$R \mid C \mid G$

Homeownership in Minnesota:
Quantifying the Need for Down Payment
Assistance

January 2021

by: Kenneth T. Rosen David Bank Dan Van Dyke Bjorn Yang-Vaernet Suzanne Kim

Rosen Consulting Group 1995 University Avenue Suite 550 Berkeley, CA 94704 510 549-4510 510 849-1209 fax

www.rosenconsulting.com

Table of Contents

Homeownership in Minnesota: Quantifying the Need for Down Payment Assistance	
Executive Summary	3
Contextualizing the Homeownership Rate in Minnesota	5
Minnesota Homeownership Trends	7
Household Finances and Credit Market Conditions	14
Quantifying the Potential for Down Payment Assistance in Minnesota	15
Recommendations	21

Homeownership in Minnesota: Quantifying the Need for Down Payment Assistance

Executive Summary

Although there are numerous roadblocks in the path to homeownership, especially for low and moderate income (LMI) households and communities of color, the lack of capital for down payment is arguably the most significant financial barrier to homeownership. One common way to overcome this barrier is assistance from family and friends. However, most LMI households and first-generation homebuyers, do not have access to these sources of capital. The objective of down payment assistance (DPA) is to use financial products, ranging form forgivable grants to loans, to facilitate homeownership for households who have the sufficient income to support a mortgage, but not the upfront capital for the down payment.

Recent research demonstrated that, nationwide, 15.2 million potential homeowners could purchase the median-priced home in their area with DPA of \$10,500 or less, while 18.9 million could purchase with DPA of up to \$25,000. Research specific to DPA potential in Minnesota, however, is much more limited. As such, the primary goal of this paper is to establish reasonable estimates for the size and scale of the potential demand for DPA in Minnesota.

State and Regional Results

RCG developed a county-level affordability metric to examine the number of households in each Minnesota county with sufficient income to afford the monthly housing costs of owning a home in their local county (based on estimates of monthly mortgage payments, property insurance and property taxes). RCG then leveraged prior national research on DPA potential to establish a broad estimate of potential demand for DPA by level of assistance across the state geographically and by race/ethnicity.

- After accounting for households already able to afford to purchase without need of assistance, RCG estimated that a total of 216,700 renter households in Minnesota, or 35%, could potentially purchase a home with access to down payment assistance, based on the median home value in 2018.
- Of this total, RCG estimated that more than half could purchase the home with DPA of \$10,500 or less.
- At the 25th percentile home values in each county, RCG estimated that a total 297,300 renter households in the state could afford to purchase with varying levels of assistance, representing 48% of renter households in the state as of 2018, of which more than two-thirds could purchase the home with DPA of \$10,500 or less.

 In the Twin Cities, RCG estimated that nearly 131,000 and 184,000 renter households could potentially purchase with some degree of assistance, accounting for more than 60% of total statewide potential in both scenarios.

Down Payment Assistance Potential by Race

- The homeownership rate among non-White households in Minnesota is well below that for White households, and far below the national average. In particular, the homeownership rate for Black households in Minnesota was 25.3% as of 2019 vs. 42.0% nationwide. Additionally, the spread between Black and White households was 51.7 percentage points vs. 30.2 percentage points nationally.
- The racial homeownership gap improved minimally since 2010, reflecting a modest uptick in homeownership for Hispanic and Asian households since 2017, but largely stagnant Black homeownership.
- While in absolute terms the largest number of households potentially benefiting from DPA are White households, the potential effect of DPA programs to increase homeownership for non-white households, and in particular, for Black households, is significant, making widespread access to DPA a major potential step in the right direction.
- Consistent with the low end of RCG's range (50th percentile), in order to increase the Black homeownership rate in Minnesota by 10 percentage points, approximately 11,600 Black renter households would need to purchase homes.
- Statewide, approximately 19,400 Black households would need to transition to homeownership in order to match the national rate, and 24,800 new Black homeowners would be needed to narrow the Minnesota racial homeownership gap sufficiently to fall in line with the much lower, albeit still wide, national gap.

Although the DPA analysis in this report is based on data prior to the pandemic, it is critical to recognize that the uneven economic impacts of the pandemic have further amplified the hurdles to homeownership for LMI households and communities of color. Indeed, with job and income losses disproportionately concentrated among lower-income households, and a sharp rise in home prices magnifying affordability challenges, the need for programs such as DPA to help level the playing field has only become that much more important to efforts to promote greater and more equitable access to homeownership in Minnesota.

Minnesota Downpayment Assistance Summary (2018)					
	50th Perc	50th Percentile Home		entile Home	
Renter Households	616,500		616,500		
Can Afford Without Assistance	32,500	5%	66,500	11%	
Unable to Purchase	368,600	60%	254,500	41%	
Can Afford with Assistance					
\$3,500 or less	37,900	6%	137,700	22%	
\$3,501 - \$10,500	73,800	12%	63,500	10%	
\$10,501 - \$25,000	11,800	2%	15,900	3%	
\$25,001 - \$50,000	16,000	3%	20,600	3%	
\$50,001 - \$75,000	16,000	3%	21,600	4%	
\$75,001 - \$100,000	14,600	2%	13,300	2%	
\$100,000 or more	46,600	8%	24,700	4%	
Total	216,700	35%	297,300	48%	
Note: Based on the 50th and 25th percentile median valued home	e in each county				
Sources: Census, Joint Center for Housing Studies of Harvard Uni	versity, RCG				

		50th Percen	itile	25th Percen	tile
Race	Renter Households	Low	High	Low	High
White, Non-Hispanic	435,400	153,000	183,800	209,900	249,700
Black or African-American	86,400	11,300	30,400	17,100	41,700
Asian	32,800	7,200	11,500	9,800	15,800
Hispanic or Latino	43,400	9,300	15,200	13,600	20,900
Non-White	188,800	32,900	66,400	47,600	91,100
Total (Races do not sum)	616,500				

	Renter				oan Ano	rd with Assi	stance	
Hou	useholds	Can Afford Without Assistance	Unable to Purchase	\$10,500 or less	\$10,501 - \$50,000	\$50,001 - \$100,000	\$100,000 or more	Total
Twin Cities	397,200	5%	62%	16%	4%	4%	9%	130,800
Duluth	28,500	6%	56%	23%	7%	6%	4%	10,900
St. Cloud	23,600	7%	56%	23%	5%	7%	4%	9,100
Rochester	21,000	6%	59%	21%	5%	6%	3%	7,500
Mankato	13,200	5%	59%	18%	5%	5%	9%	4,700
Note: Based on the 50th percen	ntile median value	d home in each county						

Contextualizing the Homeownership Rate in Minnesota

Increasing homeownership among households in Minnesota is an important policy objective for a wide range of reasons, most notably because of the financial, social and psychological benefits that homeownership may convey, which include¹: 1) Higher wealth accumulation (e.g. increase in home equity can be leveraged to pay for children's college education²; 2) Greater positive outcomes for children (e.g. children remain in school longer)³; 3) Increased social/local neighborhood capital (e.g. homeowners are incentivized to maintain or improve local communities)⁴; and 4) Improved psychological and physical health (e.g. homeowners gain a sense of accomplishment via greater control over living environment).⁵

At a high level, the homeownership landscape in Minnesota appears encouraging. As of 2019, the homeownership rate in Minnesota was 71.9%, well above the 64.1% reported by the entire U.S., according to the Census. After further investigation, however, three potentially vexing themes emerge. First, since peaking in 2002, the Minnesotan homeownership rate, while markedly higher than that for the U.S., has been generally trending downwards. Second, the homeownership rate is uneven across major sociodemographic characteristics—in general, those with higher incomes, those with higher educational attainment and older households tend to have higher homeownership rates. Notably, the spread in homeownership rates between low- and high-income households and between low and high educational attainment households is greater than that for the U.S. while the spread in homeownership rates between younger and older households is less than that for the U.S. Third, homeownership among non-White households in Minnesota is well below that for White households. In 2019, the Minnesota non-White homeownership rate was 43.6%, which was 33.4 percentage points lower than the 76.9% homeownership rate for White households. This spread between White and non-White household homeownership in Minnesota was significantly greater than the gap of 24.1 percentage points for the U.S. and represented the fourth largest disparity among U.S. states.

What accounts for these developments? A number of roadblocks persist in the path to homeownership, especially for low and moderate income (LMI) and non-White households. Beyond language barriers, lack of financial literacy, lack of economic opportunity and racism, financial obstacles—namely a limited supply of affordable housing, impeded access to adequate credit and, most notably for purposes for this paper, lack of sufficient down payment capital—impede growth in homeownership levels.

Roadblock 1: Limited Supply of Affordable Housing

Limited supply of affordable housing poses as a major hindrance to homeownership. Using the debt-to-income ratio ("DTI") as a proxy for affordability and holding income constant, higher home prices generally correspond to higher DTI ratios and, therefore, reduced affordability. Nationally, during the past years, home price appreciation has outpaced income growth—specifically, affordability decreased by 530 points during the period from 2012 to 2018.6 While low interest rates have somewhat dampened the potential for an even greater rise in DTI ratios, interest rates are already at historical lows and are likely to increase in the coming years as the economy recovers from the effects of the pandemic. Nonetheless, the primary driver for home price appreciation is demand outpacing supply. The long-term average for annual owner-occupied, single family and single family plus multifamily home starts is 1.2 million and 1.7 million, respectively. While annual starts accelerated since the steep declines, post-Global Financial Crisis (GFC), the most recent annual levels were still 13.6% and 10.1% below the long-term average, respectively, and significantly below the pre-GFC annual rate. However, household formation, a proxy for housing demand, rebounded much more rapidly following the GFC and continued to grow annually. Significantly, this gap between supply and demand is particularly acute in the affordable housing segment—in Minnesota, an estimate of more than 111,000 low-income households could not find affordable housing as of 2017.7

To address the shortfall in affordable housing supply, public and private efforts have targeted increasing the supply of substitutes, albeit largely in the form of rental units, which do not convey the same wealth accumulation and other benefits that homeownership could deliver. Moreover, despite these efforts, as of 2018, it remained more affordable to own a home with a mortgage than renting in Minnesota. Other efforts, such as community land trusts and regulatory price caps, have focused on direct or indirect housing price limits to manage the supply of affordable housing units.

Roadblock 2: Access to Adequate Credit

households with incomes greater than the median household income are homeowners. Of significance, the median income for non-White households is well below that for White households—the median household income for Black and Hispanic/Latino households in the U.S. was 38.8% and 22.3%, respectively, below that for White households. Correspondingly, the U.S. homeownership rate for non-White households, which was 48.0%, meaningfully underperforms the 72.1% for White households.

Although there is a great deal of additional work to be done, existing legislation, such as the Community Reinvestment Act, explicitly attempts to improve access to credit and mortgages, especially for LMI communities and non-White communities. ¹² Government-sponsored enterprises (GSEs), nonprofits and other impact-focused lending institutions also offer targeted financial products that accommodate higher DTI ratios, among other provisions, to facilitate access to adequate credit. Other efforts, such as seeking to raise minimum wages to living wages and increasing access to educational opportunities, can indirectly address the credit accessibility issue by focusing on increasing income levels for non-White and LMI households.

