth and change in the composition of US households by age, race/ethnicity, and family type—will support the addition of 4.7 million renters and 8.9 million homeowners between 2015 and 2025.



3 | RENTAL HOUSING STOCK

The nation's rental housing comes in all structure types, sizes, prices, and locations. But with the recent growth in high-income renter households, most additions to the stock have been at the upper end of the market. In contrast, the supply of rentals affordable to low- and moderate-income households has not kept pace with growth in demand, contributing to the spread of housing cost burdens. At the same time, the rising costs of land, materials, and construction make development of lower-rent units increasingly difficult.

SNAPSHOT OF THE RENTAL STOCK

JCHS analysis of the 2016 American Community Survey indicates that the rental stock comprises 47.1 million units, or 35 percent of the national housing supply. Just under 44 million of these units are currently occupied. Of the 3.4 million units that are vacant, 82 percent are available for rent while the remaining 18 percent are rented but unoccupied.

It is a common misconception that rental housing consists almost entirely of apartments in multifamily buildings. In fact, multifamily units account for 61 percent (28.9 million units) of the nation's rental stock, distributed across various-sized properties. Single-family homes make up a substantial—and, until recently, fast-growing—share of rentals (**Figure 14**). This stock includes 13.1 million detached homes, 2.9 million attached homes, and 2.1 million mobile homes, RVs, and similar dwellings.

Nearly half (46 percent) of all renter-occupied units are located in the principal cities of metro areas, 42 percent in surrounding suburban communities, and the remaining 12 percent in non-metro areas. Types of rental housing vary substantially by location, with large apartment buildings of at least 20 units concentrated in urban areas and single-family rentals found primarily in suburban and non-metro areas.

GEOGRAPHIC VARIATION IN SUPPLY

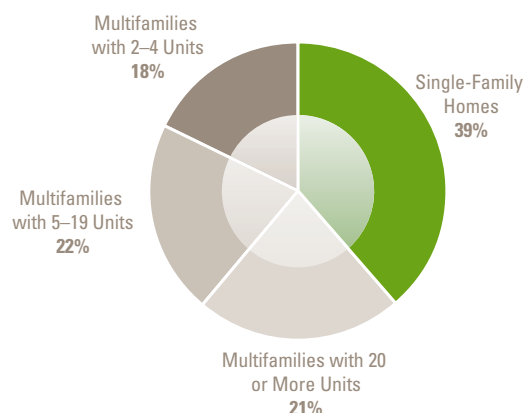
In the nation's 100 largest metros (home to almost 70 percent of all US households), detached single-family homes make up 24 percent of the rental stock while attached single-family units add another 7 percent. The remaining units are in multifamily structures, with 17 percent in small buildings of 2–4 units, 24 percent in mid-sized buildings of 5–19 units, and 25 percent in large buildings of 20 or more units. Mobile homes provide another 2 percent of the housing stock in the largest metros.

But given differences in topography, density of development, and average age of the stock, the mix of rental housing varies widely across metro and rural areas. For example, detached single-family

FIGURE 14

Single-Family Homes Now Account for Well Over One-Third of the Nation's 47 Million Rental Units

Share of National Rental Stock



Notes: Stock estimates include renter-occupied units, vacant units for rent, and rented but unoccupied units. Single-family homes include detached and attached units, mobile homes, and units such as RVs and boats. Source: JCHS tabulations of US Census Bureau, 2016 American Community Survey 1-Year Estimates.

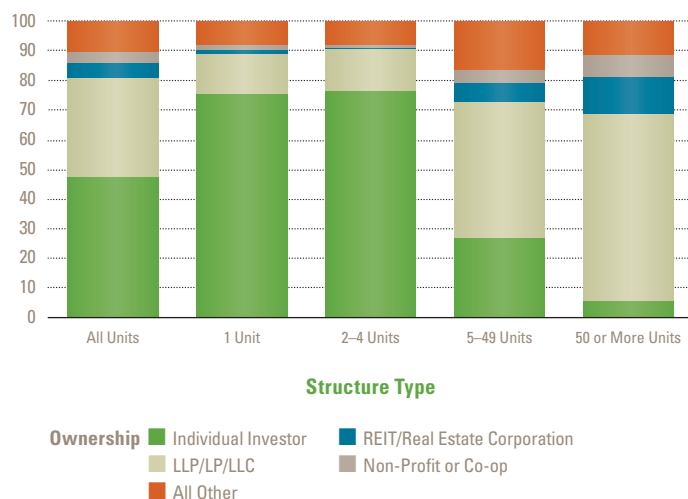
rentals make up just 8 percent of rentals in Boston, but 51 percent in Stockton (**Online Figure 2**). Over a third (35 percent) of Boston's rental stock consists of units in buildings with 2–4 apartments. Another 22 percent of rentals are in buildings with 5–19 units, 29 percent are in buildings with 20 or more units, and the remaining 6 percent are divided between attached single-family homes (5 percent) and mobile homes and other structures (1 percent). In contrast, just over 10 percent of the rental units in Stockton are in buildings with 2–4 units, 14 percent are in buildings with 5–19 units, and slightly more than 12 percent are in buildings with 20 or more units. Attached single-family homes (10 percent of the rental stock) and mobile homes (just under 3 percent) are somewhat more common in Stockton than in Boston.

In rural areas (as defined by the US Census Bureau), the rental stock primarily consists of single-family homes. Indeed, almost three-quarters of rural rentals are single-family units. The highest concentrations of single-family rentals are in New Mexico (89 percent of the rural stock) and Oregon (86 percent). But even in states with the smallest shares (Massachusetts, New Hampshire, and Vermont), single-family homes still make up about half of rural rentals.

FIGURE 15

Individual Investors Are the Largest Owners of Rental Stock, with Most of Their Units Concentrated in Small Buildings

Share of Rental Units (Percent)



Note: All other includes tenants in common, general partnerships, trustees for estate, and units for which ownership was not reported.

Source: JCHS tabulations of US Census Bureau, 2015 Rental Housing Finance Survey.

Mobile homes are also an important component of the rural rental stock, contributing fully 20 percent of rural rental housing nationwide. At the state level, however, mobile homes are much more common in the rural communities of South Carolina (39 percent of the stock) and North Carolina (36 percent) than in the rural areas of Hawaii (0.4 percent of the stock) and Massachusetts (2.0 percent).

OWNERSHIP OF RENTAL HOUSING

Individual investors are the largest group of rental housing owners, followed by business entities such as limited partnerships (LPs), limited liability companies (LLCs), and limited liability partnerships (LLPs). Individual investors primarily own single-family rentals and small apartment properties, while LPs, LLCs, and LLPs own a majority of large apartment properties. As a result, individuals own three-quarters of rental properties (74 percent) but just under half of the nation's rental units (48 percent), while business entities own 15 percent of rental properties but a third of units (**Figure 15**). Housing cooperatives and nonprofit organizations own 2 percent of rental properties and 4 percent of rental units, while real estate corporations and investment trusts own 1 percent of rental properties and 5 percent of rental units. The remaining 8 percent of properties and 10 percent of units are under other forms of ownership, such as trustee for estate, tenant in common, and general partnership.

The latest Rental Housing Finance Survey reports that the single-family ownership share of individual investors slipped from 83 per-

cent in 2001 to 76 percent in 2015 as institutional investors gained a foothold in the market. But this decline in individual ownership likely overstates institutional investment in single-family rentals. Indeed, real estate corporations and investment trusts owned only 250,000 single-family rentals in 2015. In addition, many individual investors reportedly transferred ownership of their properties to LLCs in recent decades to protect against legal problems and to take advantage of tax benefits.

Along with shifting patterns of ownership, motivations for acquiring single-family rental units may have also changed. While there is little research available on this topic, one study suggests that prior to the housing market crash, the two major reasons that owners bought single-family rentals were as primary residences, which they then decided to rent, or as income-generating investments. However, the housing boom and bust encouraged more speculation in the single-family rental market, including by mom-and-pop owners, which may mark a shift in their expectations. Institutional owners also jumped into the single-family rental market after the bust, but their longer-term presence in the market is unclear.

Understanding the evolving nature and financial motivations of rental property owners is important for designing policies that protect naturally occurring affordable units that may be at risk of either under-investment and deterioration or of upgrading and gentrification. In both cases, these units would be lost from the low-cost stock.

BUILDING AGE AND ACCESSIBILITY

The median age of occupied rental units in 2015 was 42 years—somewhat higher than the median of 37 years for owner-occupied homes. The age gap between owned and rented units has been growing since 1985, when both types of units had an average age of 23 years. This disparity reflects the slowdown in rental construction in the 1990s following the booms of the 1970s and 1980s, as well as significant construction of owner-occupied housing in the early 2000s. In addition, a minor but still sizable share (8 percent) of rental housing was built before 1920. With the recent uptick in multifamily construction since 2015, however, the age gap between owned and rental units may be narrowing.

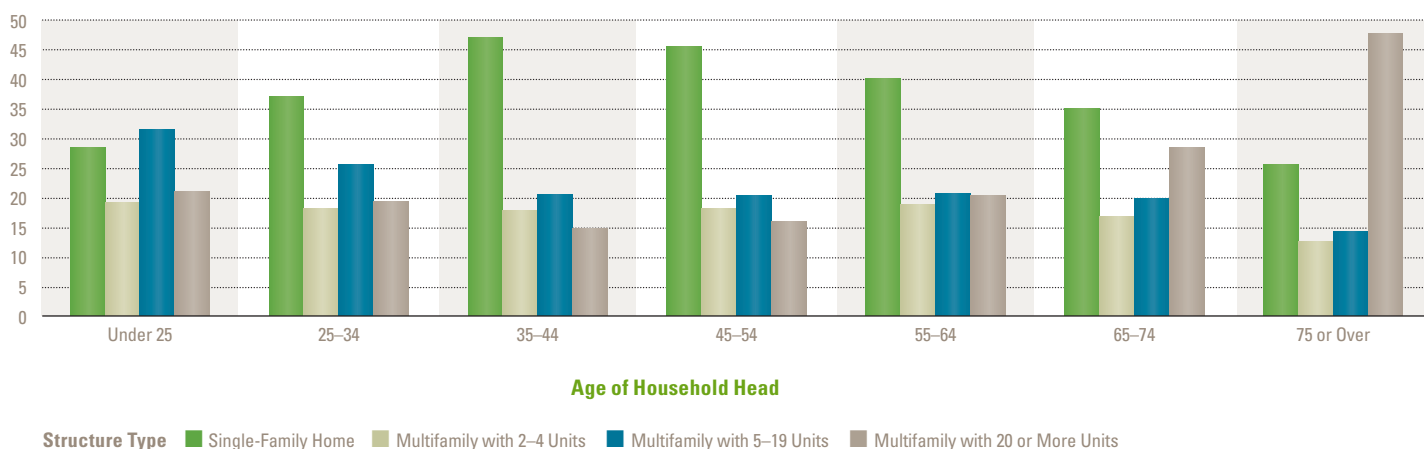
Today, the oldest units in the occupied rental stock are apartments in multifamily buildings with 2–4 units (median age of 51 years) and detached single-family homes (median age of 49 years). The typical renter-occupied single-family home is 10 years older than the typical owner-occupied home. Meanwhile, apartments in buildings with 20 or more units had a median age of 38 years in 2015, and the typical mobile home rental had the lowest median age of 29 years.

Older rental housing is more likely than newer housing to have quality and safety issues that may jeopardize the health of occupants. Under HUD definitions, 13 percent of occupied rental units built before 1940 have physical inadequacies, compared with 6 percent of units built in 1990 or later. Although overall inadequacy rates for renter-occupied housing are low (9 percent), they are still more than double those for owner-occupied homes (4 percent).

FIGURE 16

Larger Multifamily Properties Attract a Significant Share of Older Renters

Share of Renters (Percent)



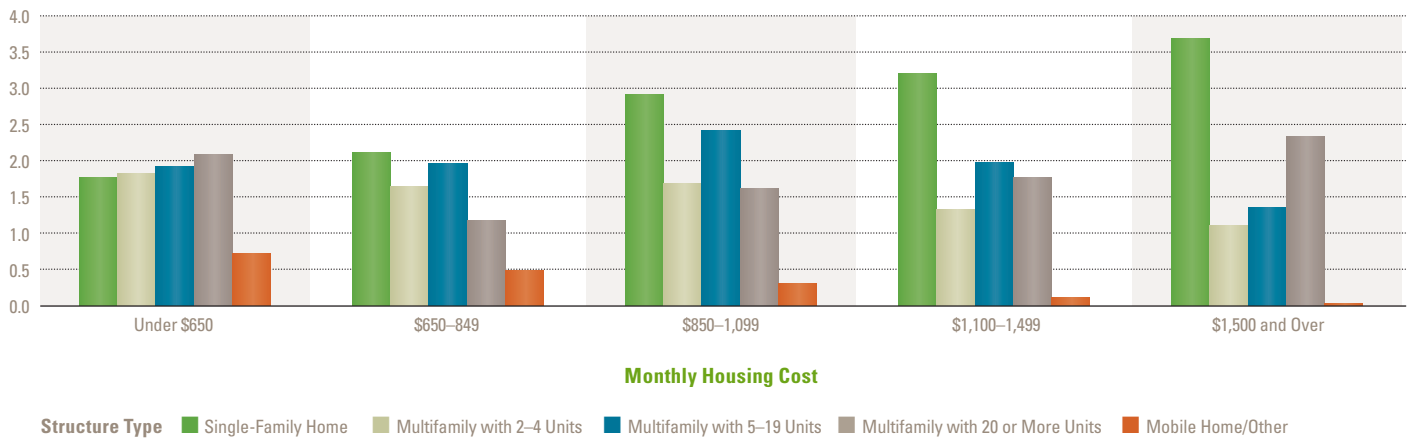
Note: Single-family homes include detached and attached units, mobile homes, and other units such as RVs and boats.

