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Responsibly Increasing Affordable Housing Supply & Access to Credit

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SINGLE-FAMILY ANALYTICS

Our November 18 update to Desktop Underwriter® (DU®) makes two changes to our underwriting policies in support of our mission to facilitate equitable and sustainable access to homeownership and quality, affordable rental housing across America:

- First, we are increasing the maximum allowable Loan-to-Value (LTV), Combined LTV (CLTV), and Home-equity combined LTV (HCLTV) ratios for 2-4-unit principal residence properties. These changes aim to support revitalization of the "missing middle" housing sector, enable better access to mortgage finance for historically underserved borrowers, and help provide affordable rental housing for low-and-moderate income renters.
- Second, we are removing the Number of Borrowers on a mortgage application as a risk factor in DU's risk assessment.

In this whitepaper, we share insights for these changes.

Background on 2-4 Unit Properties

Table 1 illustrates the change in maximum LTV, CLTV, and HCLTV ratios for Desktop Underwriter 2-to-4-unit principal residence properties, including HomeStyle® Renovation. This expansion does not apply to cash-out refinancing, high-balance loans, or to manual underwriting.

Table 1: Maximum LTV Ratio Eligibility Changes for Multi-Unit Properties

	Fannie Mae		**Freddie Mac**
	Prior to November 18, 2023	**On and After November 18, 2023**	**Current**
Standard Eligibility	2-unit: 85% 3-4 unit: 75%	**2-4 unit: 95%***	2-unit: 85% 3-4 unit: 80%
Special Programs	*HomeReady®/HomeStyle®:* 2-unit: 85% 3-4 unit: 75%	*HomeReady®/HomeStyle®:* **2-4 unit: 95%***	*HomePossible®:* 2-4 unit: 95%* 3-4 unit ARMs 75%
	HFA Preferred™: 2-4 unit: 95%	*HFA Preferred™:* 2-4 unit: 95%	

**Except High Balance Loans*

Stereotypical rental apartments are thought of as being in a large high-rise property; however, approximately 7% of all homes in the US, and one out of six rental units, are part of a 2-4-unit building, also known as a duplex, triplex, or fourplex.[i] While such structures are technically small multifamily properties, government regulations place them within the purview of *single-family* mortgages – which is why eligibility is defined within Fannie Mae's Single-Family Selling Guide, and can be included in Fannie Mae Single-Family Mortgage-Backed Securities (MBS).

As shown in Table 2, the Federal government regularly sets higher loan limits based on the number of units, both for loans delivered to the Government-Sponsored Enterprises (GSEs) as well as those backed by agencies such as the Federal Housing Administration (FHA). Our eligibility changes apply only to 2-4-unit loans up to the Standard GSE loan limits below.

Table 2: 2023 GSE and FHA Loan Limits by Number of Units

	Standard FHA*	Standard GSE*	FHA and GSE, High-Cost Areas
1-unit	$472,030	$726,200	$1,089,300
2-unit	$604,400	$929,850	$1,394,775
3-unit	$730,525	$1,123,900	$1,685,850
4-unit	$907,900	$1,396,800	$2,095,200

**Contiguous States, DC, and Puerto Rico*

Historically, the largest barrier for most families to obtain a GSE-backed mortgage on a 2-to-4-unit residence has been the larger down payment necessary to satisfy the maximum allowable LTV, CLTV, and HCLTV ratios. With these changes, someone planning to purchase a triplex, and then live in one unit while renting the other two, would only need a 5% down payment, rather than a 25% percent down payment under the previous maximum allowable LTV, CLTV, and HCLTV ratios. Changing eligibility for the purchase and refinance of these property types will substantially lower the down payment barriers that many borrowers face for DU underwritten loans subject to standard loan limits.

Demographics of 2-4 Unit Properties

Commonly found in older neighborhoods of large cities such as Chicago and Boston, these small rental properties are typically small business or family-owned operations, owned by one or two people, in contrast to larger apartment buildings that are usually owned by a partnership, corporation, or real estate investment trust (REIT).[ii] Living in and managing a multi-unit property has been a traditional wealth-building strategy for many minority and immigrant households, who may also rent out some units to extended family members or other persons with whom they have a relationship.[iii] The comparative income and demographics of 2-4-unit residents are shown in Table 3. Both owner-occupants and tenants of these properties are more likely to be Black or Hispanic/Latino than owners and renters in general. Table 4 illustrates that the median household income is also lower in both subgroups.