Roadblock 3: Lack of Sufficient Down Payment Capital

Closely related to the credit accessibility issue and the affordable supply issues is the shortage of savings or capital sources for the down payment. The lack of capital for down payment is arguably the most significant financial barrier to homeownership. ¹³ Note that part of this barrier is attributable to perception—39% of renters believe that "more than 20 percent is needed for a down payment" when, in fact, the national loan-to-value ("LTV") ratio was around 95% as of 2017. ¹⁴ Nonetheless, an estimated 83% of 51.2 million potential homeowners across the U.S. are unable to purchase a median-priced home in their locality due to insufficient savings—51% of potential homeowners hold assets between \$1 and \$5,000, and another 29% of potential homeowners hold no assets. ¹⁵ Note that in 2016, an estimated 70% of homebuyers used savings, inheritance, retirement accounts and other assets to fund down payments. ¹⁶

One common way to overcome this financial barrier involves assistance from family and friends—in 2016, nearly 25% of homebuyers used "a gift or loan" from family and friends.¹⁷ Many households, however, especially LMI households and prospective first-generation homebuyers, do not have access to these sources of capital. Another group of strategies to overcome this financial barrier involves increasing the LTV threshold. Since 2006, LTV has increased from 80% to 95% in 2017. ¹⁸ GSEs like Freddie Mac and agencies like the Federal Housing Administration ("FHA") and the U.S. Department of Veteran Affairs ("VA") have programs allowing for LTVs as high as 96.5% or greater.

A third strategy, which is the focus of this paper, is via Down Payment Assistance (DPA) programs, which provide a range of financial products, from forgivable grants to loans, that are provided to households, which, other than lacking access to upfront capital for a down payment, could afford to purchase a home. Nationally, with down payment assistance of \$10,500 or less, an estimated 15.2 million, or nearly 30%, of potential homeowners could purchase a medianpriced home. By increasing down payment assistance to \$25,000, this number could grow to an estimated 18.9 million, or nearly 37%, of potential homeowners. 19 According to the Urban Institute, there were 2,144 DPA programs available in the U.S. as of 2017, including a number of existing programs in Minnesota. 20 However, while there is guite a bit of research on the national potential for DPA programs, there is a dearth of research focusing on Minnesota. At a time when the overall homeownership rate in Minnesota is largely trending downwards, and the gap in homeownership rates among different socioeconomic classes is widening, this paper aims to provide critical information on the potential demand for DPA programs and to assess the potential scale of the impact on increasing access to homeownership among Minnesota households.

Minnesota Homeownership Trends

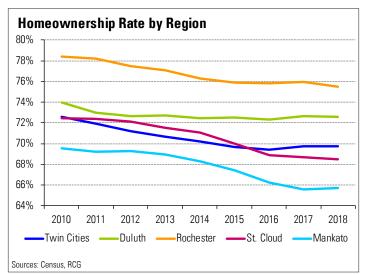
Homeownership by Geography

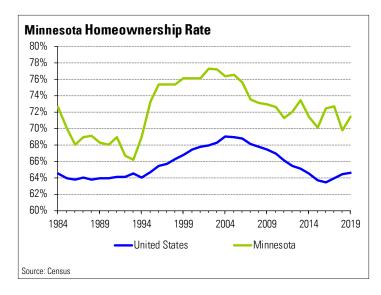
The statewide homeownership rate among households in Minnesota was 71.9% as of 2019, well above the 64.1% reported for the U.S. After the GFC, U.S. and Minnesota homeownership fell dramatically and has yet to return to pre-GFC levels and the long-term average.

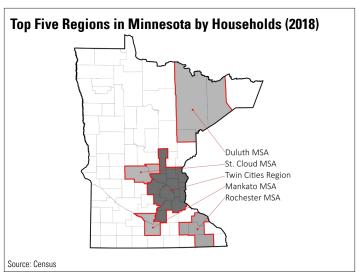
As of 2018, the most recent data available for all counties statewide, 73.0% of Minnesotan homeowners were concentrated in five regions of the state. These five regions, which comprised nearly 75% of all households in the state, are as follows:

- Twin Cities region (encompassing 13 counties, including 7 counties under the jurisdiction of the Metropolitan Council—Hennepin, Ramsey, Dakota, Anoka, Washington, Scott and Carver counties—and 6 MN surrounding counties—Wright, Sherburne, Chisago, Isanti, Le Sueur and Mille Lacs)—60.5% of total MN households;
- **Duluth MSA** (encompassing St. Louis, Carlton and Lake counties)—4.8%;
- Rochester MSA (encompassing Olmsted, Wabasha, Fillmore and Dodge counties)—4.0%;
- **St. Cloud MSA** (encompassing Benton and Stearns counties)—3.5%; and
- Mankato-North Mankato MSA (encompassing Blue Earth and Nicollet counties)—1.8%.

As of 2018, the homeownership rates for the Twin Cities, St. Cloud and Mankato of 69.7%, 68.5% and 65.7%, respectively, were all below the Minnesota average. The homeownership rate for Duluth and Rochester, at 72.6% and 75.5%, respectively, were above the Minnesota average. Note that homeownership across all five regions has yet to recover to pre-GFC levels. St. Cloud and Mankato had the largest declines since 2010, while Duluth had the smallest decline.

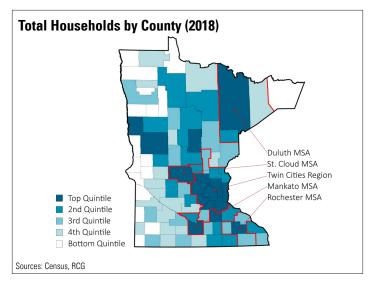


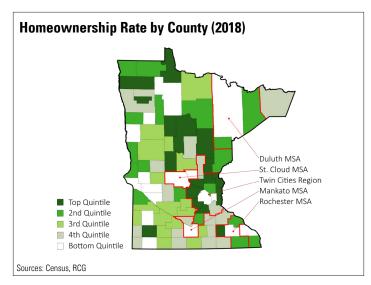




Drilling down to the county level, more than 64% of Minnesotan households are located in the ten most densely populated counties, seven of which are within the Twin Cities region. Less than 1% of Minnesotan households are located in the ten most sparsely populated counties. The nearby map shows household levels, with the darkest color representing the counties with the highest levels of households.

Among the 87 counties in Minnesota, the range of homeownership rates among the top ten counties varies from 85.9% to 81.9%, and four are within the Twin Cities region. Among the bottom ten counties, the range of homeownership rates varies from 59.3% to 69.0%, and two are within the Twin Cities region. Note that homeownership rates vary significantly among the group of counties with the largest number of households, and especially within regions. In fact, the Twin Cities region is home to both the highest and lowest homeownership rate counties in the state.

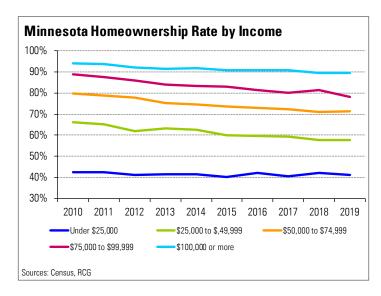




Homeownership by Income

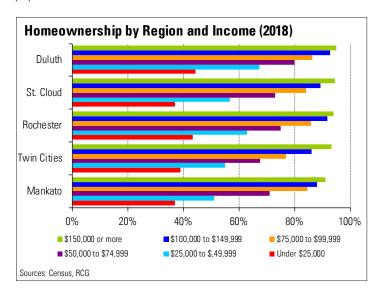
In 2019, the median household income in Minnesota was \$74,593, about 13.5% greater than that for the nation, a factor that largely accounts for the higher overall homeownership rate in the state. However, like the U.S., the homeownership rate in Minnesota varies considerably with income level—the higher the income, the higher the homeownership rate. On an aggregated basis, the homeownership rate for Minnesota households earning less than the median household income was 59.2%, compared with 80.9% for those earning above the median. These numbers were higher than the national rates, which were 55.3% for households earning less than the median income and 71.4% for those earning greater than the median.

Statewide, 41.3% of households with annual incomes of \$25,000 or less and 57.6% of households with incomes between \$25,000 and \$49,999 were homeowners, compared with 92.9% of households with annual incomes of \$150,000 or greater. In every income



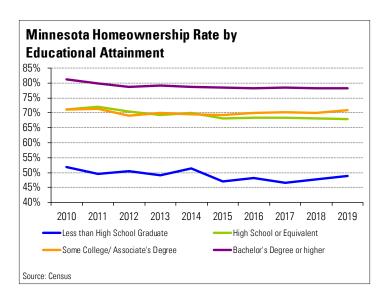
Homeownership by Income - United States and Minnesota (2019)						
	Minnesota	United States	Gap (MN - U.S.)			
All Households						
Homeownership Rate	71.9%	64.1%	7.8%			
Median Income per Household	\$74,593	\$65,712				
By Income Level						
Under \$25,000	41.3%	40.5%	0.8%			
\$25,000 to \$49,999	57.6%	53.4%	4.2%			
\$50,000 to \$74,999	71.3%	63.3%	8.0%			
\$75,000 to \$99,999	78.0%	71.2%	6.8%			
\$100,000 to \$149,999	86.3%	78.7%	7.6%			
\$150,000 or more	92.9%	85.7%	7.2%			
Spread Between Highest and Lowest Income Groups	51.6%	45.2%				
Sources: Census, RCG						

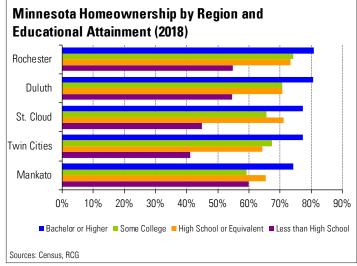
category, the MN homeownership rate outperformed those for the U.S. However, the homeownership gap between the highest earners and lower earners in Minnesota was notably larger than the U.S. (51.6% vs. 45.3%). The wide dispersion between lowest and highest earners was also evident when focusing on the five largest population centers.



Homeownership by Educational Attainment

Income is closely linked to educational attainment, and as such, more highly educated households tend to have higher homeownership rates. In 2019, less than half of Minnesotan households whose head of household did not have a high school diploma were homeowners. For those households whose head of household had a high school diploma or some college (including associate's degrees), the homeownership rate was 68.0% and 70.9%, respectively. Finally, the homeownership rate for those households whose head of household had attained at least a bachelor's degree was 78.3%. Other than the "less than high school" category, homeownership rates in Minnesota generally outperformed corresponding national categories. However, like income, the gap in homeownership rates between those in the highest and the lowest educational attainment categories was considerably higher than that for the U.S. Moreover, the wide dispersion in homeownership rates between the lowest and highest education attainment households was once again evident when focusing on the five largest population centers.