Source: JCHS tabulations of US Census Bureau, 2016 American Community Survey 1-Year Estimates.

FIGURE 17

Low-Cost Rentals Are More Evenly Distributed Across Building Types than High-Cost Rentals

Rental Units (Millions)



Notes: Monthly housing costs include rent and utilities. Rental units exclude vacant units and units where no cash rent is paid. Single-family homes include attached and detached units. Other structures include units such as boats and RVs. Source: JCHS tabulations of US Census Bureau, 2016 American Community Survey 1-Year Estimates.

Another limitation of older rental units is that they are seldom accessible to households with mobility or other physical challenges. As of 2011, only 3 percent of rental units provided three basic universal design features (extra-wide hallways and doors, bedroom and bathroom on the entry level, and a no-step entrance). Newer and larger buildings, however, tend to offer more of these amenities: one-fifth of apartments in buildings with 50 or more units dating from 1990 or later provided all three features. Given that accessibility needs increase with household age, it is therefore unsurprising that about half of the renters age 75 and over live in larger apartment buildings (Figure 16).

Accessibility features are less common in the single-family and smaller multifamily rental stocks. Just 2.4 percent of renter-occupied detached single-family homes and apartments in buildings with 2-4 units have the three basic universal design features, along with 2.5 percent of attached single-family homes and 1.2 percent of mobile homes. The fact that the majority (52 percent) of renters in the 75-and-over age group live in single-family homes and apartments in small buildings is cause for concern because these rental units are unlikely to provide the accessibility features that would enable tenants to age safely in place.

The availability of rentals with accessibility features varies by region. With its older stock of primarily small properties and multi-story structures, the Northeast has the lowest share of

renter-occupied accessible units, with only 2.0 percent offering no-step entry, single-floor living, and extra-wide hallways and doors, followed by the South (3.3 percent), West (3.4 percent), and Midwest (3.6 percent). While no-step entries and single-floor living are more common in the South and West, in no region does the share of units with extra-wide hallways and doors exceed the single digits.

VARIATION IN RENTS

The median monthly housing cost (including rent and utilities) for all occupied rental units was \$981 in 2016. Location is perhaps the strongest determinant of cost. In the high-priced San Francisco metro area, for example, well over half (62 percent) of occupied units rent for more than \$1,500 per month, compared with 17 percent in mid-priced Dallas and just 5 percent in low-cost Cleveland (Online Figure 3). The median rent for a detached single-family home, typically the most expensive type of rental unit, was \$2,125 in San Francisco, \$1,240 in Dallas, and \$920 in Cleveland.

Monthly rents vary widely by structure type, ranging from \$890 for apartments in buildings with 2-4 units, to \$1,070 for those in buildings with 50 or more units, to \$1,087 for single-family homes. Rents also vary with age of the home, with the newest ones (built in 2014 or later) commanding the highest median rents (\$1,318) and those built in the 1970s the lowest (\$915).

The low-cost stock (renting for under \$650 per month, or roughly the bottom quintile for rents) consists of units in a broad mix of structure types (**Figure 17**). In 2016, the number of occupied low-cost rentals was distributed fairly evenly across structure types, with 1.8 million each in single family homes and buildings with 2–4 units, 1.9 million in buildings with 5–19 units, and 2.1 million in buildings with 20 or more units. Mobile homes account for another 724,000 low-cost units. In contrast, some 71 percent of higher-cost units (renting for at least \$1,500 per month, or roughly the top quintile) are attached or detached single-family homes or in buildings with 20 or more units.

Rental apartments in buildings with 2–4 units are the most likely to be affordable, accounting for 22 percent of the lowest-cost stock but just 13 percent of the highest-cost supply. Multifamily buildings with 5–19 apartments are also more likely to have moderate rents, providing 27 percent of units renting for \$850–1,099 and only 16 percent of highest-cost rentals.

ADDITIONS TO THE RENTAL STOCK

The number of single-family rentals shot up from 14.2 million units in 2001 to 18.2 million units in 2016—a 29 percent increase that far outpaced the 18 percent growth in the overall rental stock. Own-to-rent conversions drove almost all of this gain, with only 575,000 single-family homes built expressly for the rental market over this period. Indeed, in 2011–2013 alone (the last year for which a constant sample is available), tenure conversions of occupied housing units resulted in a net gain of more than 420,000 single-family rentals.

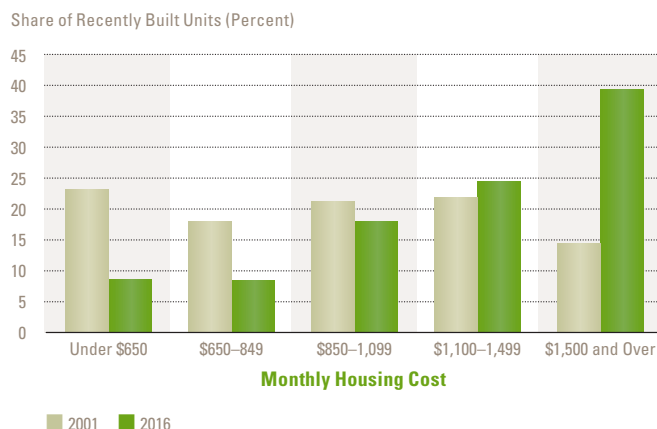
However, this trend may be moderating. According to the American Community Survey, 2015 was the first year since 2006 when the number of single-family rentals declined, suggesting that there were at least some conversions back to owner occupancy. While turning up again in 2016, growth in the number of single-family rentals nonetheless remained well below average annual levels in the previous decade.

Meanwhile, most new rental construction consists of larger properties. Census construction data show that the share of completed rentals in buildings with 20 or more units grew from 54 percent in 2001 to 83 percent in 2016. As a result, apartments in these larger properties accounted for just over one-fifth of the rental stock (9.9 million units) in 2016, an increase of 37 percent—or more than 2.6 million units—since 2001.

In addition to their concentration in large structures, many recent additions to the rental stock have high rents (**Figure 18**). The share of newly built units renting for \$1,500 or more soared from 15 percent in 2001 to 40 percent in 2016. Over this same period, the share of

FIGURE 18

Additions to the Rental Stock Are Increasingly at the Higher End



Notes: Recently built units in 2001 (2016) were built 1999–2001 (2014–2016). Monthly housing costs include rent and utilities and have been adjusted to 2016 dollars using the CPI-U All Items Less Shelter. Rental units exclude vacant units and units where no cash rent is paid.

Source: JCHS tabulations of US Census Bureau, 2001 and 2016 American Community Survey 1-Year Estimates.

newly built units renting for less than \$850 per month fell from 42 percent of the rental stock to 18 percent.

RIISING CONSTRUCTION COSTS

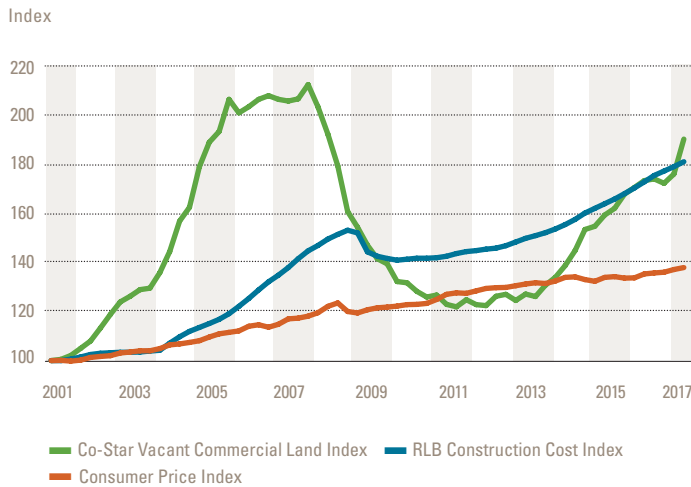
At least part of the reason for the surge in high-end construction is that developing multifamily housing is increasingly expensive. Between 2012 and 2017, the price of vacant commercial land—a proxy for developable multifamily sites—was up 62 percent. Over this same period, the combined costs of construction labor, materials, and contractor fees rose 25 percent, far faster than the general inflation rate of just 7 percent (**Figure 19**). Cost increases for key building materials, such as gypsum, concrete, and lumber, have also outpaced inflation in recent years.

Data obtained from RS Means indicate that construction of a three-story, 22,500 square-foot apartment structure with a reinforced concrete frame—including the cost of materials, labor at union wages, and fixed contractor and architectural fees, but excluding land costs—would average \$192 per square foot in 2017. The cost of building that same structure in 2016, however, would have been 8 percent lower. Of course, costs vary widely by location. For example, construction costs for this sample building would be 43 percent above the national average in New York City and 17 percent below the national average in Dallas.

Adding to development costs, recent construction of rental housing is largely concentrated in central cities. Between 2013 and 2016,

FIGURE 19

Construction Costs Are Rising Much Faster than Inflation



Notes: The RLB Construction Cost Index measures the bid cost of construction, which includes labor, building materials, and contractor fees. The Co-Star Vacant Commercial Land Index serves as a proxy for developable multifamily sites.
Sources: Co-Star Vacant Commercial Land Index; RLB Construction Cost Index; and US Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers.

nearly 60 percent of new unfurnished units were built in the principal cities of metro areas—up 10 percentage points from the period between 2000 and 2012. This trend appears to have continued in early 2017, with the share of rental completions in principal cities nudging above 65 percent.

The supply of developable sites in central locations is extremely limited, which raises land prices and generally entails more extensive permitting, higher legal fees and site preparation costs, and the design of taller, more expensive buildings. According to the Survey of Market Absorption, these costs are reflected in the nearly 15 percent differential in median asking rents for new apartments built in principal cities (\$1,600) than in suburbs (\$1,390) in 2016.

Regardless of location, though, new multifamily rentals are less affordable to the growing number of households with middle and lower incomes. The real median asking rent for newly completed multifamily units increased 27 percent between 2011 and 2016, to \$1,480, while real median renter income increased only 16 percent over the same period. In addition to rising construction costs, this jump in asking rents also reflects increased construction of luxury apartments for higher-income renters.

THE OUTLOOK

Strong demand has sparked the addition of millions of rental units over the past decade. This growth has come from construction of new units, mainly in large apartment buildings, as well as conversion of single-family homes from owner occupancy. However, with the aging of the overall stock and new construction focused primarily on the high end of the market, concerns are mounting that the rental supply will have even less capacity to meet the needs of lower- and middle-income households or the growth in demand for accessible housing as the population ages.

While local policymakers have little sway over the price of construction materials, they do influence the amount of land available for high-density development, the process needed to gain approvals, and the characteristics of housing that is allowed—all of which help determine the amount, type, and cost of the housing that is built. Local governments can therefore promote construction of much-needed rental units (particularly lower-rent units) by expediting approvals; guaranteeing by-right development of small multifamily buildings, particularly those with affordable units; reducing parking and other property requirements; and allowing higher densities for projects that are transit-accessible.

For their part, developers have increasingly adopted cost-saving technologies and switched to lower-cost building materials—for example, using plastics for plumbing and electrical boxes or relying more on prefabrication and modularization, which can significantly reduce waste and construction time. Collectively these efforts would reduce per unit development costs and the rents that households have to pay, ultimately encouraging more construction targeted to lower- and middle-income renters. Investments in energy efficiency would also provide long-term utility savings for tenants and could reduce maintenance costs for owners.

Efforts to preserve the stock of older affordable rentals are also vital. Expanding existing approaches can help. For example, certain states and localities allow the use of housing trust funds for operating and maintenance costs of affordable units, as well as for emergency repairs. The National Housing Trust Fund is also making a limited share of program funds available for these purposes. Real estate tax relief programs can also incentivize landlords to maintain their affordable units in good repair. Finally, programs that help nonprofits purchase lower-rent, unsubsidized units in exchange for affordability restrictions can help prevent further losses from the affordable supply, particularly in neighborhoods with rising rents.



4 | RENTAL MARKETS

While the fundamentals remain strong for investors, there are signs that rental markets are at a turning point. Real rents are still climbing, but at a slower pace now that vacancy rates are ticking up. Returns to rental property investors remain healthy, but the influx of high-end supply has begun to dampen financial performance in many prime urban locations. Meanwhile, conditions in the vastly undersupplied low-cost segment continue to be extremely tight.

RENTAL HOUSING'S ROLE IN THE ECONOMY

Rental housing is an increasingly important contributor to the US economy. According to Bureau of Economic Analysis estimates, households spent \$519 billion on rent alone last year, accounting for 2.8 percent of GDP in 2016—up substantially from the 2.2 percent share averaged during the boom years of the 2000s. Indeed, renters' real aggregate housing expenditures climbed a strong 3.2 percent annually in 2006–2016, and drove 58 percent of the growth in domestic personal housing consumption over the decade.

With the sustained strength of rental demand and sluggish recovery in single-family construction, over a third of housing starts are now intended for the rental market. This is a larger share than in any year since 1974. Before the recent run-up in multifamily construction, rentals accounted for only about one in five new homes started in a single year. Among multifamily properties, the share of starts intended for the rental market was 93 percent in 2016. Among single-family homes, 4.9 percent are now being built as rentals, significantly higher than the 2.2 percent share averaged in the 1980s and 1990s.

Investments in new multifamily housing have also helped to drive the economy. The multifamily share of private domestic investment in new permanent residential structures grew from just 11 percent in 2000 to nearly 20 percent in 2016. The Census Bureau estimates that the value of private multifamily construction put in place (including labor, materials, soft costs, taxes, and profits) exceeded \$62 billion in the 12 months ending in August 2017, similar to multifamily activity near the peak of the housing boom. In sharp contrast, the value of new single-family construction remained nearly 50 percent below the 2006 peak.

