# MDUs: The Numbers Look Good, But It's Too Soon to Tell

I project 500,000 new MDU dwelling units in 2022, but with more than the usual uncertainty. This would be an increase from 473,000 in 2021. There is likely to be a sharp drop in single-family construction.

By Steven S. Ross / Broadband Communities

onstruction of apartments in large, multiple-dwelling-unit (MDU) buildings by nongovernmental builders could set another record this year, even though overall housing construction has slowed in the face of higher interest rates, according to the U.S. Census Bureau. Builders received more than 18,000 permits for MDUs with five dwelling units or more in 2021. The properties would contain 552,000 dwelling units, up from 532,000 in 2020. Moreover, there's still a backlog of buildings that have been approved, but for which construction has been delayed, mainly as a result of COVID-19 and labor shortages.

That's great news for broadband deployers – MDUs are now almost always designed for fiber, and connecting an apartment is far less expensive than stringing fiber along streets and tying it to single-family homes through individual drops.

In addition, almost all MDUs being built now are rentals – in 2021, census data shows that only 27,000 apartments in MDUs of two units or more were made for sale. Broadband deployers generally find it easier to deal with building owners than condominium homeowner associations. Before COVID-19, about 93 percent of MDUs for which permits had been issued typically were built in the following two years. Today, that looks more like 90 percent.

Although only a quarter of all U.S. dwelling units are in multifamily buildings today, more than a third of new units are in MDUs. In the 50 largest metropolitan areas for MDUs, the figure is closer to 40 percent (see Table 1). For the country, I predict only 900,000 single-family dwellings will be built in 2022, so MDUs would be 36 percent of the total.

Last year, almost half of single-family homes were also built for rental, according to the Census Bureau and the U.S. Department of Housing and Urban Development (HUD).

Aside from the Federal Reserve's move to raise interest rates, which have almost doubled for 30-year mortgages to more than 6 percent, there are many other uncertainties. The effect of forgiving about \$200 billion in federal college loans will not begin to be felt until almost the end of 2022, as borrowers complete paperwork that has yet to be finalized at the start of October.

The issue is how much more mortgage-worthy this makes young professional families of typical home-buying age. The young families – about 20 million borrowers, so roughly 15 million – will see more money in their pockets each month, but rising interest costs have added about \$500 a month to the median mortgage bill. That, in turn, has begun to affect housing prices, which began falling in August. The Congressional Budget Office report on all this estimates (correctly, under federal accounting rules) that the total cost of the loan forgiveness program to the federal government would be \$400 to \$600 billion over 20 years. But the impact in any one year is just 5 percent of that and 0.01 percent of gross domestic product, and could be much lower if interest rates and payment plans linked to wage growth are lower than they have become this year.

Another issue is rarely mentioned, however. For 30 years, Congress has not allowed student loans to be discharged (canceled) in bankruptcy. That, in turn, has increased risk for mortgage lenders, who supposedly stand ahead of other lenders for repayment because mortgages are secured by the assets' – the homes' – values. But they lose some or all of that priority if the federal government steps ahead of the mortgage lender in bankruptcy, not only for back taxes but also for the value of the student loan balance.

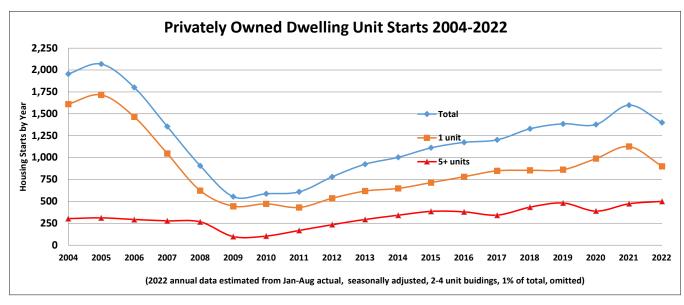


Chart 1: Construction starts for MDU buildings with at least five units plus single-family housing. Note this represents actual 2022 data through August and my estimate for the last five months in 2022. Data for 2021 and 2020 were revised from last year's report.

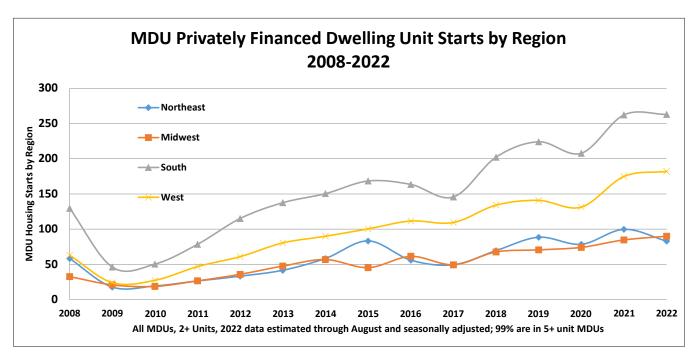


Chart 2: Regional variations in annual MDU construction. In this chart, MDUs of all sizes are aggregated; the census just began reporting MDU data by size this year, in this data series. Note that most MDU growth has been in the South and West since the recession started in 2008, but MDU volume in the West declined in 2019 before rising again.