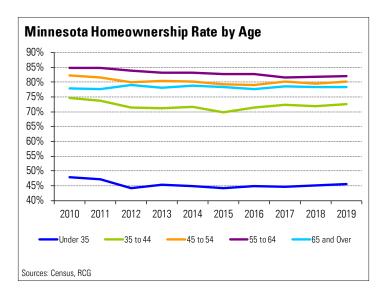
Homeownership by Education - United States and Minnesota (2019)						
	Minnesota	United States	Gap (MN - U.S.)			
All Households	71.9%	64.1%	7.8%			
By Educational Attainment						
Less than High School Diploma	49.0%	49.0%	0.0%			
High School or Equivalent	68.0%	60.7%	7.3%			
Some College Degree	70.9%	62.7%	8.1%			
Bachelor's Degree or Higher	78.3%	71.6%	6.7%			
Spread Between Highest and Lowest Education Groups	29.3%	22.6%				
Sources: Census, RCG	20.5 /0	ZZ. U /0				

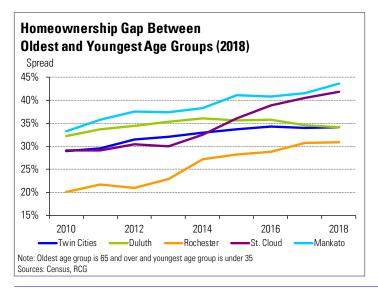
Homeownership by Age - United States and Minnesota (2019)						
	Minnesota	United States	Gap (MN - U.S.)			
All Households	71.9%	64.1%	7.8%			
By Age Group						
Under 35	45.7%	34.1%	11.6%			
35 to 44	72.5%	58.3%	14.2%			
45 to 54	80.1%	68.5%	11.6%			
55 to 64	82.0%	74.8%	7.2%			
65 and over	78.4%	78.1%	0.3%			
Spread Between Oldest and Youngest Age Groups Sources: Census, RCG	32.7%	44.0%				

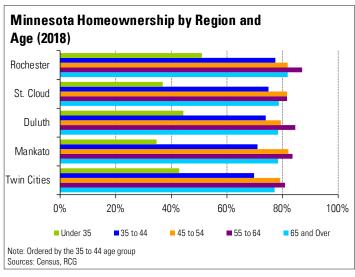
Homeownership by Age Group

Homeownership is generally positively associated with age, at least until very late in life, a trend that is not at all surprising when considering that householder age is a reasonable proxy for both life and career stage and therefore correlated with income. As of 2019, homeownership in every age class in Minnesota outperformed the national counterparts. Notably, unlike income and education, the spread in homeownership rates between the youngest and oldest categories in Minnesota was generally tighter than that for the U.S.

The large spread in homeownership rates between the youngest and oldest households was also evident when focusing on the five largest population centers. In part reflecting the hurdles that many young households faced in recent years that make it difficult to transition to homeownership—most notably student loans, rapidly rising rents and rising home prices—the homeownership gap between older and younger households has expanded meaningfully in all major markets in the Mankato, St. Cloud, Rochester and Twin Cities regions, since 2010, while the gap largely held steady in Duluth.



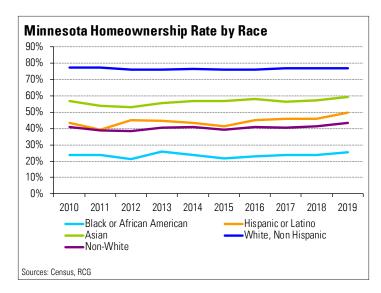


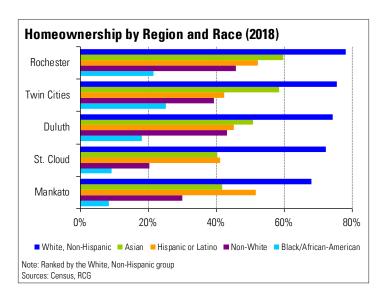


Homeownership by Race

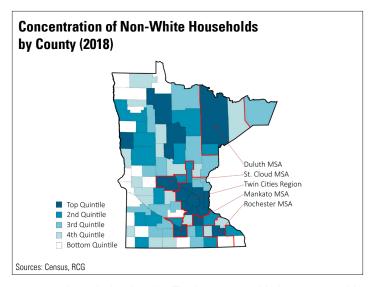
As discussed earlier, the homeownership rate among non-White households in Minnesota is well below that for White households, reflecting numerous factors including a sizable income gap. Non-White households generally tend to be associated with lower income levels—nationally, the median household income for Black and Hispanic households was 38.3% and 22.3% below that of White households, respectively. While the median household income for Asian households as a whole was 30.8% higher than that for White households, this metric masks the wide dispersion in income levels among Asian households. Income inequality among Asian households is greater than that for Black, Hispanic and White households—Asian households in the top decile had 10.7 times greater income than Asian households in the bottom decile.²¹ While other structural factors are undoubtedly in play, the nexus between income and race is evidenced through mortgage application data. Non-White households are not only less likely than White households to apply for a mortgage but, if they do, are more likely than White households to be rejected. While Black and Hispanic households make up 29.4% of the U.S. population, they comprise only 8.3% of all mortgage applications and 6.5% of all successful mortgage applications.²²

As of 2019, the non-White homeownership rate in Minnesota was 43.6%, or 33.4 percentage points lower than the 76.9% homeownership rate for White households. The homeownership rate was 59.2% for Asian households, 49.5% for Hispanic households, and 25.3% for Black households in Minnesota. Notably, the spread between Black and White households was 51.7 percentage points. Moreover, non-White household homeownership in Minnesota underperformed non-White households nationally. In particular, Black households in Minnesota had a homeownership rate of 25.3%, far below the national rate of 42.0%. In addition, the gap in homeownership rates between White and non-White households improved only minimally since 2010, reflecting a modest uptick in homeownership for Hispanic and Asian households since 2017, and more limited improvement among black households, with homeownership for that group largely





Homeownership by Race - United States and Minnesota (2019)						
	Minnesota	United States	Gap (MN - U.S.)			
All Households	71.9%	64.1%	7.8%			
By Race						
White, Non-Hispanic	76.9%	72.1%	4.8%			
Non-White	43.6%	48.0%	-4.4%			
Black or African-American	25.3%	42.0%	-16.7%			
Hispanic or Latino	49.5%	48.1%	1.4%			
Asian	59.2%	60.0%	-0.8%			
Spread Between White, Non-Hispanic and Non-White Groups Sources: Census, RCG	33.4%	24.1%				

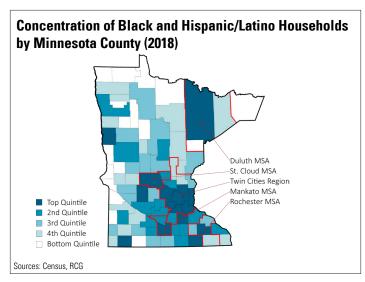


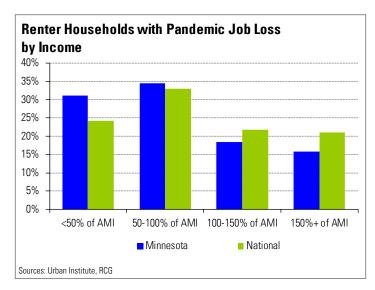
stagnant through the decade. The large spread in homeownership rates between the White and non-White households was also evident when focusing on the five largest population centers.

Non-White households make up about 15.1% of all Minnesotan households. Nearly 90% of households of color were located in the five largest regions, as of 2018. More than 80% of non-White households reside in the Twin Cities region, where they make up 15.9% of all households. Other sizable concentrations are in the Rochester (9.5% of all Rochester households) and St. Cloud (7.5% of all St Cloud households) MSAs. Note that when focusing on just Black and Hispanic households, they are even more concentrated in the five densest regions of the state, particularly in the Twin Cities.

Homeownership and COVID-19

The COVID-19 pandemic has magnified existing homeownership trends, namely, home buying among older, White households with relatively high incomes and high levels of educational attainment has accelerated, while home buying has become increasingly difficult for young, non-White households with lower-income and lower educational attainment. Reflecting the desire for more living space, a shift toward suburban environments and historically low mortgage rates, single family home sales surged in recent months among highincome households, driving up home prices and making homeownership for LMI households increasingly unattainable. Compounding the underlying homeownership barriers for LMI households and communities of color, job losses resulting from pandemic-induced shutdowns were disproportionately concentrated among lower-income households, particularly those working in the retail and leisure and hospitality sectors. In contrast, job losses were more modest and recovered more rapidly for higher-income and more highly educated households, especially those working in industries that are most conducive to remote work. This phenomenon, which has commonly been referred to as a "K-shaped" economic recovery, expanded inequality nationwide and is expected to further exacerbate the challenges of housing affordability and access to homeownership for



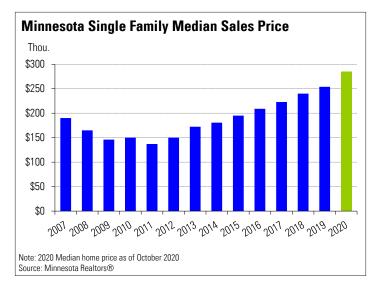


LMI households and communities of color in Minnesota and around the nation in the coming years. Of still greater concern, with virus cases spiking around the country, the prospects for further recovery in the coming months remain in question.

Highlighting the scale of the challenges for renter households through the pandemic, the Urban Institute estimated that 5.3 million renter households nationwide had at least one person in the household who lost their job during the period from February 2020 through August 2020.²³ In Minnesota, the same analysis estimated that the number of renter households with at least one job loss in Minnesota totaled approximately 69,800 during the same period. Notably, these job losses were disproportionately skewed toward lower-income renters, much more so than the broader national trend. Specifically, 65.7% of the renter household job losses in Minnesota were concentrated among households which already had incomes below the area median income (AMI) prior to the pandemic, compared with 57.2% nationally. Moreover, 31.2% of Minnesota job losses were concentrated among households with incomes less than half the AMI, compared with 24.2 nationally.

At the same time, the combination of the limited inventory of homes available for sale and robust homebuying demand from higher-income households which have been least affected financially by the pandemic, fueled rapid home price growth in recent months across much of Minnesota. Statewide, the median home sales price reached \$285,000 in October 2020, marking a record high and reflecting home price growth of 14%, compared with October 2019. The nearby table further highlights the surge in home prices, with the pace of price growth far surpassing price increases in the prior two years in most counties across the five major regions discussed throughout this report. The sharp rise in home prices has already reduced for-sale housing affordability significantly and is likely to only magnify the challenges that many households already face.