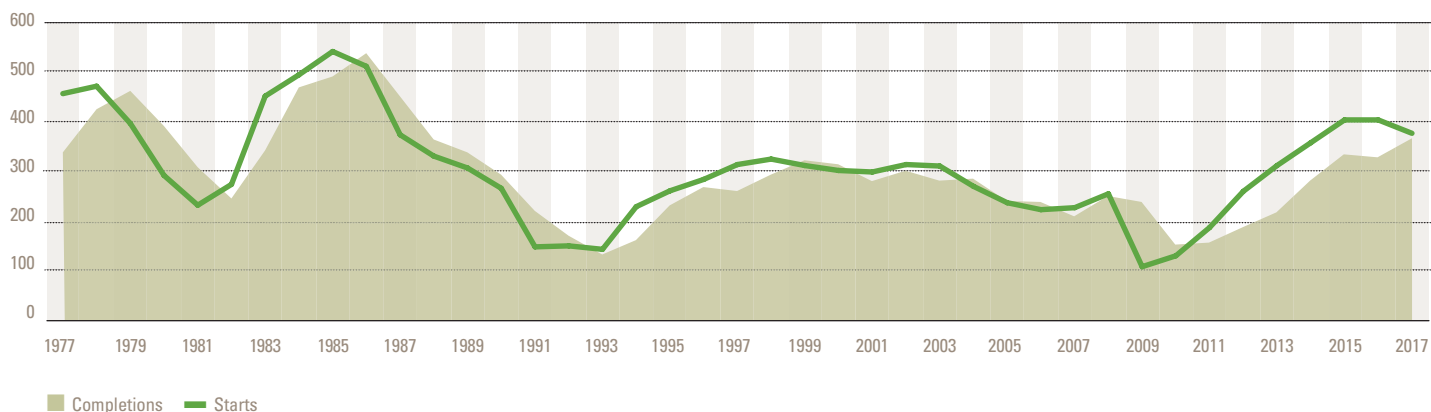
ROBUST GROWTH IN RENTAL SUPPLY

Unprecedented growth in renter households—totaling nearly 10 million between 2006 and 2016—fueled one of the fastest rental construction recoveries in history. After hitting a low of just 90,000 units in early 2010, the number of rental housing starts peaked at a 408,000 unit annual rate in early 2017. While this represents the highest volume in any four-quarter period since the late 1980s,

FIGURE 20

While Completions Are Still on the Upswing, Starts of Rental Units Have Slowed

Units Intended for Rent (Thousands)



Notes: Data include both multifamily and single-family units. Estimate for 2017 is based on the four quarters ending in 2017:3.
Source: JCHS tabulations of US Census Bureau, New Residential Construction.

recent production of new multifamily units (which make up the lion's share of rental construction) is still slightly below the 420,000 unit annual rate averaged since 1960. Growth in single-family rentals averaged some 390,000 annually from 2006 to 2016, supplementing new construction in meeting the sharp increase in demand.

Although the national recovery has been robust, the pace of growth in multifamily construction varied widely across markets. Over the latest cycle from 2010 to 2016, multifamily starts added 15 percent or more to the multifamily stock in fast-growing metros such as Austin, Charlotte, Nashville, and Raleigh, but as little as 1 percent in slow-growing areas like Cleveland and Providence. The largest increases in multifamily supply occurred mainly in the South and West, where production was still catching up with rapid population growth.

Overall, however, construction activity has begun to moderate (**Figure 20**). Indeed, multifamily starts are down 9 percent year-to-date through October 2017 on a seasonally adjusted basis. The slowdown was first evident in 2016 when permitting fell in nearly half of the nation's 50 largest markets. The five markets with the most multifamily permitting in 2013–2015 declined sharply, collectively registering a 35 percent drop in 2016. This total includes declines of more than 50 percent in Houston and New York, as well as more moderate cuts in Dallas, Los Angeles, and Seattle. Permitting in other large markets, like Atlanta and Denver, continued to increase.

Meanwhile, multifamily starts also fell in nearly half of the nation's 100 largest metros in the 12 months ending August 2017. By comparison,

construction activity slowed in less than two-fifths of these markets just a year earlier. Multifamily starts were down across metro areas of all sizes, with the biggest declines reported in the South and Northeast.

Even so, multifamily construction in many locations was still strong by historical standards. In the year ending August 2017, multifamily starts in nearly half of the nation's 100 largest metro areas exceeded their annual averages in the two decades leading up to the housing peak (1986–2005). In 26 of these areas, multifamily starts were up by more than 50 percent. Moreover, starts in several markets where multifamily construction had not fully recovered by 2017—including Jacksonville, Riverside, and Sacramento—remained on the rise.

EASING MAINLY AT THE HIGH END

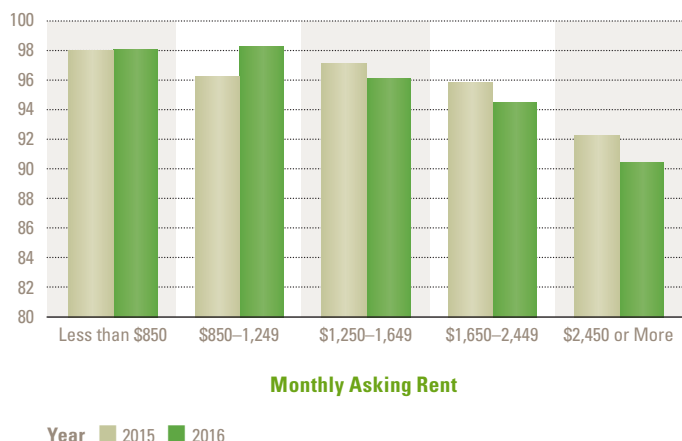
With rental demand soaring, the national stock of vacant rental units shrank from nearly 4.5 million in mid-2010 to just 3.2 million in 2016. As a result, the rental vacancy rate fell sharply from 10.8 percent to 6.9 percent in the third quarter of 2016. However, the national vacancy rate rose to 7.2 percent in the third quarter of 2017, suggesting the rental market is at a turning point.

Vacancy rates for professionally managed apartments in multifamily buildings are even lower. RealPage, Inc. reports a vacancy rate of 4.5 percent in the third quarter of 2017, comparable to those at the peak of the housing boom in 2006. Vacancy rates were under 4.0 percent in more than 40 of the 100 markets tracked, and under 3.0 percent in 16 markets.

FIGURE 21

New High-End Units Have Become Harder to Fill, But Low-Rent Units Remain in High Demand

Share of New Units Rented (Percent)



Note: The annual absorption rate covers privately financed, non-subsidized, unfurnished rental apartments in buildings with five or more units completed in the previous year.

Source: JCHS tabulations of US Census Bureau, Survey of Market Absorption.

But there are signs that conditions are loosening. According to the US Census Bureau, the vacancy rate in multifamily buildings with 5 or more units rose 0.9 percentage point in the third quarter from a year earlier, to 8.5 percent, indicating some easing in that segment. RealPage also reports that the apartment vacancy rate rose by a full percentage point in the year ending in the third quarter, with increases in 95 of the 100 metro areas tracked.

Underlying this shift is growing softness at the high end of the market. In the Class A segment where rents average \$1,700 per month, the vacancy rate hovered near 6.0 percent in the first three quarters of 2017—up from around 4.5 percent a year earlier. This is the highest vacancy rate reported since 2011, and the highest rate for any property class.

Newly constructed high-end apartment properties became more difficult to fill last year. According to the Survey of Market Absorption, 10 percent of rentals completed in 2015 and priced at more than \$2,450 remained vacant after 12 months. In contrast, only 2 percent of units with rents below \$1,250 were still unfilled within one year (**Figure 21**). Apartment absorption rates fell most in the principal cities of metro areas, where most new supply has come online. In contrast, absorption rates were up in suburban and non-metro markets, where fewer new rentals have been added.

Demand for mid-market (Class B) rentals, which rent for \$1,180 a month on average, has also begun to ease. The vacancy rate in this segment ticked up by a full percentage point to 4.6 percent in the

third quarter of 2017. While the rate remains relatively low, this increase indicates that softness in the high-end market is beginning to affect mid-market conditions. Nearly 90 of the 100 apartment markets tracked by RealPage reported a year-over-year increase in Class B vacancies in the third quarter.

Meanwhile, the vacancy rate in the lowest-cost segment of the professionally managed market (Class C) was down to just 3.3 percent in the second quarter of this year—its lowest reading since 2001—before jumping back up to 4.1 percent in the third quarter. Despite this uptick, Class C vacancy rates were at or below 3.0 percent in nearly half (46) of the 100 metros tracked by RealPage.

With rents for Class C units about a third lower than the market average, tightness in this segment indicates both ongoing demand for modestly priced rentals as well as a persistent shortfall in supply. Broader measures of vacancy rates that include all rentals confirm these conditions. For example, 2016 American Community Survey data show that vacancy rates for less expensive units (with contract rents below the area median) were below those for more expensive units in 42 of the nation's 50 largest metros. Indeed, 14 large metros reported rates in the lower-cost segment at or below 5.0 percent last year, compared with just 3 metros in 2006. The tightest conditions were in Los Angeles, Portland, San Francisco, and Seattle, where vacancy rates for low-cost rentals were under 3.0 percent.

Tight conditions are also evident in certain rental structure types tracked by the Housing Vacancy Survey. For example, vacancy rates in buildings with 2–4 units—which tend to be older and less expensive—held at 7.0 percent in the third quarter of 2017. Rates for single-family rentals, however, declined to 6.2 percent in response to strong demand and limited inventory.

RENTS STILL UNDER PRESSURE

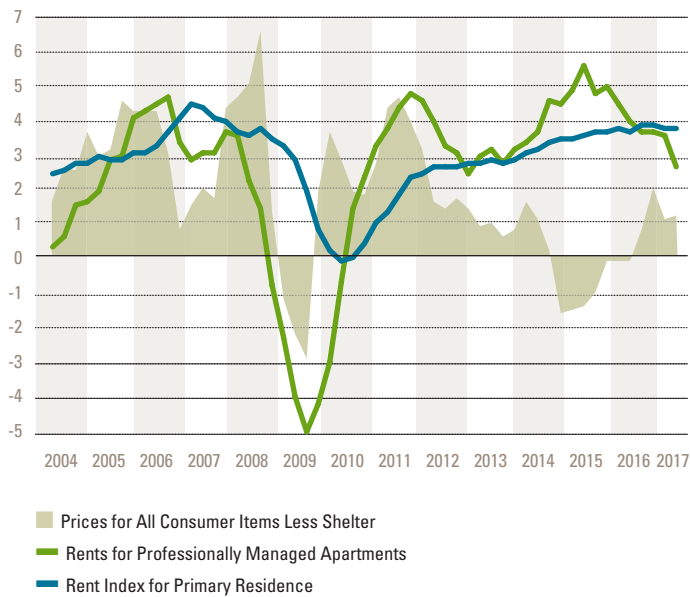
The CPI index for rent of primary residence, which covers the broadest range of rental property types, was up 3.9 percent in the year ending September 2017. Although only a modest gain from the previous year, this increase is still noteworthy because it marks yet another year when housing costs have risen faster than the prices of non-housing goods (**Figure 22**). Rent increases were highest in the West (5.5 percent) and South (3.5 percent), held steady in the Midwest (at 2.9 percent), and slowed somewhat in the Northeast (from 2.9 percent to 2.6 percent).

According to RealPage, the year-over-year increase in nominal rents for professionally managed apartments was 2.7 percent in the third quarter of 2017, continuing the slowdown from 4.0 percent a year earlier and 5.6 percent two years earlier. However, trends vary widely across apartment property types. At one extreme, a flood of

FIGURE 22

Increases in Rents Continue to Outstrip Inflation in Non-Housing Goods

Annual Change (Percent)



Notes: Data are through 2017:3. RealPage annual rents are for professionally managed apartment properties in Classes A through C.

Sources: JCHS tabulations of US Bureau of Labor Statistics, RealPage, Inc.

new construction brought annualized rent gains for recently built units down to just 1.1 percent in the third quarter (below the rate of inflation in non-housing goods). Rent increases for high-rise properties—which have the highest average rent of \$1,890 per month—were also modest at only 1.1 percent. Meanwhile, rents for units in low-rise structures rose 3.1 percent, reflecting the strong demand for lower-cost housing.

Rents for single-family homes (including condos) rose steadily for seven years, with growth hitting a high of 4.4 percent in early 2016, before slowing to 2.8 percent in mid-2017. Much of the slowdown was at the high end (units renting for more than 25 percent above median), where rent growth dropped to just 1.9 percent. Meanwhile, though, rents for low-end single-family units (renting for at least 25 percent below median) climbed by a strong 4.4 percent.