Table 3: Demographics of 2-4 Unit Properties

	Owners		Renters	
	2-4 Units	All	2-4 Units	All
Black or Hispanic/Latino	30.4%	20.0%	44.9%	41.3%
Hispanic or Latino*	16.6%	10.9%	23.5%	20.5%
Black, Non-Hispanic/Latino	13.8%	9.1%	21.4%	20.8%

*Any race
Source: 2021 American Housing Survey

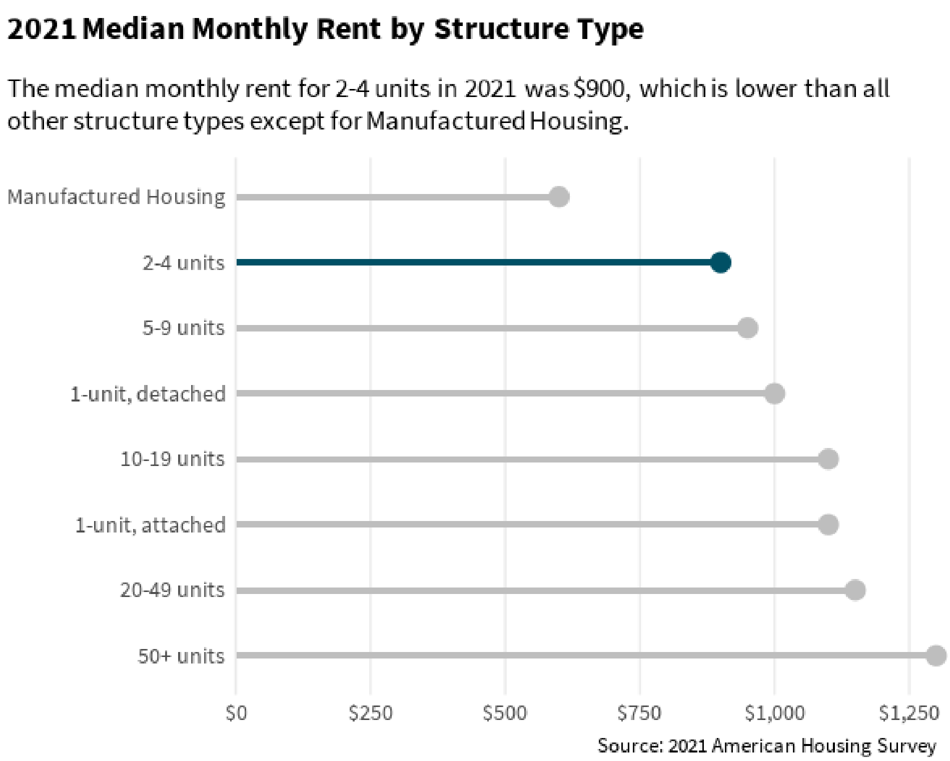
Table 4: Income of 2-4 Unit Properties

	Owners		**Renters**	
	2-4 Units	**All**	**2-4 Units**	**All**
Median Household Income	$72,800	$78,000	$38,000	$41,000

Source: 2021 American Housing Survey

We find that 2-4-unit buildings tend to provide more affordable rental housing than either single-family homes or larger apartment buildings. As shown in Figure 1, the median monthly rent in a 2-4-unit building in 2021 was $900, lower than all other types except for manufactured housing.

Figure 1



These 2-4-unit structures make up part of what policymakers are now calling the "missing middle" of US housing supply, a term that also encompasses small apartment buildings and accessory dwelling units (ADUs). Unlike mid- and high-rise apartments, the 2-4-unit, missing middle housing types are compatible in scale with single-family homes – and yet, zoning laws have prevented construction of these types of homes in most residential areas since the 1920s.[iv] Housing research from the past two decades has found that exclusionary zoning rules, like the strict covenants that preceded them, have promoted racial and economic segregation. Zoning and other regulatory barriers have also contributed to a broad shortage in US housing supply, resulting in higher prices and decreased affordability.[v,vi] Several state and local governments have recently been enacting regulatory reforms that would support the construction of missing middle housing types as part of efforts to alleviate the supply shortage.[vii]