Access to homeownership for LMI households, especially households of color, already represented a major hurdle in Minnesota, and the pandemic and uneven economic recovery has only amplified the challenges, a factor that is likely to further widen the gap in homeownership by race and income in the coming years. While this report seeks to highlight the size and scale of the potential demand for DPA programs in Minnesota, it is important to note that the analysis is based on data prior to the onset of the pandemic, and therefore does



not capture these more recent distributional effects. Indeed, in the current environment, the need for programs such as Down Payment Assistance, which can help provide homeownership opportunities and level the playing field for households hurt most by the pandemic, has only become that much more critical to efforts to promote greater access to homeownership in Minnesota and nationwide.

	Decemi	December 2018		per 2019	October 2020	
MSA/County	Price	Yr/Yr Growth	Price	Yr/Yr Growth	Price	Yr/Yr Growth
Twin Cities MSA						
Anoka	\$250,000	7.8%	\$265,000	6.0%	\$294,000	10.9%
Carver	\$321,400	3.1%	\$340,000	5.8%	\$375,200	17.8%
Chisago	\$250,000	8.7%	\$255,000	2.0%	\$286,000	7.9%
Dakota	\$269,900	6.9%	\$288,500	6.9%	\$329,500	12.5%
Hennepin	\$283,000	7.4%	\$300,000	6.0%	\$327,000	10.89
Isanti	\$216,950	11.3%	\$229,000	5.6%	\$265,000	15.3%
Le Sueur	\$202,500	15.7%	\$215,000	6.2%	\$252,000	13.5%
Mille Lacs	\$175,000	9.0%	\$187,500	7.1%	\$227,000	16.4%
Ramsey	\$232,900	7.6%	\$245,800	5.5%	\$268,500	9.6%
Scott	\$295,000	10.5%	\$305,000	3.4%	\$350,000	11.89
Sherburne	\$242,000	8.1%	\$256,900	6.2%	\$301,500	20.69
Washington	\$300,000	7.7%	\$325,000	8.3%	\$365,400	9.39
Wright	\$255,000	7.9%	\$265,000	3.9%	\$310,000	12.79
Duluth MSA						
Carlton	\$164,900	5.7%	\$175,000	6.1%	\$183,700	13.49
Lake	\$144,700	11.4%	\$162,100	12.1%	\$162,000	-22.19
Saint Louis	\$153,900	4.0%	\$165,000	7.2%	\$206,000	25.7%
Rochester						
Dodge	\$195,900	11.9%	\$211,000	7.7%	\$251,000	5.7%
Fillmore	\$137,500	7.4%	\$142,000	3.3%	\$187,000	24.79
Olmsted	\$233,500	6.2%	\$244,000	4.5%	\$269,000	12.49
Wabasha	\$181,000	9.6%	\$192,000	6.1%	\$148,100	36.3%
St. Cloud						
Benton	\$185,300	5.3%	\$200,000	8.0%	\$220,900	3.7%
Stearns	\$179,000	5.3%	\$195,000	8.9%	\$217,500	7.19
Mankato						
Blue Earth	\$195,000	6.4%	\$217,500	11.5%	\$247,000	22.39
Nicollet	\$196,000	8.9%	\$212,500	8.4%	\$235,000	24.59

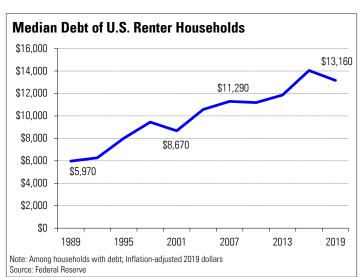
Household Finances and Credit Market Conditions

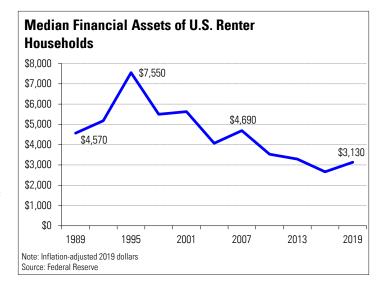
Renter Household Assets & Debts

Although detailed and reliable data on household assets and debts is not available specifically for the state of Minnesota, national figures provide considerable insight into the challenges that many renter households face in terms of their ability to accumulate sufficient savings to afford the down payment on a home.

In fact, according to data from the Federal Reserve Survey of Consumer Finances (SCF), renter households not only have very limited savings in absolute terms but, adjusted for inflation, renter households' financial assets have actually declined steadily since the mid-1990s. Pecifically, the national median financial assets of renter households declined from less than \$7,600 in 1995 to the mid-\$4,000s just prior to Great Financial Crisis, and subsequently fell further to the low-\$3,000 range in 2019, prior to the onset of the COVID-19 Pandemic. The persistent low and declining level of financial assets represents a major burden preventing many renter households from transitioning to homeownership.

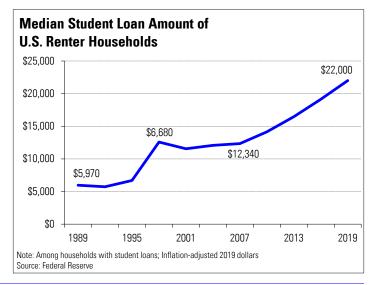
Adding to the challenge of accumulating savings, the decline in financial assets also corresponded to a persistent increase in renter household debt levels. In fact, from 1989 to 2019, the median amount of debt among renter households more than doubled to \$13,000. ²⁵ While there are numerous sources of renter household debt, much of the increase can be attributed to an explosion in student loans in recent decades. As of 1989, the median student debt level among those renter households carrying student debt was less than \$6,000 (in 2019 dollars). By 2019, that number increased to \$22,000, or more than triple the amount thirty years earlier. While high levels of debt, including student loans, represents a notable underwriting hurdle for some households in terms of meeting the 43% maximum debt-to-income (DTI) ratio, many of those who fall below the DTI threshold still cannot purchase a home because large monthly debt payments make it increasingly difficult for these households to accrue savings.





Indeed, as illustrated by the decline in financial assets referenced above, the combination of student debt payments, rising rents and other rising costs of living such as health care and childcare, make it nearly impossible for many renter households to put aside money for their financial future, a factor that makes homeownership unattainable without some form of assistance.

Adding to the challenge, the ongoing pandemic is largely expected to exacerbate the lack of savings among renter households, particularly low- and moderate-income renters, who are more likely to work in the employment sectors most negatively affected by shutdowns. Even among those with sufficient income to afford the monthly cost of purchasing a home, without sufficient savings, many renter households might not be in a position to buy a home for an extended period of time. It is for these reasons that there are millions of households nationally, and hundreds of thousands in Minnesota, who could benefit from Down Payment Assistance programs that help fill the gap for otherwise well-qualified potential homeowners.



Down Payment Assistance and Mortgage Market Credit Conditions

The objective of down payment assistance (DPA) is to boost homeownership, especially among those who may have the income to support a mortgage, but not the assets to meet the down payment. There are several ways to approach this issue, but regardless of the specific method, in the end, it involves some kind of subsidy to the assisted purchaser. Whether the subsidy is ever repaid, on what terms, or how exactly the subsidy is arranged, depends on the specific DPA program.

Regardless of the specific DPA program, it is essential for a mortgage loan supported by the down payment assistance to perform. Absent that, a loan in default that was made possible by a DPA program would not meet the stated goal of sustainably increasing overall homeownership. Additionally, it deprives another DPA candidate the opportunity. Accordingly, some view to the credit conditions in the mortgage market is essential.

Indicators of credit market conditions typically begin deteriorating when the economic cycle starts to turn down and continue to deteriorate throughout the downturn. This cycle is no exception. The overall delinquency rate for mortgages that are 30 days past due (DPD) or more, increased by 386 basis points to 8.22% in the second quarter of 2020, according to the MBA.²⁶ The 30-day delinquency rate for FHA borrowers increased by 596 basis points to 15.96% in the second quarter. The second quarter of 2020 was the first full quarter of COVID-19 restrictions.

The third quarter of 2020 brought some respite. The overall 30-day delinquency rate declined by 57 basis points to 7.65%, and the rate for FHA borrowers declined by 6 basis points to 15.59%. For FHA borrowers, the third quarter 90-DPD delinquency rate (or worse, including entering foreclosure) reached an all-time high in the history of the MBA survey of 10.76%.

For the purposes of the MBA survey, mortgages in forbearance were considered delinquent. Importantly, however, unlike during the GFC, the availability of mortgage forbearance has largely prevented widespread foreclosure activity—a factor that has undoubtedly helped to stabilize single family housing market conditions, particular among lower and moderate income households most affected by pandemic-related job losses. Moreover, despite the expectation of an extended recession and a sluggish recovery amid ongoing virus concerns and a prolonged vaccine rollout, to the extent that forbearance continues and missed mortgage payments extend the term of the mortgage rather than initiating foreclosure proceedings, a large wave of foreclosures is likely to be prevented in the near-term. While risks remain, the shortage of available single family for-sale inventory, strong demand for home buying among higher income

households and rising home prices may also mitigate the risks related to delinquency and foreclosures for individual homeowners and the broader market.

The importance of credit conditions for any down payment assistance program is that the purpose of those programs is defeated if assisted borrowers ultimately default on their loans. Credit quality typically weakens during economic downturns, and nothing can prevent assisted borrowers from eventually facing a recession. But for borrowers seeking down payment assistance more than for the general pool of borrowers, credit quality is more important for two reasons. First, there is a risk that mortgages of borrowers with a smaller equity stake in their home could underperform mortgages where borrowers have a larger equity stake. Second, for assisted borrowers, a portion of the equity is either subsidized or outright granted as an implicit or explicit transfer. That means that not only does the mortgage principal need to be protected through normal underwriting criteria, but the subsidy or gift needs to be protected as well. From a policy standpoint, especially if public funds are involved in the DPA program, additional measures of credit quality should be carefully considered in the underwriting process to qualify a borrower for assistance. Alternatively, or in addition, as described in the recommendations section below, the most effective DPA programs typically seek to bolster financial literacy, understanding of the homebuying process and, ultimately, credit quality for borrowers by incorporating educational curriculum into the DPA process.

Quantifying the Potential for Down Payment Assistance in Minnesota

Background

Recent research conducted by several researchers (Perkins, et. al), in collaboration with the Harvard Joint Center for Housing Studies (JCHS), examined detailed household-level financial data from the Census Survey of Income and Program Participation (SIPP) in order to quantify the potential demand for Down Payment Assistance programs nationally.²⁷ Specifically, the research assessed individual households in terms of their ability to purchase a home based on the median (50th percentile) or 25th percentile home value in their local county, based on 1) having sufficient income to afford monthly housing payments (less than 31% of monthly income); 2) a maximum debt-to-income ratio of 43%; and 3) sufficient household assets to afford the minimum down payment on the home. For those households who met the income and debt criteria, but lacked sufficient financial assets for a down payment, researchers examined how much assistance would be needed for households to be able to afford to purchase a home. Results of this analysis found that nationally:

- 15.2 million households, or nearly 30% of potential homeowners, could purchase the local median-priced home with \$10,500 or less in assistance.
- Approximately 3.7 million additional potential households (7%) could purchase with down payment assistance of between \$10,501 and \$25,000.
- 6.6 million potential homeowners (12%) could purchase a home in their county with assistance of \$25,000 to \$100,000.
- 8.6 million potential homeowners (17%) would require a large amount of financial assistance in excess of \$100,000.