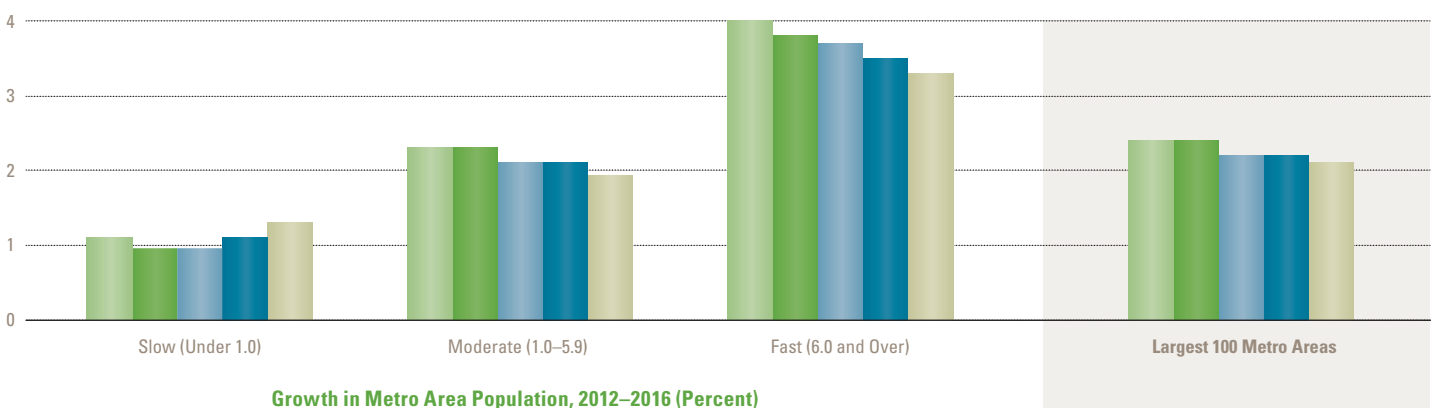
THE GEOGRAPHY OF RENT GROWTH

Annual rent growth in some 70 of the 100 apartment markets tracked by RealPage slowed in the third quarter of 2017 compared with a year earlier (**Online Figure 4**). Even so, nominal increases in almost three-quarters (73) of these markets still outpaced the 1.3 percent inflation in non-housing goods prices, with nearly one in five reporting strong growth above 4.0 per-

FIGURE 23

The Largest Rent Hikes Have Occurred in Formerly Low-Cost Neighborhoods of Fast-Growing Metros

Annualized Change in Rent, 2012–2017 (Percent)



Neighborhood Rent Tier in 2012

Notes: The top 100 metros are the largest by population as defined by the 2015 American Community Survey, but exclude Las Vegas and Tucson due to data limitations. Annualized growth in rent is from July 2012 to July 2017, and adjusted for inflation using the CPI-U for All Items Less Shelter. Rent quintiles are based on rents within each metro in 2012. Neighborhood rent growth is weighted by the share of renter households in each ZIP code over total renters in each metro. Slow-(fast-) growth metros are in the bottom (top) quartile for population growth. Moderate-growth metros are in the middle two quartiles for population growth.

Source: JCHS tabulations of the Zillow Rent Index and US Census Bureau, 2015 American Community Survey 5-Year Estimates.

cent. Most of the areas with rapidly rising rents—including Las Vegas, Orlando, Sacramento, and Seattle—are located in the West and South. Other prominent metros in these two regions also had rent gains over the past few years, but these increases have either moderated (Dallas, Riverside, and Sacramento) or slowed considerably (Austin, Nashville, and Portland).

Meanwhile, nominal rent growth in the Midwest and Northeast has remained slow to moderate, with only a handful of markets reporting annual increases above 3.0 percent over the past year (including Cincinnati and Minneapolis). In contrast, several metros in these regions—Bridgeport, Dayton, Des Moines, Pittsburgh, Providence, Syracuse, and Wichita—posted nominal rent growth that lagged behind general inflation.

Within metro areas, rent increases in once low-cost neighborhoods have been especially large. In the 100 metro areas tracked by Zillow, rents in lowest-tier neighborhoods in 2012 were up sharply by mid-2017 in metros with the highest population growth (**Figure 23**). In Denver and Houston, for example, annual rent increases in the lowest-cost neighborhoods exceeded those in the highest-cost neighborhoods by more than 2 percentage points. In metros where the population was either stable or declining, however, rents grew slowly across all neighborhood types.

STRONG RENTAL PROPERTY PERFORMANCE

The rental property market has been among the best-performing sectors of the economy. The National Council of Real Estate Investment Fiduciaries (NCREIF) reports that nominal growth in net operating income (NOI) for investment-grade properties averaged some 7.7 percent annually in the seven years ending in the third quarter of 2017, compared with just 2.8 percent annually on average in 1983–2010. These strong gains reflect high occupancy rates as well as rising rents. With apartment occupancy rates falling and rent growth slowing, however, NOI growth moderated to a 3.8 percent annual rate in the third quarter—still outpacing the national rate of inflation and in line with historical averages.

Solid growth in operating incomes allows property owners to reinvest in their units. According to the National Apartment Association, real improvement spending per unit more than doubled from 2010 to 2016 (**Figure 24**). Owners of large apartment properties invested \$1,480 per unit on average in 2016, or roughly 10 percent of gross potential rents, up from about 8 percent per year on average between 2001 and 2015.

There is also little sign that single-family rentals are returning to the owner-occupied market. According to the latest American Community Survey, growth in the total number of single-family rent-

FIGURE 24

Owners Have Invested Heavily in Apartment Property Upgrades in Recent Years

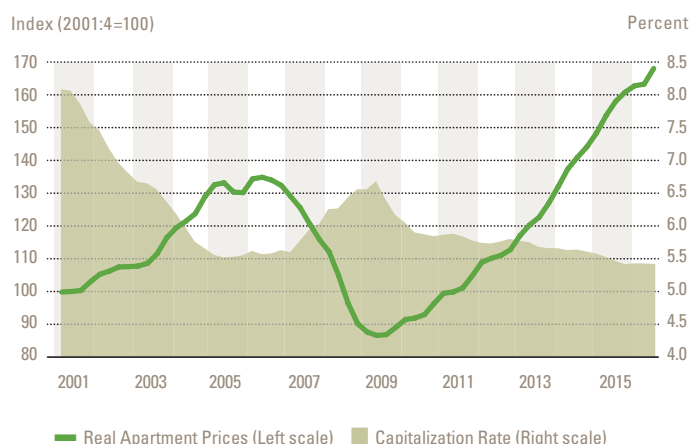
Spending per Unit (2016 dollars)



Notes: Data include apartment properties with 50 or more units under professional management with stabilized operations. Dollars adjusted for inflation using the CPI-U for All Items.
Source: National Apartment Association Survey of Operating Income & Expenses in Rental Apartment Communities, 2008–2017.

FIGURE 25

With Apartment Prices at an All-Time High...

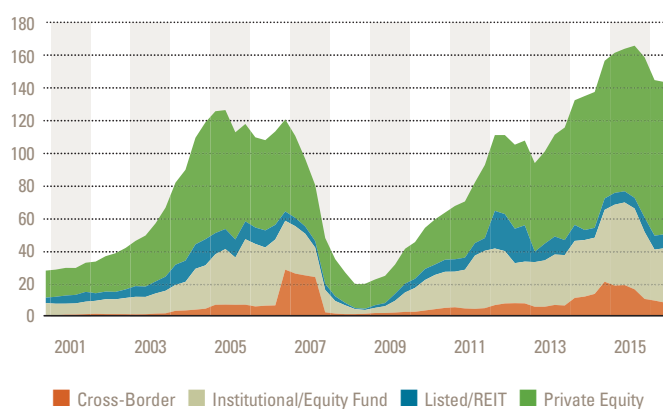


Notes: Data are adjusted for inflation using the CPI-U for All Items, and updated through 2017:2. Capitalization rate is the initial annual unlevered return on an acquisition, and measures the ratio between the net operating income produced by a property and its capital cost (the original price paid to buy the asset).

Source: JCHS tabulations of Real Capital Analytics data.

...Growth in Acquisitions Has Slowed

Net Apartment Acquisitions (Billions of 2016 dollars)



Notes: Data are adjusted for inflation using the CPI-U for All Items, and updated through 2017:2. Net acquisitions include transactions of \$2.5 million or more (calculated as acquisitions net of dispositions). Cross-border means that one or more buyers are headquartered outside of the US. Listed/REIT includes real estate investment trusts, publicly traded funds investing directly in real estate, and real estate operating companies. Figure excludes unknown/other buyers.

Source: JCHS tabulations of Real Capital Analytics data.

als (both attached and detached, and including vacant units) was essentially flat between 2014 and 2016, and increased only slightly (by 0.6 percent) in 2015–2016. However, recent growth in occupied single-family rentals remained strong in fast-growing markets of the West and South, including Austin, Charlotte, Denver, Houston, Orlando, and Phoenix.

Healthy investor appetite has driven up the real prices of investment-grade apartment properties by 9.3 percent annually over the past seven years. Real Capital Analytics data indicate that real apartment prices stood 24 percent above their 2007 peak in mid-2017 (**Figure 25**). Prices for properties in highly walkable central business districts are particularly high, up 84 percent from their previous peak. Properties in highly walkable suburbs have also appreciated rapidly, exceeding the previous peak by more than 40 percent. Although much slower to recover, rental property prices in more car-dependent suburbs still surpassed previous peaks by 13 percent by mid-2017.

The apartment property market is, however, cooling. Prices declined slightly for the Midwest and Northeast regions over the past year. And while prices in several metros in the West and South (including Atlanta, Los Angeles, Nashville, Phoenix, San Diego, Seattle, and Tampa) continued to climb through mid-year, prices in several others (Charlotte, Houston, Orlando, and San Jose) declined in real terms.

NCREIF estimates show that the total return on investment in the multifamily sector, including net income and appreciation in property values, exceeded 10 percent annually from late 2010 through early 2016. But with price appreciation slowing, ROI ramped down to a still respectable 6.2 percent in mid-2017. Investor appetite nonetheless remains strong, with CBRE reporting historically low capitalization rates for multifamily assets in nearly all markets and tiers in the first half of this year.

MULTIFAMILY SALES VOLUME SOFTENING

According to Real Capital Analytics, the annual volume of large apartment purchases (prices of \$2.5 million or more), net of dispositions, hit a record high of \$169.6 billion in the third quarter of 2016 in real terms, a 30 percent increase from the previous peak in the second quarter of 2006. By mid-2017, though, deal volume edged down to 148.1 billion, with declines in both international and institutional/equity fund investments. More than half (63 percent) of net acquisitions came through private domestic sources, while 33 percent were through institutional and equity funds. The shares of REITs and foreign investment were small by comparison, in the 5–6 percent range.

With pricing at or near all-time highs and limited inventory on the market, large apartment deals in five of the six major metro areas tracked by RCA—Boston, Los Angeles, New York City, San Francisco,

and Washington, DC—slowed in the first half of 2017 from a year earlier. The exception was Chicago, where net sales continued to pick up. Large purchases of high- and mid-rise apartment buildings also rose in non-major metros.

Investors and lenders alike appear more cautious at this stage of the cycle. According to a recent Federal Reserve survey for the third quarter of 2017, bank loan officers on net reported weakening demand for loans secured by multifamily residential structures, while also reporting more stringent lending standards—the ninth consecutive quarter of tightening.

Nevertheless, the Mortgage Bankers Association reports that the volume of multifamily loans outstanding (including both originations and repayment/write-offs of existing loans) hit a new high of \$1.2 trillion in nominal terms in early 2017, a 9 percent increase from a year earlier and a 44 percent jump from early 2011. Federal lending sources were responsible for fully two-thirds of the net increase in debt financing over the past year. Banks and thrifts have also steadily expanded their lending, raising their share of mortgage debt outstanding from a quarter in 2011 to about a third.

Despite signs that the rental market may be cresting and that investors are facing greater headwinds, measures of credit risk remain low overall. Only 0.15 percent of all FDIC-insured loans secured by multifamily residential properties were in noncurrent status (90 days past due or in nonaccrual status) in the second quarter of 2017, down from 0.23 percent a year earlier. According to Moody's

Delinquency Tracker, the noncurrent rate for commercial mortgage-backed securities (60 days past due, in foreclosure, or REO), though higher, was still a modest 2.8 percent in August 2017.

THE OUTLOOK

After seven years of tightening, rental market conditions have begun to ease in many metro areas. So far, most of the slack is at the upper end of the market and in core urban areas, where most new rental units have come online. However, supply pressures may be lessening in the moderately priced segment as well.

While this does appear to be a turning point, the extent of any potential slowdown depends in large part on the strength of future rental demand. The most likely scenario is that renters will still account for about a third of household growth going forward, which would make for a soft landing from current market conditions. But if the downshift in renter household growth is more significant, the impact on markets would be more negative.

Whatever the short-term outlook, there will be ongoing need for lower-cost rental housing. Now that the high end is saturated, developers may turn their attention to the middle-market segments. But given the challenges of supplying lower-cost units amid high and rising development costs, government at all levels will have to find new ways to facilitate preservation and expansion of the affordable stock. The housing industry must also play its part in fostering innovation to meet the nation's rental affordability challenges.



5 | RENTAL AFFORDABILITY

While affordability has improved somewhat, the share of renter households with cost burdens remains well above levels in 2001. Although picking up since 2011, renter incomes still lag far behind the 15-year rise in rents. Renters of all types and in all markets face affordability challenges, although lower-income households are especially hard-pressed to find units they can afford. Indeed, high housing costs have eroded the recent income gains among these households, leaving many renters with even less money to pay for other basic needs.

RENTER INCOMES AND HOUSING COSTS

Despite some recent improvement, the rental housing affordability gap remains wide. Median monthly rental costs were up 15 percent in real terms in 2000–2016, increasing from \$850 to a high of \$980. At the same time, median renter household income fell sharply between 2000 and 2011, from \$38,000 to \$32,000, before gradually recovering to \$37,300 in 2016. Part of this rebound, however, reflects the growing presence of higher-income households in the rental market rather than income gains alone.