Figure 2

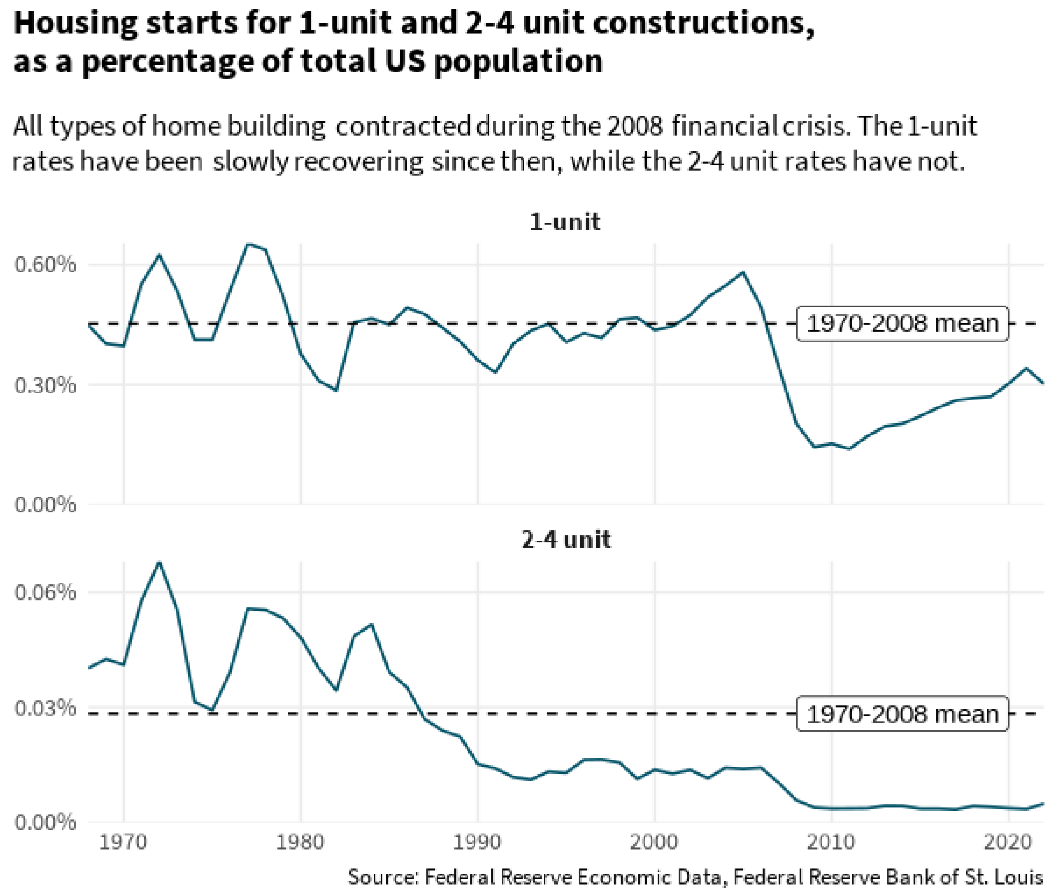


Figure 2 compares 1-unit and 2-4-unit annual housing starts over the past 50 years. During the 1970s, 2-4-unit residences were being constructed at a tenth of the rate of 1-units; this ratio then declined substantially in the late 1980s. All types of home building contracted during the 2008 financial crisis, but the 1-unit rates have been slowly recovering since then, while 2-4-unit construction has not. While much of the long-term decline in the 2-4-unit sector is likely due to zoning and other local restrictions, the latest reduction may be due in part to mortgage credit constraints, in the form of stricter down payment requirements imposed after 2008.

History on Maximum LTV Ratio Limits on 2-4 Unit Properties

*Table 5: Historical Standard DU LTV Ratio Limits for 1-4 Unit Properties**

	DU 5.0 (2002-07)	DU 7.0 (2007-08)	DU 7.1 (2008-09)	DU 8.0 (2009-12)	DU 9.0-11.0 (2012-13)
1-unit	95%	95%	95%	95%	95%
2-unit	90%	**95% ↑**	95%	**80% ↓**	**85% ↑**
3-4 unit	80%	80%	**75% ↓**	75%	75%

*Standard eligibility for fixed-rate loans on a principal residence, excluding cash-out refis; condos, co-ops or manufactured housing; interest-only; high-balance loans; subordinate financing

Table 5 shows how the maximum LTV ratio eligibility limits, for loans underwritten with DU, have evolved over time.[viii] The most significant changes took place in 2008-09, at which time both Fannie Mae and Freddie Mac lowered LTV ratio limits on a variety of loan types, including those on multi-unit properties. For example, down payment requirements on 2-unit properties increased from 5% to 20%. A 2016 Urban Institute study found that GSE eligibility changes contributed to a long-term reduction in 2-4-unit originations within the broader market.[ix] Looking at our own data, we find that the share of these properties among all Fannie Mae acquisitions has fallen from a 2003-07 average of 3.6% down to just 2.2% between 2009 and 2022, although we would note that private market participation in the US housing environment materially shifted as a result of the 2008 recession.