Although replicating this methodology directly for the state of Minnesota was not expected to be feasible from the outset, as described in the methodology discussion below, the goal of this paper was to leverage this national-level research, as well as the available state and county-level data to establish reasonable estimates for the size and scale of the demand for down payment assistance in Minnesota, both statewide and geographically across of the state.

Methodology & Results

The household-level financial data used in the aforementioned national analysis relied on specially obtained access to restricteduse SIPP data. This information is generally not publicly available and would likely require a lengthy and rigorous application and approval process through the U.S. Census. Moreover, in response to an initial inquiry by RCG, the Census indicated that sub-state level aggregations of the SIPP data may not prove reliable due to limited sample size. In addition, as discussed previously, reliable measures of financial assets and debts are generally limited to national statistics. As such, this direct approach of testing underwriting criteria for each potential homeowner and calculating the need for down payment assistance at the household level was not possible. Notably, however, data from an alternate Census product, the American Community Survey (ACS) does provide considerable detail regarding household incomes in Minnesota, both statewide and by county. As such, RCG pursued an alternate approach to establish the extent to which households in Minnesota could reasonably be expected to meet the underwriting criteria necessary to purchase a home.

Income-Qualified Renter Households

As a first step, RCG developed a county-level affordability metric to examine the question of how many households in each county had sufficient income to afford the monthly housing costs associated with owning a home, assuming that the household had access to a home down payment (either because the household already had sufficient savings or as the result of some form of DPA program). The idea here was to establish the number of income-qualified potential

homeowners, recognizing that without sufficient income to pay for monthly housing costs, a household would not be able to purchase a home, regardless of the availability of down payment assistance.

Based on data from the 2018 ACS, the latest figures that were available for all counties in Minnesota while RCG was conducting research, RCG calculated the share of renter households who would be able to afford the 50th or 25th percentile home value in their local county based on a fairly standard measure of income qualifications. This renter household affordability metric compares the distribution of renter incomes in each county to an estimate of housing costs associated with homeownership, including monthly mortgage payments (based on the average mortgage rate for the four quarters of 2018 of 4.78%), property insurance (0.38%) and property taxes (1.15%). RCG then calculated the share of renter households able to afford to purchase with monthly costs less than 31% of income, consistent with the income threshold used by Perkins, et. al. in their national study. As part of this analysis, RCG tested renter income qualification based on a range of down payment assumptions, particularly considering the scenarios of access to a traditional down payment (20%) versus access to a small down payment (3.5%), with the latter scenario also incorporating mortgage insurance (0.85%). However, following this testing, RCG determined that the traditional down payment scenario was the preferred option for purposes of estimating the broadest potential for DPA demand for several reasons. By definition, the low down payment scenario would require a larger loan amount, and therefore a substantially larger monthly mortgage payment. In addition, the low down payment scenario would require the additional monthly cost of mortgage insurance. Together, these higher monthly costs would eliminate a large number of households based on insufficient income to afford the monthly payments without exceeding the 31% threshold. Moreover, eliminating these households as potential homeowners, would make it impossible to assess the potential DPA demand from households who could only afford to purchase a home with relatively large amounts of assistance, such as the \$25,000 to \$100,000 or greater than \$100,000 ranges highlighted in the national study.

Based on this methodology, RCG calculated county-level affordability shares and determined the absolute number of renter households in each Minnesota county and statewide who could potentially afford to purchase a home, based on income qualifications in both home price scenarios. Specifically, the research found that some 60% of renter households in the state did not have sufficient income to purchase a home at the 50th percentile home value, and 41% would be unable to afford the 25th percentile home value, regardless of availability of down payment assistance. However, in absolute terms, this still translated to nearly 250,000 (50th percentile) and more than 360,000 (25% percentile) income-qualified renter households in the state as of 2018, a considerable number compared with the total of 616,500 renter households statewide.

Potential for Down Payment Assistance

Although this income-qualified renter metric provides useful insights into the number of potential homeowners among existing renter households in the state, it is notable that these figures do not account for household assets or debts. In reality, it is likely that a portion of the renter households who met the income qualifications would also have sufficient savings to pay for a down payment on a home purchase and therefore would require no assistance. Many others would have access to enough savings to cover at least part of a down payment and would therefore only require small or modest amounts of assistance to transition to homeownership. At the same time, others would have little to no financial assets, or may hold sizable existing debts that would make homeownership a major hurdle, even with access to considerable upfront financial help. Moreover, these factors could reasonably be expected to vary geographically across Minnesota, based on local incomes and housing costs in each part of the state.

Lacking reliable data on assets and debts at the state level but recognizing that the median financial assets of renter households nationwide are extremely limited and changed minimally in recent years, as shown earlier, RCG leveraged the national results from Perkins, et. al. as a proxy to better understand homeownership affordability across various levels of down payment assistance in Minnesota. In particular, in order to highlight geographic variability across the nation, Perkins, et. al. report results disaggregated into three categories of counties with different degrees of housing affordability based on a measure of price-to-income (PTI) in each county. The paper then classifies these categories as inexpensive, middle market and expensive counties, based on PTI ratios of less than three, between three and five, and greater than or equal to five. The report then highlights the share of households within each PTI affordability category who would be able to afford to purchase

a home (based on 50th or 25th percentile home value) with varying levels of down payment assistance. For this report, RCG followed a similar methodology of assigning each county in Minnesota to a PTI category based on the median income and median home value in the county, as of 2018, from the ACS. Next, RCG applied the share of households able to afford, with different amounts of down payment assistance in each PTI category (the national proxy), to the previously established number of income-qualified renter households in each Minnesota county with the corresponding PTI assignment, to establish a broad estimate of potential demand for down payment assistance by level of assistance in each county in the state.

Although this approach relies on a national proxy to establish the shares and assistance levels within each county, RCG believes that the use of PTI categorization significantly mitigates concerns about the reliability of the proxy. That is, although the absolute levels of incomes, assets and debts of course vary considerably across geographies within the state and around the country, it would not be unreasonable to believe that households living in counties where the cost of housing relative to income is similar (i.e., those in the same PTI category), would tend to have similar abilities to save for a down payment, and therefore similar levels of homeownership affordability and DPA need.

State and Regional Results

The nearby table summarizes the results for the entire state, which RCG calculated by rolling-up county-level estimates. After accounting for households already able to afford to purchase without need of assistance, RCG estimated that a total of 216,700 renter households in Minnesota, or 35%, could potentially purchase a home with ac-

Minnesota Downpayment Assistance S	ummary (2018)				
	50th Perce	50th Percentile Home		25th Percentile Home	
lenter Households	616,500		616,500		
Can Afford Without Assistance	32,500	5%	66,500	11%	
Unable to Purchase	368,600	60%	254,500	41%	
Can Afford with Assistance					
\$3,500 or less	37,900	6%	137,700	22%	
\$3,501 - \$10,500	73,800	12%	63,500	10%	
\$10,501 - \$25,000	11,800	2%	15,900	3%	
\$25,001 - \$50,000	16,000	3%	20,600	3%	
\$50,001 - \$75,000	16,000	3%	21,600	4%	
\$75,001 - \$100,000	14,600	2%	13,300	2%	
\$100,000 or more	46,600	8%	24,700	4%	
Total	216,700	35%	297,300	48%	
Note: Based on the 50th and 25th percentile median valued home	in each county				
Sources: Census, Joint Center for Housing Studies of Harvard Univ	versity, RCG				

cess to down payment assistance, based on the median home value in 2018. Of this total, RCG estimated that more than half of the households could purchase the home with DPA of \$10,500 or less.

Examining the 25th percentile home values by county, RCG estimated that a total 297,300 renter households in the state could afford to purchase with varying levels of assistance, representing 48% of renter households in the state as of 2018, of which more than two-thirds could purchase the home with DPA of \$10,500 or less.

Among major regions in the state, affordability was lowest in the Twin Cities, where an estimated 62% and 44% of renter households were unable to afford, even with assistance based on the 50th and 25th percentile home values, respectively. Nonetheless, in absolute terms, RCG estimated that nearly 131,000 and 184,000 renter households could potentially purchase with some degree of assistance, accounting for more than 60% of total statewide potential in both scenarios. The nearby tables highlight the significant additional potential for renter households to transition to homeownership with assistance in Duluth, St. Cloud, Rochester and Mankato. In addition, Appendix A and B at the end of this report provide a detailed county-by-county breakdown of the results at the 50th and 25th percentiles, respectively.

Down Payment Assistance Potential by Race

Beyond the data challenges previously highlighted, determining the potential demand for DPA by race or ethnicity in Minnesota is further complicated by a lack of sufficiently detailed and reliable data. In particular, the two preferred approaches for doing this calculation would be: 1) to have access to household-level income and financial data within the state similar to the previously-mentioned national research; or 2) to have access to reliable state or county-level data that provides a cross tabulation of household income distribution by both race/ethnicity and housing tenure (owner or renter status) in order to calculate an affordability metric by race based on the income needed to afford the monthly payments on a home, similar to the county-level metric described above. However, neither of these options proved feasible. First, as described in the prior section, restricted-use SIPP household-level financial data is not available. Second, the data provided by the ACS at both the state and the county levels includes cross-tabulations of only two of the three necessary metrics. Specifically, the distribution of renter households by race/ethnicity (tenure by race) is available, but without income details, and the distribution of incomes is available by race/ethnicity (income by race), but without an owner/renter breakdown. Unfortunately, the combined data (income by tenure by race) are not included as part of the standard set of ACS tables. Although there could be some potential to obtain additional granularity on this ques-

Downpayment Assistance by Largest Minnesota MSAs - 50th Percentile Home (2018) **Can Afford with Assistance** \$10.501 -\$50.001 - \$100.000 or Renter **Can Afford Without** Unable to \$10,500 **Households Assistance Purchase** or less \$50,000 \$100,000 more Total **Twin Cities** 397,200 5% 62% 16% 4% 4% 9% 130,800 10,900 Duluth 28,500 6% 56% 23% 7% 6% 4% St. Cloud 9,100 23,600 7% 56% 23% 5% 7% 4% Rochester 7,500 21,000 6% 59% 21% 5% 6% 3% Mankato 13,200 5% 59% 18% 5% 5% 9% 4,700

Note: Based on the 50th percentile median valued home in each county Sources: Census, Joint Center for Housing Studies of Harvard University, RCG

Downpayment Assistance by Largest Minnesota MSAs - 25th Percentile Home (2018)

					Can Afford with Assistance			
	Renter Households	Can Afford Without Assistance	Unable to Purchase	\$10,500 or less	\$10,501 - \$50,000	\$50,001 - \$100,000	\$100,000 or more	Total
Twin Cities	397,200	10%	44%	30%	5%	6%	5%	183,600
Duluth	28,500	13%	35%	40%	7%	4%	1%	15,000
St. Cloud	23,600	12%	40%	37%	7%	4%	1%	11,500
Rochester	21,000	12%	39%	38%	7%	4%	1%	10,500
Mankato	13,200	11%	38%	34%	6%	6%	5%	6,700

Note: Based on the 25th percentile median valued home in each county

Sources: Census, Joint Center for Housing Studies of Harvard University, RCG

tion from the ACS Public Use Micro Sample (PUMS) dataset, RCG determined that this approach was unlikely to provide particularly reliable results, as it would require using a still smaller subset of the already limited ACS sample.