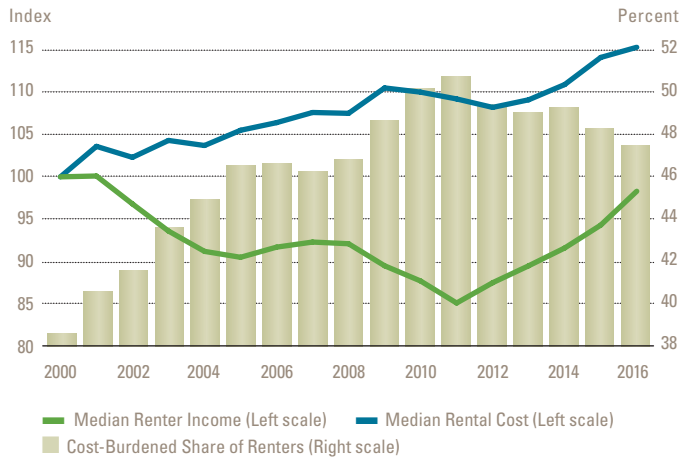
Even so, growth in renter incomes across all income quartiles has outpaced the rise in housing costs since 2011, modestly narrowing the affordability gap. The median monthly income for renters in the bottom quartile increased 10 percent in real terms from \$1,000 in 2011 to \$1,100 in 2016, while their monthly housing costs rose 3 percent from \$740 to \$760. By comparison, the median monthly income for renter households in the top quartile grew 9 percent over this period, to \$11,300, but their housing costs jumped 6 percent, from \$1,600 to \$1,700.

With this pickup in income growth, the number of cost-burdened renter households (paying more than 30 percent of income for housing, including utilities) receded from a high of 21.3 million in 2014 to 20.8 million in 2016. The number of severely cost-burdened renters (paying more than 50 percent of income for housing) also edged down from 11.4 million to 11.0 million. The declines in the number of cost-burdened households between 2015 and 2016 coincide with the largest increase in median renter income since 2000.

While down slightly since its 2011 peak, the share of cost-burdened renter households remains high (**Figure 26**). After increasing from 39 percent in 2000 to 51 percent in 2011, the share of cost-burdened households dipped to 47 percent in 2016. The share of severely cost-burdened renters also fell from 28 percent in 2011 to 25 percent. Again, these small improvements reflect not only a drop in the number of cost-burdened renters but also rapid growth in the number of renters with higher incomes—the group least likely to be cost burdened. In fact, the number of renters earning at least \$75,000 rose by 40 percent between 2011 and 2016, to 9.1 million, the fastest growth in renter households in any income group.

FIGURE 26

Despite Rising Incomes, the Share of Cost-Burdened Renters Remains High

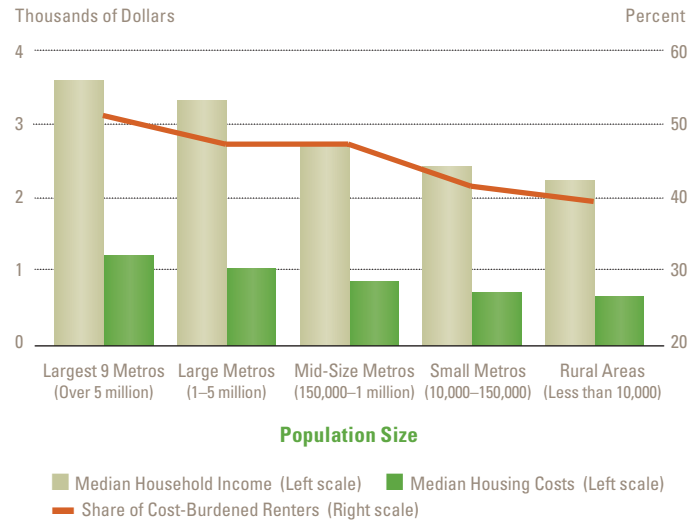


Notes: Median costs and household incomes are in constant 2016 dollars, adjusted for inflation using the CPI-U for All Items. Housing costs include cash rent and utilities. Cost-burdened households pay more than 30% of income for housing. Households with zero or negative income are assumed to have severe burdens, while households paying no cash rent are assumed to be without burdens. Indexed values represent cumulative percent change.

Source: JCHS tabulations of US Census Bureau, American Community Surveys.

FIGURE 27

While Most Common in Large Metros, Cost Burdens Are Widespread in Markets of All Sizes



Notes: Household income is monthly. Housing costs are monthly and include cash rent and utilities. Cost-burdened households pay more than 30% of income for housing. Households with zero or negative income are assumed to have severe burdens, while households paying no cash rent are assumed to be without burdens. Small metros include micropolitan areas with populations between 10,000 and 50,000.

Source: JCHS tabulations of US Census Bureau, 2016 American Community Survey 1-Year Estimates using the Missouri Census Data Center MABLE/Geocorr14.

GEOGRAPHY OF COST BURDENS

Despite declines in the majority of states between 2015 and 2016, large shares of renters across the country are housing cost burdened. Indeed, the shares in California, Colorado, Florida, Hawaii, and New York range from 51 percent to 54 percent, although for different reasons. For example, renters in Colorado, Florida, and New York have relatively moderate median incomes but face high housing costs. In contrast, renters in California and Hawaii have high incomes but even higher housing costs, with both rents and incomes ranking in the top five in the country. Alaska is currently the most affordable state, with the cost-burdened share of renters at 37 percent. Although housing costs in Alaska are the sixth highest nationwide, median renter income is the second highest.

Lower housing costs, however, do not mean greater affordability. Although median housing costs in Alabama, Kentucky, Maine, Mississippi, and West Virginia are in the bottom fifth for the nation, the shares of cost-burdened renters in these states are above 41 percent. The states with the smallest shares of cost-burdened renters are located primarily in the Great Plains region—including Montana, North Dakota, South Dakota, and Wyoming—where median housing costs are low and renter populations are small. But even in these states, more than one-third of renters have housing cost burdens.

Cost-burdened renters live in communities of all sizes, but finding affordable housing in larger metro areas is particularly challenging. About half (51 percent) of renter households in the nation's nine largest metros pay more than 30 percent of income for housing (Figure 27). The median monthly housing cost in these areas is \$1,200 while the median renter income is \$3,600. Among this group of nine metros, Miami has the highest shares of cost-burdened renters at 61 percent. The shares of cost-burdened renters are slightly lower in large (47 percent), mid-size (47 percent), and small metros (42 percent). Small metros have the lowest median housing costs of any urbanized areas at \$720 and the lowest median incomes at \$2,400.

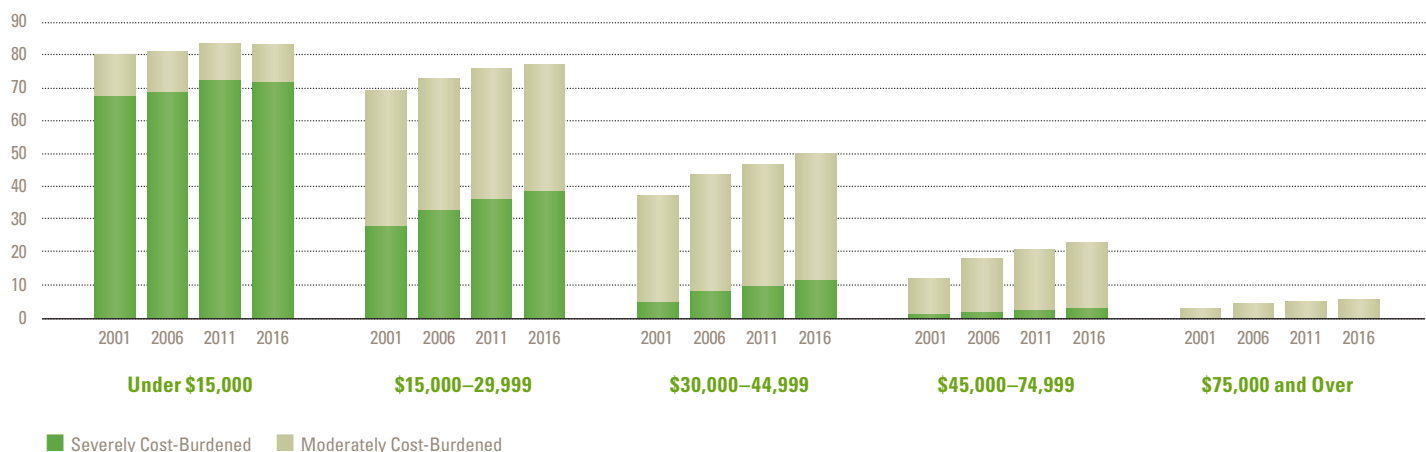
From 2011 to 2016, the cost-burdened shares of renters declined in 220 out of the nation's 275 mid-size and larger metros (80 percent), but primarily because increasing numbers of moderate- and higher-income households had entered the rental market. The number of cost-burdened renters decreased in only 46 percent of these metros over this period.

In 63 of the nation's 658 small metros (10 percent), more than half of renters were housing cost burdened in 2016. About two-thirds of small metros with majority shares of cost-burdened renters are in the South and West. Meanwhile, the number of cost-burdened renters in 385 small metros (59 percent) fell between 2011 and 2016.

FIGURE 28

The Share of Middle-Income Renters with Cost Burdens Is Growing Rapidly

Share of Households (Percent)



Notes: Household incomes are in constant 2016 dollars, adjusted for inflation using the CPI-U for All Items. Moderately (severely) cost-burdened households pay 30–50% (more than 50%) of income for housing. Households with zero or negative income are assumed to have severe burdens, while households paying no cash rent are assumed to be without burdens.

Source: JCHS tabulations of US Census Bureau, American Community Surveys.

Rural areas tend to have lower, but still sizable, shares of cost-burdened renters (40 percent). Even so, more than 46 percent of rural renters in California, Maryland, New Hampshire, and New York are housing cost burdened. These states are largely urbanized, suggesting that high rents in metropolitan areas extend into rural areas. Cost-burdened households in rural areas are often more dispersed than in metro areas, making it difficult to target effective policy interventions.

UNIVERSALITY OF COST BURDENS

Renters in many demographic groups are cost burdened, but low-income households are the most likely to pay a disproportionate share of their incomes for housing. In 2016, 83 percent of renter households with incomes below \$15,000 had cost burdens, including 72 percent with severe burdens. Some 77 percent of renters earning between \$15,000 and \$30,000 were also cost burdened. By comparison, only 6 percent of renters making at least \$75,000 were cost burdened in 2016.

Over the past 15 years, more than half of the growth in the number of cost-burdened renters has been among renters earning under \$30,000. However, the largest increases in cost-burdened shares have been among moderate-income households. From 2001 to 2016, the number of cost-burdened renters earning \$30,000–\$45,000 rose by 1.3 million, bringing the share for this income group from 37 percent to 50 percent (**Figure 28**). Similarly, the addition of 1.1 million cost-burdened households with incomes of \$45,000–\$75,000 nearly doubled the share in this group from 12 percent to 23 percent.

Being fully employed is no panacea. In 2016, some 56 percent of renters with jobs in personal care and service occupations were housing cost burdened (**Online Figure 5**). Indeed, more than half of renters working in food preparation and service, building and grounds maintenance, and healthcare support—industries with many low-wage jobs—had cost burdens. Conversely, less than 20 percent of renters in higher-paying fields such as computer science, mathematics, architecture, engineering, and oil extraction, were housing cost burdened in 2016.

In addition to low income, several household characteristics—including race/ethnicity, age, household composition, and disability status—are associated with cost burdens. For example, 55 percent of black and 54 percent of Hispanic renters were housing cost burdened in 2016, an increase of about 7 percentage points for both groups in 2001–2016. By comparison, 43 percent of white renters and 47 percent of Asian and other minority renters were cost burdened, up 5–6 percent over this period.

In addition, cost burdens are common among households age 65 and over, as well as among those under age 25. As of 2016, 54 percent of older renters had cost burdens, along with 60 percent of younger renters. Many members of these age groups are out of the workforce or have low wages, either because of retirement and/or disability or because they are still students.

Household composition also makes a difference. Married or partnered households with more than one potential earner are less frequently

cost burdened. Those with children present are more frequently burdened, perhaps reflecting the more limited hours that parents are available to work. For these reasons, single parents have the highest cost-burdened share (63 percent) of any household type, well above that for married or partnered parents (39 percent).

Finally, 55 percent of renter households that have a member with a disability have cost burdens, compared with 45 percent of those with no disabilities. Rental cost burdens can be particularly detrimental to households with disabilities in that high housing costs may constrain their ability to pay for medical and other essential needs.

THE LOW-COST HOUSING DEFICIT

The prevalence of cost burdens among lower-income renters is due in part to a shortage of low-cost housing in the private market. To be low cost, housing must be affordable at the 30-percent-of-income standard to very low-income renters (earning up to 50 percent of area median income).

HUD's Worst Case Housing Needs 2017 Report to Congress documents the growing gap between supply of and demand for low-cost rentals. Worst case needs are defined as the number of very low-income renters who are severely cost burdened or living in inadequate housing. After a slight dip from 8.5 million in 2011 to 7.7

million in 2013, the number of renter households with worst case needs increased to 8.3 million in 2015. Nearly all of these cases (98 percent) arise from lower-income households having to pay more than half their incomes for housing costs rather than from problems of housing adequacy.

Some of the pressures on the low-cost supply arise from the fact that households with moderate or even high incomes occupy the units that low-income renters could afford. HUD estimates that 93 units are affordable for every 100 very low-income renters, but of these, only 54 are both available and adequate. For extremely low-income renters, the supply of affordable housing nationally is just 66 units per 100 renters, with only 33 of those units meeting the available and adequate criteria.