By contrast, FHA has continued to offer loans at 96.5% LTV ratio regardless of the number of units. But these loans only benefit a subset of the market: As shown in Table 2, the FHA loan limits for each unit type, outside of high-cost areas, are substantially lower than those for the GSEs. Total monthly payments on government loans will also be higher than those on conventional loans for many borrowers due to the way FHA mortgage insurance is priced. While a conventional loan above 80% LTV ratio would also require the borrower to pay for and maintain private mortgage insurance (PMI), unlike an FHA loan this PMI is cancelable under our Servicing Guide once certain conditions are met.

There are sound reasons for the GSEs to have tightened LTV ratio limits in the wake of the 2008 financial crisis. Placing fixed eligibility limits on mortgage LTV, CLTV, and HCLTV ratios is now recognized as an important and effective part of regulators' "macro-prudential" toolkit for controlling household leverage, home price swings, and risks to the financial system.[x] This is especially true for cash-out refinancing and for loans on investor-owned properties. About one-third of US mortgage defaults in 2006-08 can be attributed to homeowners having previously extracted equity, through a cash-out refinance or home equity loan, based on bubble-inflated appraisal values.[xi] And as the bubble in the 2000's progressed, an increasing share of purchases were from novice, speculative "house flipping" investors.[xii]

Establishing maximum allowable LTV, CLTV, and HCLTV ratios, then, involves a balance between the need to support housing market and business cycle stability and discourage speculation, while providing broad access to credit. A large down payment requirement will tend to have a greater impact on populations of first-time home buyers with less access to generational wealth. We know from research on the racial wealth gap that the average net worth of non-Hispanic/Latino white households in 2019 was nearly seven times that of Black households, and five times that of Hispanic/Latino households,[xiii] and these gaps likely deepened during the COVID pandemic.[xiv]

Changes to Maximum LTV Ratio Eligibility on 2-4 Unit Properties

The eligibility change shown in Table 1 is limited to non-cash-out, principal residence transactions and is aligned with our Charter Act responsibility to provide ongoing assistance to the secondary market for residential mortgages, including activities relating to mortgages on housing for low- and moderate-income families. Our research shows that owner-occupants of 2-to-4-unit residences exhibit standard credit risk concerns, but do not pose systemic risk to market stability unlike cash-out refinance or investors.

We have carefully considered the potential credit risks and business impacts of this expansion. We arrived at this decision based on a comprehensive analysis of application data disclosed pursuant to the Consumer Financial Protection Bureau's Home Mortgage Disclosure Act (HMDA) and various sources of loan performance data beyond our own data. These data allow us to estimate not only the impact of making these changes on potential mortgage origination volume, but also on various credit risk and financial metrics such as capital costs or delinquency rates. Certainly, mortgages on multi-unit properties *do* carry a higher credit risk than those on 1-unit homes, even when controlling for other risk factors. In their 2016 study, the Urban Institute found that GSE loans on 2-4-unit structures had a 30% higher risk of default compared to

1-unit properties, with owner-occupants posing less risk than investors. This risk difference is also recognized in the GSE capital requirements under the Enterprise Regulatory Capital Framework (ERCF), which impose a 40% risk premium on 2-4-unit mortgages.

The risk assessment within Desktop Underwriter also takes the number of units into account when evaluating the overall risk of the mortgage application. This means that, regardless of where the LTV ratio eligibility limits are set, a mortgage application on a multi-unit property will need stronger compensating factors than for a similar 1-unit property. Based on our assessment of both internal and external loan performance data, we find the risk assessment in DU's evaluation of loan performance is accurate on these higher LTV ratio transactions for 2-to-4-unit properties. Furthermore, multi-unit properties are more heavily concentrated in metropolitan areas that have seen slower home price appreciation in recent years, mitigating the potential for homeowner loss of equity in a housing market correction.[xv] Additionally, based on internal modeling using our historical data, we find that, on average, loans with multiple-units historically have a slower likelihood of refinance than 1-unit properties and therefore can be expected to, on average, have slower pre-payment speeds.