For these reasons, RCG instead estimated a broad range for the DPA potential in Minnesota by race/ethnicity by distributing our state-level results using upper and lower bounds for the range of households who could be able to afford to purchase a home with assistance that was determined by leveraging the two available data tables described above. Specifically, RCG used the share of all renter households in the state who fall within each race/ethnicity category and the share of all households (including owners and renters) in each race/ethnicity who fall within the appropriate income segments such that the monthly costs of homeownership could potentially be affordable. For example, consistent with the relatively low homeownership rate for Black households in Minnesota, Black households represent a relatively large share of renter households in the state (overrepresented among renters), but the income distribution among Black households also skews lower than the state as a whole, meaning proportionately fewer Black households would have sufficient income to afford monthly mortgage payments (underrepresented among potential homeowners). For purposes of constructing a range, the share of Black households who could benefit from DPA would reasonably be expected to be no greater than the Black share of total renter households (upper bound), but no less than the Black share of all households in the designated income categories, which encompass the largest group of potential homeowners (see Appendix C for additional details). The nearby table highlights the low and high ranges for the number of households in each category who could purchase with access to DPA under both the 50th percentile and 25th percentile scenarios. Consistent with the broader race/ ethnicity breakdown of the state population and the relatively higher incomes among White households, it is not surprising that White, non-Hispanic households account for by far the largest number of potential homeowners if given access to assistance, at least in absolute terms (note that race/ethnicity categories are not mutually exclusive, as households may self-identify into multiple categories).

However, it is also particularly notable to consider the large number of non-White households who could also potentially be beneficiaries of assistance with transitioning to homeownership, especially considering the low levels of homeownership among communities of color in Minnesota.

As previously highlighted, the homeownership rate among Black households in Minnesota was 25.3% as of 2019, compared with the national homeownership rate for Black households of 42.0%. Moreover, with a higher White homeownership than the national average, the gap between homeownership for White, non-Hispanic households and Black households in Minnesota was 51.7 percentage points, compared with a gap of 30.2 percentage points nationwide. However, the potential effect of DPA programs to increase homeownership for non-white households, and in particular, for Black households, is significant. Generally consistent with the low end of RCG's range for Black renter households who could potentially be able to purchase with assistance (based on the 50th percentile home value), in order to increase the Black homeownership rate in Minnesota by 10 percentage points (to 35.3%), approximately 11,600 Black renter households would need to purchase homes, holding all else equal. Alternatively, the state would need approximately 19,400 Black households to transition to homeownership in order to match the national homeownership rate for Black households, or 24,800 new Black homeowners to narrow the Minnesota racial homeownership gap sufficiently to fall in line with the much lower, albeit still wide, national gap. On balance, while the difference in homeownership trends is still stark, widespread access to DPA could be a major step in the right direction.

Additional Considerations

Given the data challenges and the need to adopt state proxies, there are a number of factors that RCG recognizes are not incorporated into the estimates, which in reality would necessarily influence the true number of households who could potentially benefit from DPA programs. First, owing to a lack of state-level data, RCG's estimates

		50th Percen	ntile	25th Percer	ıtile
Race	Renter Households	Low	High	Low	High
White, Non-Hispanic	435,400	153,000	183,800	209,900	249,700
Black or African-American	86,400	11,300	30,400	17,100	41,700
Asian	32,800	7,200	11,500	9,800	15,800
Hispanic or Latino	43,400	9,300	15,200	13,600	20,900
Non-White	188,800	32,900	66,400	47,600	91,100
Total (Races do not sum)	616,500				

do not effectively account for household debts, particularly those households who may not quality for a mortgage based on existing debt loads that, with the addition of a mortgage, would exceed the standard 43% DTI maximum threshold. Second, the data incorporated into the county-level analysis comes from the 2018 ACS, and therefore does not reflect the past two years of changes in incomes and home values. As highlighted earlier in the report, like much of the nation, home prices in Minnesota increased notably in recent years and particularly since the onset of the COVID-19 pandemic, even as many households, especially renter households, have lost jobs. Both the debt considerations and the timing factors would suggest that RCG's estimates would be likely to overstate the realistic demand potential for DPA programs.

Conversely, mortgage rates decreased dramatically since 2018, a factor that would tend to significantly enhance affordability, all else equal. In addition, RCG's income qualification figures rely only on the pool of existing renter households as the base for calculating the number of income-qualified potential homeowners. This would tend to significantly undercount the potential demand by not capturing the group of non-households who could potentially transition to homeownership, particularly in the case of the sizable number of adults living in someone else's home, such as those living with roommates or adult children living with parents. In both cases, these individuals could potentially form their own households and purchase a home if they had access to assistance with the down payment. When determining "potential homeowning units," Perkins, et. al. included adult individuals and couples aged between 25 and 65 who fell into these categories in their national figures. While directly replicating this approach was not feasible, by way of reference, based on the latest available Census data, approximately 394,500 adult children statewide lived with their parents as of 2019. Of that total, approximately 62,900 were in the 35 to 64 age group—the age groups most likely to be able to transition to homeownership. In addition, roughly estimating roommate situations, there were approximately 167,800 non-family households with more than one person in Minnesota as of 2019. Among those households, approximately 64,100 were in the 35 to 64 age group.

It is difficult to weigh the relative size of the potential over- and undercounting based on these additional factors, but on balance, considering the data limitations, RCG believes that the results highlighted throughout this report provide a reasonable estimate for the sense of scale for the number of households in Minnesota who could potentially benefit from DPA programs. However, it is important to clarify that these estimates look only at the demand side and do not consider the supply of homes available for sale, of which there is a significant shortage, especially under current market conditions. Moreover, the estimates do not consider any factors related to design or effectiveness of DPA programs, factors that could prove critical to the success of any new DPA initiatives.

Recommendations

As highlighted through the research results, there are a large number of households in Minnesota who could potentially benefit from down payment assistance in order to make the transition to homeownership. However, at a high level, there are a number of important features to consider in designing and implementing DPA programs.

- DPA programs should generally be designed to assist households who are on the precipice of homeownership, that is households who can afford the monthly homeownership costs (income-qualified), but otherwise have no or limited access to the capital required for down payments.
- Programs should be flexible to accommodate a wide range of circumstances and, therefore, offer a range of financial products versus a single financial product that is uniform for all homebuyers. For example, DPA programs featuring grants could target first-generation homebuyers who have little or no access to down payment capital, while other DPA programs could seek to provide mechanisms to help households with student debt, or to leverage credit enhancements to lower the cost of borrowed capital for those with some, albeit insufficient, access to savings.
- Considering the large potential demand for DPA demonstrated in this report, effective DPA programs will need to be scalable and, therefore, should be designed to be financially self-sustainable in the long run. To the extent possible, programs should be designed such that fees can eventually help to pay for program overhead and, when possible, capital should be recycled to finance future transactions. Acknowledging that access to down payment capital is a long-term structural problem and that original sources of capital for the program are not limitless, DPA programs should not only attempt to seek capital from multiple sources, but also focus on more sustainable sources in the long term. For example, with regard to the former, programs should look beyond state and local appropriations and towards federal grants and other programs. With regard to the latter, programs should look towards initiatives to leverage scarce public dollars to attract private capital, especially as state and local coffers will continue to be stretched for some time in the wake of the pandemic.
- Programs should have a data or research component to help inform the design and execution of more effective DPA programs and future public policies. Moreover, programs should also aim for simplicity—for example, reducing documentation requirements, establishing uniform eligibility requirements and utilizing standardized forms could facilitate program efficacy and efficiency. In addition, any new programs should build upon the efforts of existing DPA programs in Minnesota. What are the best practices? What are the lessons learned? Where are the major gaps?

- Of particular importance, a community outreach program should accompany any DPA program to ensure program success. A well-designed community outreach program would seek to proactively connect potential homebuyers with DPA resources.
- Lastly, in addition to a community outreach program, a DPA program should be accompanied by a technical assistance program that not only guides potential homebuyers through the entire homebuying process, but also facilitates sustainable homeownership among successful homebuyers. As discussed earlier, an important outcome of homeownership is wealth creation, and a technical assistance program that helps new homeowners develop financial literacy through financial counseling will help participating households achieve this goal.

In all, well-designed and implemented DPA programs could significantly improve access to homeownership and, ultimately, increase homeownership levels in Minnesota. However, with the growing cost burden of housing, and the limited availability of homes for sale, DPA alone may not be sufficient for many households. Instead, complementary programs targeting credit accessibility, as well as policies to promote housing affordability more broadly, and increased housing supply in particular, will likely also be necessary to comprehensively tackle all three of the major roadblocks to homeownership in Minnesota.

Appendix A - Downpayment Assistance by Minnesota County - 50th Percentile Home (2018)

						Can Afford with Assistance			
	Renter Households	Home Value	Can Afford Without Assistance	Unable to Purchase	\$10,500 or less	\$10,501 - \$50,000	\$50,001 - \$100,000	\$100,000 or more	Total
Aitkin	1,400	\$174,400	4%	63%	15%	4%	4%	10%	400
Anoka	25,100	\$218,800	6%	58%	22%	5%	6%	3%	9,200
Becker	2,900	\$187,600	3%	76%	10%	3%	3%	6%	600
Beltrami	5,700	\$157,000	4%	65%	14%	4%	4%	9%	1,700
Benton	5,400	\$166,700	6%	60%	21%	5%	6%	3%	1,800
Big Stone	600	\$97,900	8%	46%	28%	7%	8%	4%	300
Blue Earth	9,800	\$177,800	5%	61%	16%	4%	4%	10%	3,400
Brown	2,400	\$135,800	8%	47%	28%	6%	8%	4%	1,100
Carlton	2,600	\$166,200	7%	56%	23%	5%	7%	4%	1,000
Carver	6,600	\$301,900	4%	67%	13%	4%	4%	9%	1,900
Cass	2,400	\$182,700	4%	71%	12%	3%	3%	8%	600
Chippewa	1,700	\$114,600	10%	29%	37%	8%	10%	6%	1,000
Chisago	2,800	\$219,400	5%	65%	18%	4%	5%	3%	900
Clay	7,500	\$183,300	6%	61%	20%	5%	6%	3%	2,500
Clearwater	700	\$123,800	6%	60%	21%	5%	6%	3%	200
Cook	700	\$252,900	2%	79%	8%	2%	2%	6%	100
Cottonwood	1,100	\$90,800	11%	24%	40%	9%	11%	6%	700
Crow Wing	6,500	\$194,400	4%	68%	13%	3%	3%	9%	1,800
Dakota	41,100	\$252,000	5%	59%	17%	4%	4%	11%	15,000
Dodge	1,400	\$174,400	7%	52%	25%	6%	7%	4%	600
Douglas	4,200	\$209,800	4%	63%	15%	4%	4%	10%	1,400
Faribault	1,400	\$88,500	10%	32%	35%	8%	10%	5%	800
Fillmore	1,700	\$152,900	7%	52%	25%	6%	7%	4%	700
Freeborn	3,200	\$111,400	10%	34%	34%	8%	10%	5%	1,800
Goodhue	4,800	\$196,100	4%	63%	15%	4%	4%	10%	1,600
Grant	500	\$105,700	9%	38%	32%	7%	9%	5%	300
Hennepin	189,200	\$260,300	4%	64%	15%	4%	4%	10%	60,400
Houston	1,600	\$167,600	6%	59%	22%	5%	6%	3%	600
Hubbard	1,600	\$189,500	4%	65%	14%	4%	4%	9%	500
Isanti	2,700	\$186,000	7%	56%	23%	5%	7%	4%	1,000
Note: Based on the 5	Oth percentile median v	alued home in each	county						
Sources: Canque, Joint Contar for Housing Studies of Hangard Haiversity, DCC									