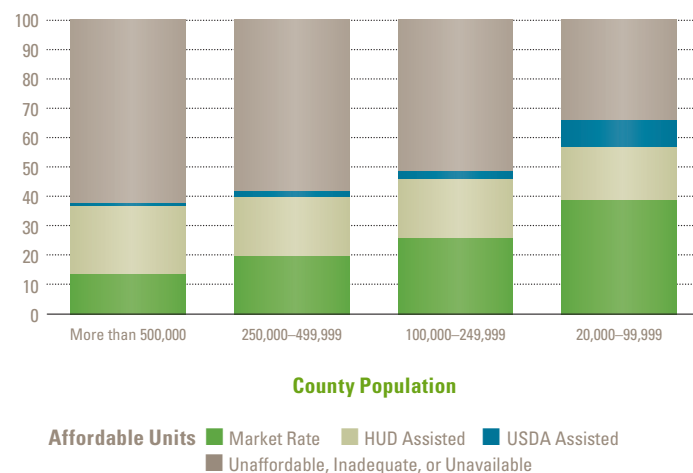
HUD adjusts incomes based on household size to determine affordability and eligibility for housing subsidies. Given that the median income of very low-income families nationally was \$28,400 in 2015, a very low-income family of four could afford to pay \$710 per month for rent. This number, however, is much lower in some counties. Moreover, the median family of four with extremely low income could afford only \$430 in monthly housing costs.

Recent data from the Urban Institute confirms the shortage of privately owned affordable rental housing (also known as naturally

FIGURE 29

The Most Populous Counties Face the Largest Shortfalls in Affordable Supply

Average Number of Units per 100 Extremely Low-Income Renters



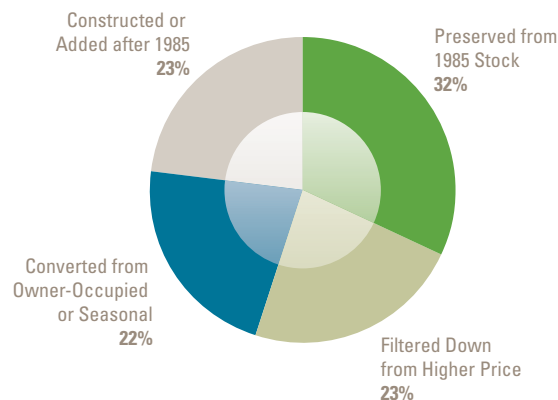
Notes: Affordable is defined as costing no more than 30% of income for households with extremely low incomes (earning up to 30% of area median). Adequate units have complete bathrooms, running water, electricity, and no sign of major disrepair. Available units are not occupied by higher-income households.

Source: JCHS tabulations of Urban Institute, Mapping America's Rental Housing Crisis, 2017.

FIGURE 30

Maintaining the Stock of Rental Housing Depends Largely on Preservation

Share of Affordable Rental Stock in 2013



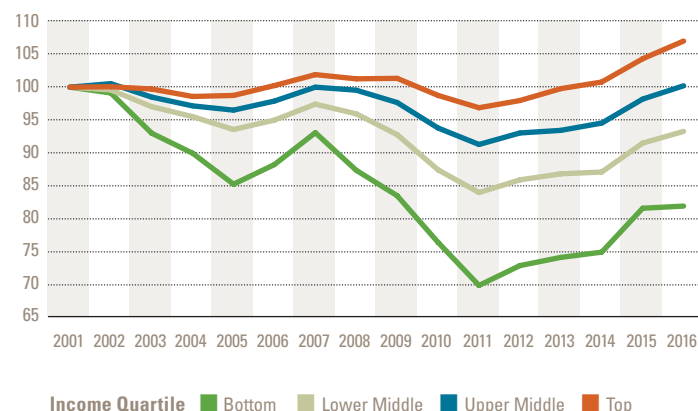
Notes: Affordable is defined as costing no more than 30% of income for households with very low incomes (earning up to 50% of area median). Units added after 1985 include rentals that were temporarily out of the stock in that year.

Source: JCHS tabulations of Weicher, Eggers, and Mouden, 2016.

FIGURE 31

Rising Housing Costs Have Eroded Disposable Incomes...

Median Income Left Over After Paying for Housing Costs (Indexed)



Income Quartile ■ Bottom ■ Lower Middle ■ Upper Middle ■ Top

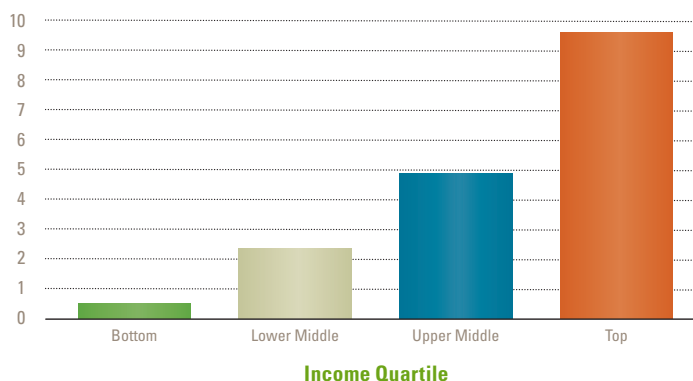
Notes: Income quartiles include both owners and renters. Median housing costs and household incomes are in constant 2016 dollars, adjusted for inflation using the CPI-U for All Items. Housing costs include cash rent and utilities. Indexed values are cumulative percent change.

Source: JCHS tabulations of US Census Bureau, American Community Surveys.

FIGURE 32

...Especially Among Lowest-Income Renters

Median Income Left Over After Paying for Housing Costs (Thousands of dollars)



Notes: Income quartiles include both renters and owners. Housing costs include cash rent and utilities.

Source: JCHS tabulations of 2016 American Community Survey.

occurring affordable housing) available to extremely low-income renters. In 2014, counties with populations of at least 20,000 had an average of 34 naturally occurring affordable, adequate, and available units per 100 extremely low-income renters. Of these counties, 29 (about 2 percent) had no units meeting the criteria, while the most affordable counties provided 81 units for every 100 extremely low-income renters. On average, smaller counties have a higher ratio of supply to demand than larger urban counties, while large urban counties have the greatest deficit (Figure 29).

At the same time, a Hudson Institute report finds that losses of low-cost units are high. About 60 percent of the 15 million rentals affordable in 1985—some 8.7 million units—were lost by 2013. The biggest reductions were due to permanent removals, with 27 percent of affordable rentals in 1985 (4.1 million units) demolished, destroyed in disasters, or reconfigured into fewer units. About 18 percent (2.7 million units) were converted to owner-occupied or seasonal housing, while 12 percent (1.7 million units) were upgraded to higher rents through gentrification. The remaining 276,000 units were temporarily out of the affordable stock.

This same report also documents how the low-cost rental stock is replenished over time. A little under a third of affordable rentals in 2013 were also affordable in 1985, highlighting the importance of preservation. Even so, a large majority of affordable rentals were added through a variety of other means over time, with roughly equal shares coming from new construction and conversion of non-residential structures, filtering from higher price points, and conversion of owner-occupied or seasonal housing to rentals (Figure 30).

Given the lack of naturally occurring affordable units, federal housing assistance is crucial for lowest-income renters. The Urban Institute estimates that HUD and USDA programs assist 53 percent of units affordable to extremely low-income renters. In the largest counties where supplies of naturally occurring affordable units are especially tight, federal programs on average contribute an average of 24 units per 100 extremely low-income renters. In smaller and non-metropolitan counties, federal programs account for an average of 27 units per 100 extremely low-income renters.

THE ADDED BURDEN OF UTILITY AND TRANSPORTATION COSTS

For renters that pay for their own use, utilities can be a sizable component of total housing outlays. The 2016 American Community Survey reports that the median renter spent \$140 per month on electricity, gas, heating fuel, and water bills beyond any utility costs included in the rent.

Utility spending varies across income groups and geographies. Lowest-income renters (making less than \$15,000) spend the least on utilities, or \$120 per month at the median. Renters in this income group living

in the East South Central census division, including Alabama, Kentucky, Mississippi, and Tennessee, have the highest median outlays of \$155 per month. Renters making \$75,000 or more have the highest utility bills, amounting to \$150 per month. Highest-income renters in the East South Central area spend the most, or \$188 per month.

Although lower-income households spend less than higher-income households on utilities, they must dedicate a larger share of their incomes to these costs. Renters in the lowest income group spend 17 percent of their annual incomes on utilities, and highest-income households spend only 2 percent. While the median share of income devoted to utility costs has fallen across all income groups over the last five years, these costs still contribute significantly to overall housing outlays.

Some renter households make tradeoffs between housing they can afford and location, thus adding to their transportation costs. Indeed, the median household with no housing cost burden spends more on transportation than the median household that is cost burdened. The 2016 Consumer Expenditure Survey reports that transportation costs account for 31 percent of total housing and transportation spending for the median renter. Even excluding vehicle purchases, the median transportation cost represents 21 percent of housing and transportation costs combined.

CONSEQUENCES OF HIGH HOUSING COSTS

High housing costs have eroded renter incomes and exacerbated inequality among renter households. After paying for their housing, the amount of money that lowest-income renters had left over for all other expenses fell 18 percent from 2001 to 2016 (**Figure 31**). Over the same period, the amount of money that highest-income renters had to spend on other costs increased by 7 percent.

In 2016, the median renter household in the bottom income quartile paid 60 percent of its income for housing. For the median renter in this income group, the amount left over for all other needs was less than \$500 per month (**Figure 32**). By comparison, the median renter in the top quartile paid just 14 percent of household income for housing and had nearly \$9,700 left over for other expenses.

A recent JCHS working paper assesses the gap between household incomes and outlays for both housing and basic living

expenses (including transportation, food, childcare, healthcare, and income taxes) in three metropolitan areas in 2015. Not surprisingly, low-income households faced significant challenges in paying for basic necessities after covering their rents, even if these households were fortunate enough to find housing they could afford. Despite lower living expenses, lowest-income single-person households still faced significant financial challenges in covering housing costs and necessities. The results also show that childcare costs incurred by families leave even moderate-income households with cost burdens.

THE OUTLOOK

While the recent drop in the number of housing cost-burdened renters is good news, future meaningful progress is far from certain. Indeed, at the average annual pace of decline from 2014 to 2016, it would take another 15 years just to return to the 2006 level of 17.0 million cost-burdened households and 24 years to hit the 2001 level of 14.8 million households. In effect, the latest economic cycle seems to have defined a new normal for the nation's rental affordability challenges.

Improvement in rental affordability depends on the trajectories of household incomes and housing costs. The recent growth in renter incomes has come at a time when the economy is nearing full employment, so sustained gains are uncertain. In addition, the Bureau of Labor Statistics expects that the fastest employment growth will be in several low-wage occupations—such as personal care, healthcare support, and food preparation—with large shares of housing cost-burdened workers. For earners in these occupations, full employment will not guarantee access to housing they can afford.

Meanwhile, tight rental market conditions have propelled rapid growth in housing costs relative to incomes, although the recent rise in vacancy rates may help to ease some of the pressure on rents in the short term. Turning back the tide on the nation's rental affordability challenges thus requires efforts to address lagging incomes among those near the bottom of the economic ladder as well as steps to help reduce the cost of housing. And for those with low incomes, increasing access to rental assistance, expanding the low-cost stock, and preserving affordable housing will be necessary to close the gap between income and housing costs.



6 | RENTAL HOUSING CHALLENGES

The gap between the supply of and demand for rental housing assistance is still growing. Reversing this trend will require increased efforts to preserve assisted units, construct new affordable rentals, and expand the availability of vouchers and other forms of assistance. More immediately, the lack of affordable rentals in high-cost metros may be putting low-income households at greater risk of housing instability, evictions, and homelessness. The need for additional rental housing is especially acute in areas recently devastated by hurricanes and wildfires.

REDUCED ACCESS TO RENTAL ASSISTANCE

Between 2001 and 2015, the number of very low-income households (making less than 50 percent of area median) was up 29 percent, from 14.9 million to 19.2 million. According to HUD's Worst Case Needs 2017 Report to Congress, this includes a comparably large increase in the number of extremely low-income households (making less than 30 percent of area median) from 8.7 million to 11.3 million households. At the same time, the number of very low-income households receiving rental assistance rose only 14 percent, from 4.2 million to 4.8 million. As a result, the share of very low-income households that receive rental assistance declined from 28 percent to 25 percent over this period.

The growing gap between need and assistance is evident in the long waiting lists for rental assistance in most cities. In fact, many local housing agencies have closed their waitlists in response to oversubscribed demand, sometimes not accepting new applicants for years. In one extreme example, Los Angeles reopened its waitlist for housing choice vouchers in October 2017 for the first time in 13 years, anticipating as many as 600,000 applications for 20,000 spots on the list.

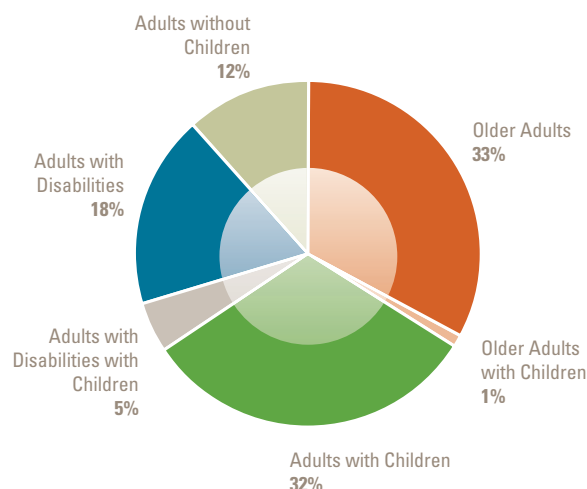
The shortfall in rental assistance has been accompanied by changes in the stock of federally assisted units. HUD data indicate that the number of public housing units fell from 1.1 million in 2006 to 1.0 million in 2016, while the number of privately owned units with project-based subsidies was down from 1.4 million to 1.3 million. These declines have been offset by an increase in housing choice vouchers, from 2.0 million to 2.3 million. The number of households receiving assistance from the US Department of Agriculture also rose modestly from 263,000 in 2008 to 269,000 in 2016. Although the net change across programs is positive, the increase has not kept pace with growth in the number of very low-income households.