The current loan forgiveness policy does not include graduate-student debt, which in the aggregate is much higher than undergraduate-student debt. The remaining federally guaranteed debt is \$1.5 trillion; another 20 million graduates owe. As a result of bankruptcy law, many well-paid couples and single households owing that money have high-paying jobs and

still can't qualify for mortgages.

Builders tend to have some flexibility. They typically secured loans for current construction soon after getting permits to build, which was before the current interest squeeze. They also tend not to build unless they have a healthy profit margin. But construction costs have risen about 30 percent in the past four years. That rise – in labor costs and

for materials – has canceled out the margin boost they got when wooden construction on sprinklered dwellings with no more than five inhabited floors was allowed by national building codes a decade ago.

But for MDUs, as noted, rentals are currently the primary strategy and rents (and, typically, profits) have climbed faster than general inflation.

## BANDWIDTH HAWK

NEW PRIVATELY OWNED HOUSING UNITS AUTHORIZED IN 2021										
UNADJUSTED UN	ITS FOR	REGION	S, DIVI	SIONS,	AND ST	ATES				
Consolidated Metropolitan Statistical Area (Ranked by number of units permitted, 2021)	Total	1 Unit	2 Units	3 and 4 Units	5 Units or More	Structures, 5 Units or More	Average size, 5+ units			
New York-Newark-Jersey City, NY-NJ-PA	56,661	12,947	1,522	934	41,258	1,354	30			
Austin-Round Rock-Georgetown, TX	50,907	24,486	494	285	25,642	539	48			
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	36,307	8,868	900	1,112	25,427	676	38			
Dallas-Fort Worth-Arlington, TX	78,705	51,996	836	632	25,241	518	49			
Seattle-Tacoma-Bellevue, WA	30,743	8,828	736	858	20,321	359	57			
Los Angeles-Long Beach-Anaheim, CA	31,151	11,090	1,284	510	18,267	546	33			
Miami-Fort Lauderdale-Pompano Beach, FL	25,313	8,316	266	182	16,549	280	59			
Denver-Aurora-Lakewood, CO	30,006	13,113	602	263	16,028	356	45			
Houston-The Woodlands-Sugar Land, TX	69,263	52,719	782	114	15,648	499	31			
Phoenix-Mesa-Chandler, AZ	50,581	34,347	1,066	284	14,884	598	25			
Nashville-Davidson-Murfreesboro- Franklin, TN	32,191	17,422	116	175	14,478	308	47			
Minneapolis-St. Paul-Bloomington, MN-WI	26,077	11,734	228	223	13,892	221	63			
Washington-Arlington-Alexandria, DC-VA-MD-WV	27,414	13,729	54	41	13,590	273	50			
Orlando-Kissimmee-Sanford, FL	30,618	17,795	168	201	12,454	278	45			
Boston-Cambridge-Newton, MA-NH	16,602	4,820	520	349	10,913	599	18			
Charlotte-Concord-Gastonia, NC-SC	30,126	20,830	40	70	9,186	269	34			
San Francisco-Oakland-Berkeley, CA	13,606	4,301	250	91	8,964	266	34			
San Antonio-New Braunfels, TX	22,264	13,945	140	103	8,076	314	26			
Atlanta-Sandy Springs-Alpharetta, GA	39,466	31,560	78	151	7,677	317	24			
Chicago-Naperville-Elgin, IL-IN-WI	18,511	10,071	262	733	7,445	259	29			
Raleigh-Cary, NC	21,649	14,227	38	16	7,368	138	53			
Portland-Vancouver-Hillsboro, OR-WA	15,023	8,008	180	288	6,547	169	39			
San Diego-Chula Vista-Carlsbad, CA	10,048	3,227	114	308	6,399	214	30			
Jacksonville, FL	22,738	16,536	108	221	5,873	158	37			
Salt Lake City, UT	11,642	5,338	190	263	5,851	124	47			
Tampa-St. Petersburg-Clearwater, FL	24,831	19,305	62	30	5,434	185	29			
Madison, WI	7,194	1,737	198	24	5,235	107	49			
Columbus, OH	12,062	6,844	78	84	5,056	231	22			
Colorado Springs, CO	9,335	5,074	312	24	3,925	105	37			
North Port-Sarasota-Bradenton, FL	15,924	12,106	252	62	3,504	112	31			
Kansas City, MO-KS	11,254	7,051	332	376	3,495	99	35			
Las Vegas-Henderson-Paradise, NV	16,307	12,156	138	594	3,419	187	18			
Provo-Orem, UT	11,175	7,562	102	246	3,265	234	14			
Boise City, ID	12,196	8,342	72	581	3,201	179	18			
Richmond, VA	9,547	5,946	398	49	3,154	60	53			