Sources: Census, Joint Center for Housing Studies of Harvard University, RCG

Appendix A - Downpayment Assistance by Minnesota County - 50th Percentile Home (2018)

					Can Afford with Assistance					
	Renter Households	Home Value	Can Afford Without Assistance	Unable to Purchase	\$10,500 or less	\$10,501 - \$50,000	\$50,001 - \$100,000	\$100,000 or more	Total	
Itasca	3,900	\$159,000	5%	63%	19%	4%	5%	3%	1,200	
Jackson	1,000	\$120,000	10%	29%	37%	9%	10%	6%	600	
Kanabec	1,100	\$152,600	7%	54%	24%	6%	7%	4%	400	
Kandiyohi	4,300	\$168,400	7%	52%	25%	6%	7%	4%	1,800	
Kittson	400	\$74,100	12%	17%	43%	10%	12%	7%	300	
Koochiching	1,300	\$106,300	8%	47%	27%	6%	8%	4%	600	
Lac qui Parle	600	\$85,600	13%	12%	46%	11%	13%	7%	500	
Lake	1,000	\$170,400	9%	41%	30%	7%	9%	5%	500	
Lake of the Wood	300	\$152,400	8%	32%	27%	7%	7%	18%	200	
Le Sueur	2,100	\$197,600	6%	61%	20%	5%	6%	3%	700	
Lincoln	500	\$94,300	10%	29%	37%	9%	10%	6%	300	
Lyon	3,200	\$141,100	7%	55%	23%	5%	7%	4%	1,200	
McLeod	3,500	\$157,900	7%	51%	26%	6%	7%	4%	1,500	
Mahnomen	600	\$94,900	10%	35%	34%	8%	10%	5%	300	
Marshall	700	\$111,500	9%	36%	33%	8%	9%	5%	400	
Martin	2,300	\$114,900	9%	37%	33%	8%	9%	5%	1,300	
Meeker	1,900	\$165,500	7%	51%	25%	6%	7%	4%	800	
Mille Lacs	2,500	\$157,200	6%	59%	21%	5%	6%	3%	900	
Morrison	3,000	\$165,200	5%	58%	17%	5%	5%	11%	1,100	
Mower	4,100	\$120,500	9%	38%	32%	7%	9%	5%	2,200	
Murray	700	\$113,300	10%	34%	34%	8%	10%	5%	400	
Nicollet	3,400	\$182,100	7%	55%	24%	5%	7%	4%	1,300	
Nobles	2,300	\$120,900	7%	50%	26%	6%	7%	4%	1,000	
Norman	500	\$93,400	6%	56%	23%	5%	6%	4%	200	
Olmsted	16,300	\$199,500	6%	61%	20%	5%	6%	3%	5,500	
Otter Tail	5,100	\$179,500	4%	64%	15%	4%	4%	10%	1,600	
Pennington	1,500	\$142,100	8%	47%	27%	6%	8%	4%	700	
Pine	2,200	\$157,400	5%	56%	18%	5%	5%	12%	800	
Pipestone	1,000	\$97,700	10%	29%	37%	9%	10%	6%	600	
Polk	3,300	\$158,200	6%	58%	22%	5%	6%	3%	1,200	
Note: Based on the 50th	n percentile median v	alued home in each	county							
Sources: Census Joint (Center for Housing St	tudies of Harvard Ur	niversity RCG							

Sources: Census, Joint Center for Housing Studies of Harvard University, RCG

Appendix A - Downpayment Assistance by Minnesota County - 50th Percentile Home (2018)

		Can Afford with Assistance							
	Renter		Can Afford Without	Unable to	\$10,500	\$10,501 -	\$50,001 -	\$100,000	
	Households	Home Value	Assistance	Purchase	or less	\$50,000	\$100,000	or more	Total
Ramsey	85,100	\$219,400	4%	63%	15%	4%	4%	10%	27,400
Red Lake	300	\$113,600	8%	45%	29%	7%	8%	4%	100
Redwood	1,400	\$100,800	10%	30%	36%	8%	10%	6%	800
Renville	1,300	\$102,700	11%	28%	38%	9%	11%	6%	800
Rice	5,900	\$196,500	5%	68%	17%	4%	5%	3%	1,600
Rock	1,000	\$137,100	10%	33%	35%	8%	10%	5%	600
Roseau	1,200	\$125,700	8%	42%	30%	7%	8%	5%	600
St. Louis	24,900	\$152,000	6%	57%	23%	5%	6%	3%	9,300
Scott	8,600	\$285,200	5%	66%	18%	4%	5%	3%	2,600
Sherburne	5,500	\$217,200	6%	60%	21%	5%	6%	3%	1,900
Sibley	1,300	\$151,000	8%	43%	30%	7%	8%	5%	600
Stearns	18,300	\$176,000	7%	54%	24%	5%	7%	4%	7,200
Steele	3,500	\$158,500	7%	54%	24%	6%	7%	4%	1,400
Stevens	1,200	\$154,100	7%	54%	24%	6%	7%	4%	500
Swift	1,300	\$103,100	11%	27%	38%	9%	11%	6%	800
Todd	1,800	\$149,300	7%	52%	25%	6%	7%	4%	700
Traverse	300	\$82,000	13%	13%	45%	10%	13%	7%	200
Wabasha	1,700	\$173,100	7%	51%	25%	6%	7%	4%	700
Wadena	1,300	\$123,700	9%	41%	31%	7%	9%	5%	700
Waseca	1,600	\$150,700	7%	54%	24%	6%	7%	4%	600
Washington	17,200	\$277,400	5%	61%	16%	4%	4%	10%	5,900
Watonwan	1,000	\$94,300	9%	36%	33%	8%	9%	5%	600
Wilkin	600	\$125,600	7%	51%	26%	6%	7%	4%	300
Winona	5,900	\$161,100	6%	56%	23%	5%	6%	4%	2,200
Wright	8,700	\$225,600	6%	59%	22%	5%	6%	3%	3,100
Yellow Medicine	900	\$101,800	10%	30%	36%	8%	10%	6%	600

Note: Based on the 50th percentile median valued home in each county Sources: Census, Joint Center for Housing Studies of Harvard University, RCG

Appendix B - Downpayment Assistance by Minnesota County - 25th Percentile Home (2018)

					Can Afford with Assistance				
	Renter		Can Afford Without	Unable to	\$10,500	\$10,501 -	\$50,001 -	\$100,000	
	Households	Home Value	Assistance	Purchase	or less	\$50,000	\$100,000	or more	Total
Aitkin	1,400	\$109,500	10%	44%	29%	5%	7%	6%	600
Anoka	25,100	\$164,800	13%	37%	39%	7%	4%	1%	12,700
Becker	2,900	\$116,000	10%	42%	30%	5%	7%	6%	1,400
Beltrami	5,700	\$96,600	11%	39%	32%	6%	7%	6%	2,900
Benton	5,400	\$120,600	12%	42%	36%	7%	4%	1%	2,500
Big Stone	600	\$63,300	16%	23%	48%	9%	5%	1%	400
Blue Earth	9,800	\$124,100	10%	39%	31%	6%	7%	6%	5,000
Brown	2,400	\$89,500	15%	28%	45%	8%	5%	1%	1,400
Carlton	2,600	\$117,400	12%	42%	36%	7%	4%	1%	1,300
Carver	6,600	\$205,200	10%	44%	29%	5%	7%	6%	3,100
Cass	2,400	\$110,700	10%	41%	30%	5%	7%	6%	1,200
Chippewa	1,700	\$70,400	16%	22%	48%	9%	5%	1%	1,100
Chisago	2,800	\$178,300	10%	52%	30%	6%	3%	1%	1,100
Clay	7,500	\$131,500	10%	49%	32%	6%	3%	1%	3,100
Clearwater	700	\$69,000	14%	30%	43%	8%	4%	1%	400
Cook	700	\$167,400	7%	58%	22%	4%	5%	4%	200
Cottonwood	1,100	\$60,000	17%	16%	52%	10%	5%	1%	700
Crow Wing	6,500	\$124,000	10%	44%	29%	5%	7%	6%	3,000
Dakota	41,100	\$180,500	10%	39%	31%	6%	7%	6%	20,800
Dodge	1,400	\$120,900	15%	26%	46%	8%	5%	1%	800
Douglas	4,200	\$140,700	10%	43%	29%	5%	7%	6%	2,000
Faribault	1,400	\$54,900	16%	21%	49%	9%	5%	1%	900
Fillmore	1,700	\$94,800	13%	36%	40%	7%	4%	1%	900
Freeborn	3,200	\$70,300	16%	23%	48%	9%	5%	1%	2,000
Goodhue	4,800	\$139,400	9%	45%	28%	5%	7%	6%	2,200
Grant	500	\$63,900	15%	26%	46%	8%	5%	1%	300
Hennepin	189,200	\$184,300	9%	45%	28%	5%	6%	6%	85,700
Houston	1,600	\$105,400	14%	30%	43%	8%	4%	1%	900
Hubbard	1,600	\$116,800	9%	45%	28%	5%	7%	6%	700
Isanti	2,700	\$139,700	13%	35%	40%	7%	4%	1%	1,400
Note: Based on the 2	5 th percentile median v	alued home in each	county						
1.	.0 . (11 . 0		: : B00						

Sources: Census, Joint Center for Housing Studies of Harvard University, RCG

Appendix B - Downpayment Assistance by Minnesota County - 25th Percentile Home (2018)