The Low Income Housing Tax Credit (LIHTC) program remains the primary source of support for new affordable rental units. Between 2006 and 2015, the stock of LIHTC units expanded from 1.6 million to 2.3 million. While adding to the overall supply of affordable

FIGURE 33

Most Assisted Households Are Older Adults, Persons with Disabilities, or Families with Children

Share of Assisted Households



Notes: Household counts include those assisted by housing choice vouchers, public housing, project-based Section 8, Section 202, and Section 811. Older adult households are headed by a person age 62 or older, including those with a disability or a spouse with a disability. Adults with disabilities are households headed by a person age 61 or younger with a disability or a spouse with a disability. Adults with children include households with at least one child under age 18 present.

Source: JCHS tabulations of US Department of Housing and Urban Development, 2016 Public Use Microdata Sample.

housing, these units generally have rents affordable to households with incomes 50–60 percent of the area median. To be affordable to extremely low-income households, LIHTC units often must be coupled with other subsidies. Indeed, a 2014 HUD analysis estimated that 38 percent or more of LIHTC tenants received rental assistance of some kind from federal, state, or local sources.

Households receiving rental assistance are predominantly families with children, older adults, and persons with disabilities (**Figure 33**). According to HUD data for 2016, 38 percent of recipients were low-income families with children, including 5 percent with a household head with a disability and 1 percent with a household head age 62 or over. With the aging of the baby-boom generation, older adults now occupy one-third of assisted units and this share is and set to increase over the coming decades. Meanwhile, 18 percent of assisted households in 2016 were headed by a person under age 62 with a disability. Only 12 percent of recipients were childless adults under age 62.

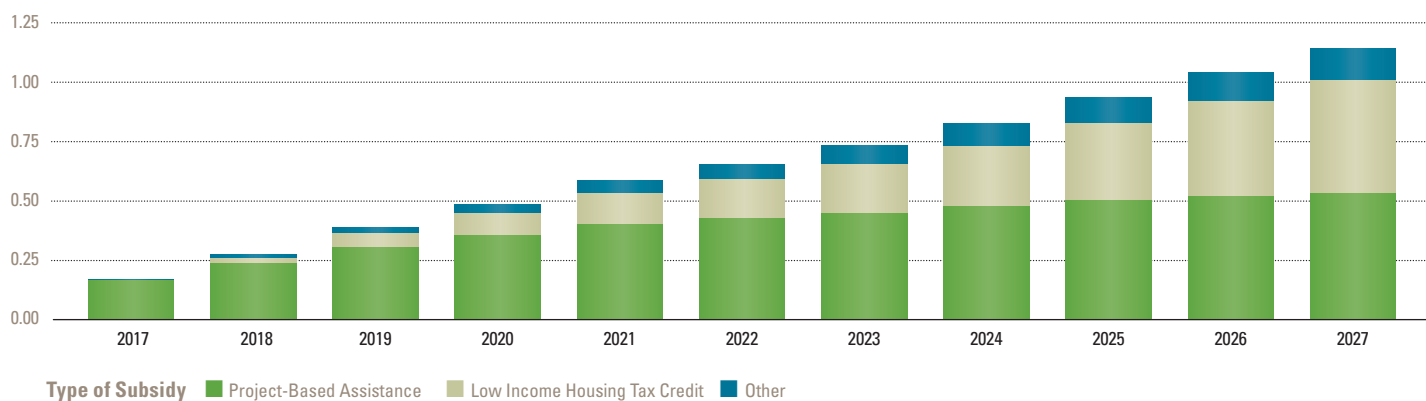
PRESERVING THE AFFORDABLE HOUSING STOCK

The nation's stock of both assisted and privately owned low-cost rentals includes many units at risk of loss. Public housing, in particular, has a large backlog of needed repairs and improvements, last estimated at \$26 billion in 2010, and its annual maintenance needs of \$3.4 billion exceed Congressional appropriations. Although Congress has not addressed this deficit through additional capital funding, it did establish the Rental Assistance Demonstration (RAD) in 2012 to give public housing and other eligible properties more

FIGURE 34

Affordability Restrictions on 1.1 Million Rental Units Will Expire by 2027

Cumulative Number of Units with Expiring Affordability (Millions)



Notes: Data include properties with active subsidies as of January 1, 2017. Other includes units funded by HOME Rental Assistance, FHA Insurance, Section 236 Insurance, Section 202 Direct Loans, USDA Section 515 Rural Rental Housing Loans, and units in properties with more than one subsidy type expiring on the same day. For properties with multiple subsidies, if one subsidy expires but one or more others remain active, the difference between the number of units assisted by the expiring subsidy and the number of units assisted by the remaining subsidies are counted as expired.

Source: JCHS tabulations of Public and Affordable Housing Research Corporation and National Low Income Housing Coalition, National Housing Preservation Database.

funding flexibility through conversion to project-based Section 8 contracts. After applications for participation in RAD reached the initial limits, Congress raised the cap to 225,000 units for fiscal year 2017. At last count 423 public housing authorities (14 percent) are currently participating in the demonstration.

The impending expiration of affordability restrictions on federally subsidized units presents another preservation challenge. Over the next 10 years, 530,000 rentals with project-based rental assistance, 478,000 units with LIHTC subsidies, and 136,000 units with other types of subsidies will reach the end of their required affordability periods (**Figure 34**). While some of these properties are owned by nonprofits and other mission-driven organizations, many are privately owned and at risk of converting to market rate. Properties located in areas with high or rising rents are particularly vulnerable to loss from the affordable stock.

Expirations of LIHTC affordability restrictions are set to increase in 2020 as the oldest units built under the program reach the 30-year mark. In response, several states have enacted mandates to extend the affordability periods of LIHTC properties. For example, California now requires 25 years of additional affordability, while New Hampshire, Utah, and Vermont require 69 years. However, these state-level actions do not include funding for maintenance expenditures and were mostly undertaken after 2000, implying that they will only have an impact after 2030. Additional preservation efforts are therefore necessary to keep LIHTC units with expiring affordability restrictions in the subsidized housing stock.

Finally, after a decade of tight rental markets and rising rents, the stock of privately owned low-cost units continues to shrink. These losses are particularly concerning in metros with rapid rent growth, where downward filtering and conversions from the owner-occupied stock have done little to offset the disappearance of low-cost rentals. To combat losses of naturally occurring affordable housing, nonprofit organizations have begun to acquire and manage at-risk properties to keep rents affordable to current and future tenants.

TRACKING HOMELESSNESS

In the early 2000s, HUD launched an initiative challenging cities to develop plans to end chronic homelessness within ten years. The 2010 Federal Strategic Plan to Prevent and End Homelessness subsequently broadened this effort, setting goals to end chronic and veteran homelessness within five years and homelessness among families with children and unaccompanied youth within ten years.

Efforts to reduce homelessness appear to be working, at least at the national level. According to HUD's Annual Homelessness

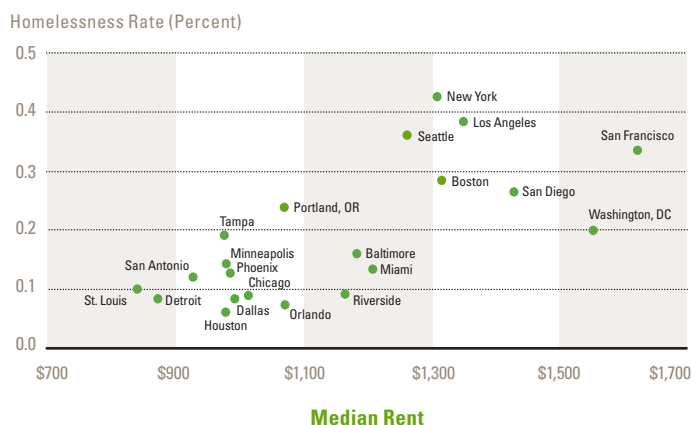
Assessment Report (AHAR), the number of people who were homeless on a single night in January fell 15 percent from 647,000 in 2007 to 550,000 in 2016. Nearly all of this decline is due to decreases in the number of unsheltered homeless people, with the number of sheltered homeless people remaining almost constant. The reductions are also largest among the groups most likely to be unsheltered, including the chronically homeless (down 35 percent in 2007–2016) and homeless veterans (down 47 percent in 2010–2016). Less progress has occurred in reducing homelessness among families with children (down 17 percent in 2007–2016).

The point-in-time count, however, provides only a conservative estimate of the number of people and families that experience homelessness over the course of a year. An alternative AHAR measure of the extent of homelessness is that nearly 1.5 million people spent at least one night in a shelter in 2015. Even this figure is low, given that it does not include the unsheltered homeless or at-risk individuals living in doubled-up or other unstable housing situations. The national estimates also mask considerable variation across locations. Metros with the highest rates of homelessness are frequently those with the highest median rents (**Figure 35**), raising concerns about the consequences of tight conditions in these high-cost markets.

Achieving further reductions in homelessness will require attention to the needs of multiple subpopulations. A recent analysis of HUD's Family Options Study suggests that housing vouchers may be

FIGURE 35

Homelessness Is Especially High in More Expensive Rental Markets



Notes: Included metros are the 21 metropolitan statistical areas (MSAs) among the 25 largest MSAs by total population for which at least 80% of population falls within one or more metro Continuums of Care (CoCs). Metro CoCs are defined here as having at least 90% of their population falling within one MSA. Median rent is median gross rent including utilities. Homelessness rate is the point-in-time count of homeless people, both sheltered and unsheltered, divided by the MSA population.

Sources: JCHS tabulations of US Department of Housing and Urban Development, 2016 Point-in-Time Count of Homelessness, and US Census Bureau, 2015 American Community Survey 1-year Estimates.

the best strategy for reducing family homelessness. This study was launched in 2008 to test the relative efficacy of several approaches, including priority access to long-term subsidies, temporary subsidies, project-based transitional housing, and usual care through the shelter system and other available supports. According to HUD's evaluation of long-term outcomes, priority access to housing choice vouchers significantly reduced the likelihood of homelessness, doubling up, and shelter stays three years after enrollment in the study.

Less is known about the relative effectiveness of strategies to reduce homelessness among the young. HUD's point-in-time estimates found 36,000 unaccompanied homeless youths in January 2016, while the Homeless Management Information System shows that 137,000 unaccompanied homeless youths used the shelter system at some point in 2015. HUD continues to improve its data collection processes, and 2017 will be the initial year for estimating changes in the number of homeless youth over time.

Findings from the Veterans' Homelessness Prevention Demonstration also highlight the unique physical and mental health needs of homeless veterans. For example, two-thirds of veterans in the demonstration reported experiencing serious depression, anxiety, or tension—including 43 percent with symptoms of post-traumatic stress disorder. The project also revealed the need for service providers to have cultural competency in military norms and the ways in which veterans experience civilian life.

EVICTIIONS AND FORCED RELOCATIONS

The frequency and consequences of evictions and forced relocations have gained new attention from policymakers. According to the 2015 American Housing Survey, 7.5 percent of all renter households that moved in the prior two years did so because they were "forced to move by a landlord, a bank or other financial institution, the government or because of a disaster or fire." It is difficult to know how many of these forced moves were due to formal evictions through the court system, informal evictions, or other events.

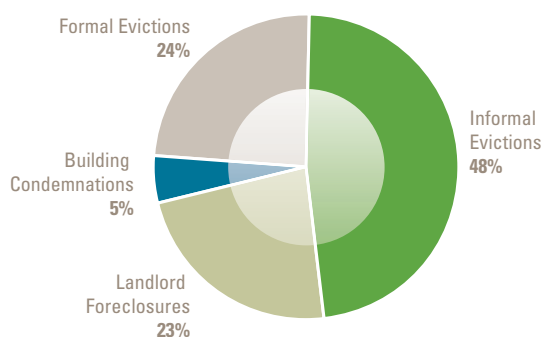
The Milwaukee Area Renters Study offers a more complete picture, reporting that 13 percent of renter households in the City of Milwaukee experienced a forced move within the two years preceding the study. Of these moves, almost half (48 percent) resulted from informal evictions, 23 percent from landlord foreclosures, and 5 percent from building condemnations, and only a quarter were due to formal evictions (**Figure 36**). While not broadly generalizable, these estimates suggest that court records seriously understate the frequency of forced relocations of renters.

In addition to stress and psychological trauma, evictions impose high costs on renter households in terms of both time and money, and can result in job absences, drain savings or increase debt, and damage credit histories. Forced moves can also disrupt children's school attendance and adults' employment options, particularly if the household moves to a new town or school district. And for the

FIGURE 36

A Milwaukee Study Suggests that Informal Evictions May Be Twice as Frequent as Formal Evictions

Share of Forced Moves



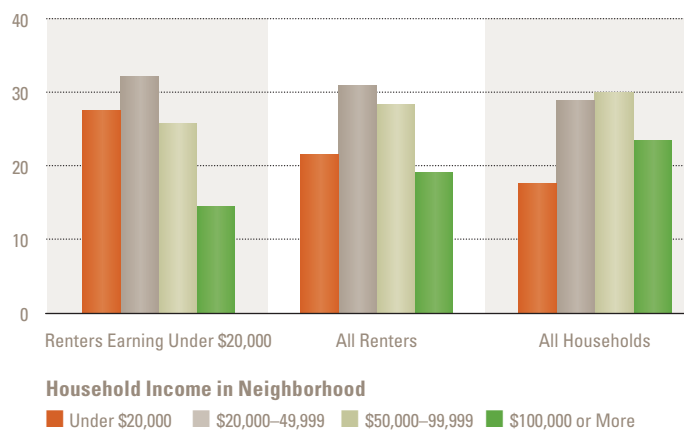
Notes: Formal evictions are processed through the court system. Informal evictions include forced moves in cases where the tenants were threatened with eviction or moved in anticipation of eviction.