The 2016 Urban Institute report recommended that the GSEs increase the eligibility limits on owner-occupied 2-4-unit loans, in the interest of expanding credit to underserved populations, and because of the benefit to affordable rental housing. The last two administrations have expressed interest in addressing affordable housing supply challenges, including re-evaluating existing regulatory barriers that reduce density.[xvi,xvii] We hope that this eligibility update, along with other reforms, will support renewed construction and renovation investment for this important part of the nation's housing supply.

Changes to Number of Borrowers

For over two decades, DU's risk assessment has considered the Number of Borrowers as a risk factor given its historic predictiveness of a mortgage default. During that time, two or more borrowers was considered less risky than one sole borrower.

However, we are removing this attribute as a risk factor in the November 18, 2023 release. This is because we have advanced our risk assessment over the years, including a broader view of an applicant's credit profile, loan application information, and property value attributes. These enhancements decrease the relative predictiveness of the Number of Borrowers risk factor such that the impact to model performance without this attribute is minimal (less than a 2% relative decrease in our main model-performance metrics).

This change is consistent with FHFA's update to the capital framework in late 2020, where FHFA removed Number of Borrowers as a factor that could unduly restrict access to credit for sole borrowers.

Broadly speaking, we believe this change will positively affect access to mortgage credit for single-individual households and households with children headed by a single parent or guardian. For US households with children, the proportion with two parents has been decreasing – from about 85% of households in the late 1960's to about 70% of households in 2020. And today, women are by far the most common single head of households with children – approximately 70% of single head of households with children were maintained by a mother.[xviii]

Across all US households, the proportion of households that are a single individual has increased from 13.3% in the 1960's Census to 27.6% in the 2020 Census. Similar to the trends above in single-parent households, this trend is not even across the US. From a geographic perspective, the counties with the highest percentage of single-person households are in the Midwest and the Mississippi River Delta area and other rural areas throughout the US. The percentage of Black households with a single person living alone was 36.3% in 2022 (58% of whom were single women), for white (non-Hispanic/Latino) households this was 30% (55% of whom were single women). Asian and Hispanic/Latino households with a single person living alone were rarer at about 20% (and split more evenly by gender at about 50% being single women or single men). Additionally, the average age of households consisting of a single member was 57.3 years, versus 55 for two members, and 44.5 for households of three or more.[xix]

By changing the risk assessment in Desktop Underwriter to no longer consider Number of Borrowers, but instead rely on other predictive factors about the potential borrower(s) creditworthiness and the financial aspects of the mortgage application, we can increase access to credit for these households, which may serve as a catalyst for building wealth or aging in place.

Fannie Mae analyzes a host of multi-variate risk measures internally before and after these changes on a consistent set of loans to evaluate the likely credit risk implications. One of these risk measures is the FHFA ERCF. When evaluating the decision to remove the Number of Borrowers from DU's risk assessment, we estimate that it would have less than a 1% impact on the overall ERCF capital expectation. Another factor we consider is the likelihood of a serious mortgage delinquency within a short period after loan purchase. Our analysis indicates this change would have an insignificant impact on these early payment serious delinquency events. Similarly, based on internal modeling using either our internal historical data or our public dataset, we do not find there to be a meaningful and consistent relationship between prepayment speeds and the Number of Borrowers.

Closing Thoughts

Fannie Mae has focused on improving the risk assessment in DU over DU's 25-year history. The November 18 updates are the next step in that evolution, recognizing the significant advancements made in data acquisition, the design and factors considered within the risk assessment, and the availability of new public datasets in the past few years. We believe the updates that we are making help to improve fair assessment of potential borrowers that provides for a more equitable and sustainable access to homeownership, while continuing to appropriately manage credit performance of these loans.

This article contains forward-looking statements about the expected impact of the upcoming changes to our underwriting policies on our business, the credit risk profile of our single-family acquisitions, our capital requirements, and other matters. These forward-looking statements are based on the authors' current expectations and are subject to significant uncertainties and changes in circumstances. Future results may different materially from those reflected in these forward-looking statements due to a variety of factors, including those discussed in "Forward-Looking Statements" and "Risk Factors" in our annual report on Form 10-K for the year ended December 31, 2022, and our quarterly report on Form 10-Q for the quarter ended June 30, 2023.

Endnotes

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[ii] U.S. Census 2018 Rental Housing Finance Survey

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[xviii] Source: US Census Bureau, Current Population Survey, 1968 to 2020 Annual Social and Economic Supplement.
[xix] Source: US Census Bureau, Current Population Survey, 2022 Annual Social and Economic Supplement.