					Can Afford with Assistance				
	Renter Households	Home Value	Can Afford Without Assistance	Unable to Purchase	\$10,500 or less	\$10,501 - \$50,000	\$50,001 - \$100,000	\$100,000 or more	Total
Itasca	3,900	\$95,500	12%	43%	35%	6%	4%	1%	1,800
Jackson	1,000	\$72,800	16%	21%	49%	9%	5%	1%	600
Kanabec	1,100	\$99,000	13%	33%	41%	8%	4%	1%	600
Kandiyohi	4,300	\$110,600	13%	38%	39%	7%	4%	1%	2,200
Kittson	400	\$37,700	18%	10%	56%	10%	6%	1%	300
Koochiching	1,300	\$61,400	14%	29%	44%	8%	5%	1%	700
Lac qui Parle	600	\$46,400	18%	10%	56%	10%	6%	1%	400
Lake	1,000	\$108,000	14%	29%	44%	8%	4%	1%	600
Lake of the Wood	300	\$77,400	13%	23%	39%	7%	9%	8%	200
Le Sueur	2,100	\$129,800	12%	38%	38%	7%	4%	1%	1,000
Lincoln	500	\$57,300	17%	17%	51%	9%	5%	1%	400
Lyon	3,200	\$85,800	14%	29%	44%	8%	4%	1%	1,800
McLeod	3,500	\$110,400	13%	36%	40%	7%	4%	1%	1,800
Mahnomen	600	\$58,800	16%	20%	50%	9%	5%	1%	400
Marshall	700	\$64,700	16%	19%	50%	9%	5%	1%	500
Martin	2,300	\$70,200	15%	24%	47%	9%	5%	1%	1,400
Meeker	1,900	\$105,500	13%	34%	41%	8%	4%	1%	1,000
Mille Lacs	2,500	\$116,800	12%	42%	36%	7%	4%	1%	1,200
Morrison	3,000	\$113,700	9%	45%	28%	5%	6%	6%	1,300
Mower	4,100	\$76,000	16%	23%	48%	9%	5%	1%	2,600
Murray	700	\$63,900	17%	18%	51%	9%	5%	1%	500
Nicollet	3,400	\$132,200	13%	36%	40%	7%	4%	1%	1,800
Nobles	2,300	\$72,200	16%	20%	50%	9%	5%	1%	1,500
Norman	500	\$56,600	16%	21%	49%	9%	5%	1%	300
Olmsted	16,300	\$145,200	12%	41%	37%	7%	4%	1%	7,900
Otter Tail	5,100	\$109,600	10%	39%	31%	6%	7%	6%	2,600
Pennington	1,500	\$80,400	16%	21%	49%	9%	5%	1%	1,000
Pine	2,200	\$97,300	10%	39%	31%	6%	7%	6%	1,100
Pipestone	1,000	\$58,500	16%	19%	50%	9%	5%	1%	700
Polk	3,300	\$93,300	12%	40%	37%	7%	4%	1%	1,600
Note: Based on the 25 th	n percentile median v	alued home in each	county						
1									

Sources: Census, Joint Center for Housing Studies of Harvard University, RCG

Appendix B - Downpayment Assistance by Minnesota County - 25th Percentile Home (2018)

					Can Afford with Assistance					
	Renter Households	Home Value	Can Afford Without Assistance	Unable to Purchase	\$10,500 or less	\$10,501 - \$50,000	\$50,001 - \$100,000	\$100,000 or more	Total	
Ramsey	85,100	\$158,200	9%	46%	28%	5%	6%	6%	38,000	
Red Lake	300	\$64,600	15%	28%	45%	8%	5%	1%	200	
Redwood	1,400	\$60,500	17%	18%	51%	9%	5%	1%	900	
Renville	1,300	\$63,500	16%	21%	49%	9%	5%	1%	800	
Rice	5,900	\$137,200	11%	46%	33%	6%	3%	1%	2,600	
Rock	1,000	\$80,200	15%	24%	47%	9%	5%	1%	600	
Roseau	1,200	\$76,400	16%	21%	49%	9%	5%	1%	800	
St. Louis	24,900	\$91,000	13%	35%	40%	7%	4%	1%	13,100	
Scott	8,600	\$205,000	10%	50%	31%	6%	3%	1%	3,500	
Sherburne	5,500	\$164,800	12%	42%	36%	7%	4%	1%	2,600	
Sibley	1,300	\$92,300	16%	22%	49%	9%	5%	1%	800	
Stearns	18,300	\$129,200	12%	39%	38%	7%	4%	1%	9,000	
Steele	3,500	\$114,400	12%	41%	37%	7%	4%	1%	1,700	
Stevens	1,200	\$83,400	13%	38%	39%	7%	4%	1%	600	
Swift	1,300	\$62,200	16%	21%	49%	9%	5%	1%	800	
Todd	1,800	\$85,200	14%	29%	44%	8%	4%	1%	1,000	
Traverse	300	\$37,700	18%	11%	55%	10%	6%	1%	200	
Wabasha	1,700	\$118,900	14%	32%	42%	8%	4%	1%	900	
Wadena	1,300	\$77,100	15%	28%	44%	8%	5%	1%	700	
Waseca	1,600	\$98,600	12%	39%	38%	7%	4%	1%	800	
Washington	17,200	\$198,300	10%	41%	30%	5%	7%	6%	8,400	
Watonwan	1,000	\$58,900	16%	20%	50%	9%	5%	1%	700	
Wilkin	600	\$70,600	13%	36%	40%	7%	4%	1%	300	
Winona	5,900	\$110,900	12%	43%	35%	7%	4%	1%	2,700	
Wright	8,700	\$163,800	12%	41%	37%	7%	4%	1%	4,200	
Yellow Medicine	900	\$62,200	15%	27%	46%	8%	5%	1%	500	

Note: Based on the 25th percentile median valued home in each county Sources: Census, Joint Center for Housing Studies of Harvard University, RCG

Appendix C - Share of Renter Households by Race							
Race	Share						
White, Non-Hispanic	70.6%						
Black or African-American	14.0%						
Asian	5.3%						
Hispanic or Latino	7.0%						
Non-White	30.6%						
Notes: Race groups are not mutually exclusive							
Sources: Census, RCG							

Appendix C - Share of Households by Race and Select Income Ranges								
	50th Percentile	25th Percentile						
Race	\$35,000 - \$100,000	\$25,000 - \$100,000						
White, Non-Hispanic	84.8%	84.0%						
Black or African-American	5.2%	5.7%						
Asian	3.3%	3.3%						
Hispanic or Latino	4.3%	4.6%						
Non-White	15.2%	16.0%						
Notes: Race groups are not mutually exclu Sources: Census, RCG	sive							

Endnotes

_....

¹ Habitat for Humanity. (2016, April). Beneficial impacts of homeownership: A research summary. Retrieved November 15, 2020, from Habitat for Humanity: www.habitatbuilds.com

² Wainer, A., & Zabel, J. (2020, March). Homeownership and wealth accumulation for low-income households. Journal of Housing Economics, 47.

³ Green, R. K., Painter, G. D., & White, M. J. (August 2012). Measuring the Benefits of Homeowning: Effects on Children Redux. Research Institute for Housing America. Washington, DC: Mortgage Bankers Association.

⁴ Haurin, D. R., Dietz, R. D., & Weinberg, B. A. (2002). The Impact of Neighborhood Homeownership Rates: A Review of the Theoretical and Empirical Literature. Journal of Housing Research, 13(2), 119-151.

⁵ Rohe, W. M., & Lindblad, M. (August 2013). Rexamining the Social Benefits of Homeownership after the Housing Crisis. Harvard University. Cambridge: Joint Center for Housing Studies.

⁶ Goodman, L., McCargo, A., Golding, E., Bai, B., & Strochak, S. (September 2018). Barriers to Accessing Homeownership: Down Payment, Credit, and Affordability. Urban Institute, Housing Finance Policy Center. Washington, DC: Urban Institute.

⁷ Norton, G. (2019). State of the State's Housing 2019: Biennial Report of the Minnesota Housing Partnership. Minnesota Housing Partnership, Research Office. St. Paul, Minnesota Housing Partnership.

⁸ Goodman, et. al.

⁹ Ibid.

¹⁰ Albanesi, S., DeGirogi, G., & Nosal, J. (September 2017). Credit Growth and the Financial Crisis: A New Narrative. Working Paper, NBER.

¹¹ Beer, R., Ionescu, F., & Li, G. (2018, August 13). Are Income and Credit Scores Highly Correlated? Retrieved 11 15, 2020, from Federal Reserve: https://www.federalreserve.gov/econres/notes/feds-notes/are-income-and-credit-scores-highly-correlated-20180813.htm

¹² Herbert, C. (2017). Expanding Access to Homeownership as a Means of Fostering Residential Integration and Inclusion. Harvard University, Harvard Joint Center for Housing Studies. Cambridge, MA: President and Fellows of Harvard College.

¹³ Herbert, C. E., Haurin, D. R., Rosenthal, S. S., & Duda, M. (March 2005). Homeownership Gaps Among Low-Income and Minority Borrowers and Neighborhoods. U.S. Department of Housing and Urban Development, Office of Policy Development & Research. Cambridge, MA: U.S. Department of Housing and Urban Development.

¹⁴ Goodman, et. al.

¹⁵ Perkins, K. L., Rieger, S. M., Spader, J., & Herbert, C. (2020). The Potential for Shared Equity and Other Forms of Downpayment Assistance to Expand Access to Homeownership. Cityscape: A Journal of Policy Development and Research, 22(1), 40.

¹⁶ Khater, S., Kiefer, L., & Atreya, A. (2019, May 07). Fulfilling the Dream of Homeownership: How Do Families and Others Play a Role? Insight, p. 5.

¹⁷ Ibid.

¹⁸ Goodman, et. al.

¹⁹ Perkins, et. al.

²⁰ Goodman, et. al.

²¹ Kochhar, R., & Cilluffo, A. (2018, July 12). Key findings on the rise in income inequality within America's racial and ethnic groups. (P. R. Center, Producer) Retrieved 11 15, 2020, from Fact Tank: News in the Numbers: https://www.pewresearch.org/fact-tank/2018/07/12/key-findings-on-the-rise-in-income-inequality-within-americas-racial-and-ethnic-groups/

²² Zillow. (January 2014). A House Divided: How Race Colors the Path to Homeownership. Seattle, Washington: Zillow.

²³ Urban Institute. (2020). Estimating the Cost of Rental Assistance in Minnesota. Retrieved 10 21, 2020, from Urban Institute:https://www.urban.org/policy-centers/research-action-lab/projects/sizing-federal-rental-assistance/minnesota

²⁴ Board of Governors of the Federal Reserve System. 2019 Survey of Consumer Finances. Retrieved 11 18, 2020, from Federal Reserve: https://www.federalreserve.gov/econres/scfindex.htm

²⁵ Ibid.

²⁶ Mortgage Bankers Association. National Delinquency Survey. Retrieved 11 19, 2020, from https://www.mba.org/news-research-and-resources/research-and-economics/single-family-research/national-delinquency-survey

²⁷ Perkins, et. al.