Source: Milwaukee Area Renters Study data reported in Desmond and Shollenberger, 2015.

FIGURE 37

Low-Income Renters Are Likely to Live in Neighborhoods with Other Low-Income Households

Average Share of Households in Neighborhood (Percent)



Household Income in Neighborhood

Legend: Under \$20,000 (Orange), \$20,000–49,999 (Grey), \$50,000–99,999 (Light Green), \$100,000 or More (Dark Green)

Note: Shares are calculated as the weighted average of households in each income category across all US census tracts.

Sources: JCHS tabulations of US Census Bureau, 2015 American Community Survey 5-Year Estimates, and the JCHS Neighborhood Change Database.

community at large, forced displacements entail direct public costs in the form of fees for court services, social services, and use of homeless shelters and emergency foster care.

The recent focus on forced relocations has led several cities to review their eviction procedures. In 2017, New York City became the first city in the country to guarantee legal representation to low-income residents facing eviction. Other cities have taken steps to limit the set of causes for which landlords can pursue eviction. Expanding support for emergency rental assistance and rapid rehousing programs would also help to protect households most at risk of homelessness.

GROWING INCOME SEGREGATION

Residential segregation by income has increased steadily in recent years, especially among households with the highest and lowest incomes. This trend adds to the challenges posed by entrenched residential segregation by race and ethnicity in many cities. It also raises concerns that low-income renters have increasingly limited access to a full range of neighborhoods.

In 2015, the average renter household earning under \$20,000 lived in a neighborhood where 28 percent of residents had comparably low incomes and only 15 percent had incomes above \$100,000 (Figure 37). In comparison, the average US household lived in a neigh-

borhood where 18 percent of residents had incomes below \$20,000 and 24 percent had incomes above \$100,000.

A recent JCHS working paper provides evidence of the detrimental effects of residential segregation on the educational attainment, employment, socioeconomic mobility, and health of low-income renters. Households living in areas of concentrated poverty are particularly vulnerable. Such segregation not only limits economic potential for individuals and society as a whole, but also reduces social cohesion and intergroup trust, increases prejudice, and erodes democratic participation.

Reversing this trend is difficult and would require changes in both private markets and the location of assisted units. A key step would be to increase the supply of low-cost rental units in neighborhoods of all types, including construction of assisted units in a broader range of neighborhoods. Many states have in fact begun to incentivize LIHTC applicants to propose projects that do just that. In addition, the recently finalized Affirmatively Furthering Fair Housing (AFFH) rule establishes a planning process for local HUD grantees to assess current residential patterns and to take meaningful actions that foster inclusion.

Reforms to the housing choice voucher program would also help to increase the options available to low-income households. Outreach to landlords, protections against source-of-income discrimination, and mobility counseling would all serve to expand the range of properties and neighborhoods available to voucher holders. For example, the results of Baltimore's Special Mobility Housing Choice Voucher program demonstrate that mobility counseling can help to increase neighborhood choice among voucher holders. HUD's Small Area Fair Market Rent demonstration is also testing whether adopting neighborhood-level fair market rents (FMRs) would induce moves into a broader set of neighborhoods. HUD currently sets a single fair market rent for each metropolitan area, often forcing voucher holders to choose from units clustered in a few neighborhoods where rents fall below the FMR. While the interim report on the demonstration found evidence that neighborhood-level FMRs broadened the location choices of voucher recipients in some areas, the results were less encouraging in other areas, and HUD has suspended expansion of the demonstration to additional metros.

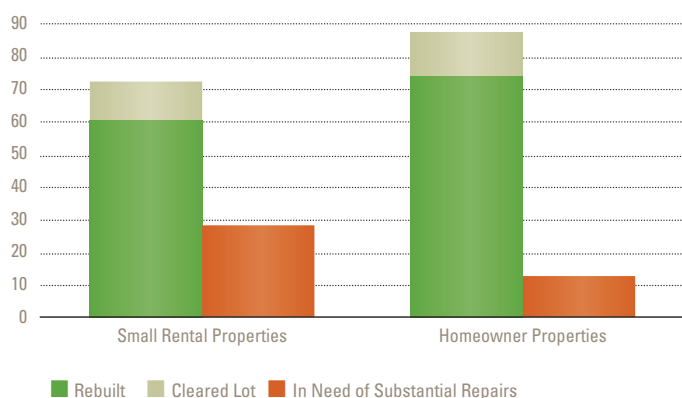
REBUILDING AFTER DISASTERS

The damage wrought by natural disasters in 2017 will pose substantial rebuilding challenges for years to come. Much of the housing stock lost in the recent hurricanes, for example, was renter-occupied. Indeed, the latest American Community Survey indicates that rental units accounted for 41 percent of all housing in the Houston metro area, 36 percent in Florida, and 32 percent in Puerto Rico.

FIGURE 38

Rental Property Owners Are Slower than Homeowners to Rebuild Following Disasters

Condition of Hurricane-Damaged Properties in Louisiana and Mississippi After Five Years (Percent)



Notes: Sample is representative of residential properties that experienced major or severe hurricane damage and were located on significantly affected blocks. Rebuilt structures are residences that do not show substantial repair needs. Cleared lots contain an empty lot or a foundation with no standing structure. Source: Spader, 2015.

One lesson from prior disasters is that rental housing is restored much more slowly than owner-occupied homes. This is likely due to several factors. While homeowners directly control the rebuilding of their properties, renters must depend on their landlords' decisions. Owners of just a few rental properties may be especially slow to invest in rebuilding if their own homes are also damaged. In addition, policymakers have historically been more generous in assisting homeowners than rental property owners who lack adequate insurance coverage.

According to a 2010 HUD survey, only 60 percent of rental properties that sustained major damage in Hurricanes Katrina and Rita in 2005 had been rebuilt by 2010, compared with 74 percent of homeowner properties with similar levels of damage (**Figure 38**). Instead, 12 percent of former rental properties were cleared lots and 28 percent contained residential structures with substantial remaining damage, including 13 percent that did not meet the Census criteria for habitability. While there are legitimate concerns about bailing out under-insured rental property investors, a secondary effect of limited rebuilding in these disaster-stricken areas has been to reduce the housing available to renters.

The rebuilding of public housing, project-based units, and units available to voucher recipients presents other challenges. Following Hurricane Katrina, Congress made appropriations for disaster recovery that included supplemental allocations of both low-income housing tax credits and housing choice vouchers. While providing much-needed resources, these allocations require attention to ensure that LIHTC units are completed quickly and that the supply of units available to voucher holders is sufficient. After the 2017 hurricanes, rebuilding of units available to voucher holders may be particularly urgent, given that these rentals account for 62 percent of the HUD-assisted stock in Houston and 64 percent in Tampa.

A recent report from the Community Preservation Corporation documents other lessons from the rebuilding effort following Hurricane Sandy and recommends multiple potential improvements to streamline the application process, speed delivery of rebuilding assistance, and allow federal agencies to better prepare for future events. Given that it is just a matter of time before the next natural disaster occurs, taking these steps in advance will help to protect renter households in the wake of future storms.

THE OUTLOOK

With the economic expansion now in its ninth year, the immediate challenges facing America's rental markets depend on the outlook for the broader economy and the policy decisions of Congress and the Administration. On the one hand, continued economic growth would give a further lift to household incomes, but could also put additional pressure on rents. On the other, though, a recession would put more renters at risk of unemployment and reduced income.

Meanwhile, proposals for tax reform and changes to the LIHTC program make future funding for affordable housing production and preservation uncertain. While its prospects are unclear, a bipartisan bill in the Senate proposes to expand support for the LIHTC program and to change program rules to provide additional flexibility to states and improve the program's ability to serve extremely low-income households. In contrast, the tax reform proposals under consideration could substantially reduce production of LIHTC units by eliminating the important 4 percent credit.

Regardless of the short-term outlook, however, the growing gap between the number of income-eligible households and the availability of rental assistance is a long-term challenge. In some markets, demand-side subsidies—such as expanded access to housing choice vouchers—may be an effective response. However, in many metros across the country, increases in supply have not kept pace with population growth, putting even greater pressure on lowest-income households. In these markets, responding to rapid population growth requires both expansion of the overall rental supply and additional support for new construction and preservation of assisted units.

While the federal government remains the primary source of rental assistance, states and localities must continue to take steps to provide increased support for affordable housing through bond issues, trust funds, inclusionary zoning, and other approaches. Since states and localities also define the regulatory context for market-rate housing, they must also lead efforts to ensure that additions to the rental housing stock keep pace with population growth and to mitigate losses of low-cost units in the private market.



7 | APPENDIX TABLES

Table A-1 Characteristics of Growth in Renter Households: 2006–2016

Table A-2 Characteristics of the Rental Housing Stock: 2016

Additional appendix tables, maps, and interactive tools are available at
www.jchs.harvard.edu/americas-rental-housing

TABLE A-1

Characteristics of Growth in Renter Households: 2006–2016

Renter Households (Thousands)

	2006	2016	Change 2006–2016	
			Number	Percent
All Renter Households				
Total	36,054	45,915	9,861	27.4%
Household Income				
Less than \$15,000	7,631	8,914	1,283	16.8%
\$15–24,999	5,797	6,637	840	14.5%
\$25–34,999	4,679	5,772	1,093	23.4%
\$35–49,999	5,997	6,715	718	12.0%
\$50–74,999	5,835	7,509	1,674	28.7%
\$75–99,999	2,857	4,243	1,386	48.5%
\$100,000 or More	3,258	6,125	2,868	88.0%
Race/Ethnicity				
White	20,027	23,647	3,620	18.1%
Black	7,064	9,118	2,055	29.1%
Hispanic	6,416	9,093	2,677	41.7%
Asian/Other	2,548	4,057	1,510	59.3%
Age of Householder				
Under 25	5,216	5,059	(157)	-3.0%
25–29	5,445	6,566	1,121	20.6%
30–34	4,384	5,795	1,411	32.2%
35–39	3,714	4,829	1,115	30.0%
40–44	3,512	4,108	596	17.0%
45–49	3,077	3,711	634	20.6%
50–54	2,563	3,437	874	34.1%
55–59	1,976	3,139	1,163	58.8%
60–64	1,473	2,716	1,243	84.3%
65–69	1,200	2,154	954	79.5%
70–74	933	1,326	393	42.1%
75 and Over	2,562	3,076	514	20.1%
Houshold Type				
Married Without Children	3,793	5,424	1,631	43.0%
Married With Children	5,723	6,754	1,031	18.0%
Single Parent (No Other Adults)	4,154	4,241	87	2.1%
Other Family with Children	3,131	4,153	1,022	32.7%
Single Person	13,513	17,144	3,632	26.9%
Unmarried Partners Without Children	1,537	2,477	941	61.2%
Other Family/Non-Family Without Children	4,204	5,722	1,518	36.1%

Note: Incomes are in constant 2015 dollars adjusted for inflation using the CPI–U for All Items.

Source: JCHS tabulations of US Census Bureau, Current Population Surveys.

TABLE A-2

Characteristics of the Rental Housing Stock: 2016

Rental Units (Thousands)

	Single-Family		Multifamily						Mobile Home/ Other	Total
	Detached	Attached	2 Units	3–4 Units	5–9 Units	10–19 Units	20–49 Units	50 Units or More		
Census Region										
Northeast	1,119	623	1,240	1,244	939	756	972	1,615	117	8,626
Midwest	2,794	550	785	998	1,176	965	777	991	267	9,304
South	5,690	1,006	961	1,409	2,023	2,228	1,239	1,720	1,341	17,617
West	3,537	763	527	1,185	1,322	1,244	1,086	1,531	411	11,606
Metro Area Status										
Principal City	4,294	1,280	1,519	2,270	2,551	2,516	2,210	3,508	234	20,383
Other City	5,908	1,336	1,295	1,742	2,058	1,970	1,257	1,720	1,051	18,338
Non-Metro	2,265	174	440	499	427	255	219	167	671	5,117
Year Built										
Pre-1940	2,029	429	992	954	622	387	552	576	23	6,564
1940–1959	3,208	447	643	665	530	436	439	568	46	6,983
1960–1979	3,526	702	882	1,410	1,740	1,625	1,151	1,641	612	13,290
1980–1999	2,626	803	661	1,281	1,779	1,808	1,128	1,517	1,089	12,692
2000 or Later	1,752	560	335	526	789	937	804	1,556	365	7,623
Monthly Cost										
Less than \$650	1,474	290	772	1,051	1,100	822	774	1,309	724	8,316
\$650–849	1,782	337	680	963	1,039	925	586	588	485	7,386
\$850–1,099	2,335	573	690	1	1,206	1,217	807	819	311	8,958
\$1,100–1,499	2,528	673	549	779	955	1,020	799	965	111	8,379
\$1,500 or More	2,887	793	472	637	654	701	697	1,643	31	8,515
No Cash Rent	1,403	107	101	64	58	48	53	75	294	2,203
Vacant	732	168	248	344	448	459	358	459	180	3,395
Number of Bedrooms										
0	88	31	139	258	348	404	496	939	35	2,737
1	672	265	685	1,384	1,788	1,945	1,800	2,830	154	11,523
2	3,266	1,295	1,784	2,393	2,691	2,377	1,496	1,747	906	17,956
3	6,449	1,122	764	701	564	408	235	281	928	11,452
4	2,182	196	118	86	60	51	33	39	97	2,862
5 or More	484	33	23	14	10	8	14	22	16	623

Notes: Data include vacant units that are for rent and rented but not yet occupied. Metro area status classifications include only occupied rental units due to data constraints.

Source: JCHS tabulations of US Census Bureau, 2016 American Community Survey 1-Year Estimates.

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