Consolidated Metropolitan Statistical Area (Ranked by number of units permitted, 2021)	Total	1 Unit	2 Units	3 and 4 Units	5 Units or More	Structures, 5 Units or More	Average size, 5+ units
Ogden-Clearfield, UT	7,482	4,205	12	140	3,125	109	29
Riverside-San Bernardino-Ontario, CA	15,606	11,962	300	286	3,058	230	13
Baltimore-Columbia-Towson, MD	7,834	4,783	2	4	3,045	53	57
Cincinnati, OH-KY-IN	8,429	5,358	60	120	2,891	127	23
Indianapolis-Carmel-Anderson, IN	13,451	10,159	334	78	2,880	92	31
Sacramento-Roseville-Folsom, CA	12,434	9,390	98	90	2,856	89	32
Detroit-Warren-Dearborn, MI	8,598	5,666	100	171	2,661	137	19
Omaha-Council Bluffs, NE-IA	6,382	3,677	54	63	2,588	99	26
Virginia Beach-Norfolk-Newport News, VA-NC	7,377	4,712	44	71	2,550	60	43
Reno, NV	5,337	2,717	80	68	2,472	132	19
St. Louis, MO-IL	8,326	5,716	132	43	2,435	104	23
Lakeland-Winter Haven, FL	13,071	10,591	44	19	2,417	81	30
Charleston-North Charleston, SC	8,282	5,913	16	11	2,342	95	25
Naples-Marco Island, FL	6,766	4,380	14	169	2,203	73	30
Durham-Chapel Hill, NC	5,900	3,735	28	16	2,121	42	51
San Jose-Sunnyvale-Santa Clara, CA	4,529	2,400	34	8	2,087	49	43
TOTAL – Top 50 MSAs	1,067,241	601,740	14,270	11,834	439,397	12,703	35

Table 1: Residential permits issued in 2021 to private developers in the top 50 consolidated metropolitan statistical areas (MSAs) ranked by number of MDU dwelling units permitted in 2021. In buildings of five units or more. Source: U.S. Census Bureau. BROADBAND COMMUNITIES' complete list of all MSAs with any large-building MDU activity is available for download at www.bbcmag.com/pub/doc/Hawk-MDU-Ross-Table-2\_Oct22.xlsx.

Talking to economists among builders and major rental MDU owners and operators, I found a wide range of opinions on inflation prospects. Many blame President Biden and, especially, the final COVID-19 relief bill and the infrastructure bill. But little of the government's infrastructure money has been spent or borrowed. Most major U.S. trading partners, especially in Europe, are suffering inflation at higher rates than the U.S. is, and current federal government deficits have fallen. However, the overall national debt is still rising fast.

As I said earlier this year, Biden had no right to claim credit for the recordsetting growth of 2021 and has little or no responsibility for current inflation.

An end to the Russia-Ukraine war would be the chief quick cure for inflation ills. China recovering from COVID-19 both helps and hurts - its relatively cheap exports would increase its energy consumption and thus world energy prices. The U.S. is basically energy self-sufficient but participates in the world market because of oddities in how we ship oil, how oil companies price it, and because we find it wise to help allies against Russia.

Bottom line: Nothing that happens in federal elections this November is likely to affect inflation, at least in the short term.

Most new apartments are in buildings of 20 units or more; the average building size this year in MSAs permitted in 2021 is a little more than 30 units – about the same as for the past five years. Those numbers dropped slightly, from 34 in 2017, as woodframed, partially prefabricated MDUs became more common. In Chart 1, the roughly 12,000 annual construction totals for MDUs of two, three or four units are omitted to keep data after 2017 compatible with earlier years.

New, single-family housing production is still far below its prerecession peak, but the volume of dwelling units in large MDU buildings - five units or more - has risen since 2009 with only minor pauses. MDU dwelling unit totals have been above the pre-recession peak since 2014, setting new records almost yearly.

#### U.S. HOUSING EVOLVED

New MDU construction has been the sweet spot for broadband deployments since the 1990s, specifically for fiber deployments since Verizon began its first MDU Fios build in 2005. But only about half of new construction has used fiber since the technology became widely available 15 years ago. Now that is quickly changing.

COVID-19 is the main reason. It directly brought more work, education and even health care to many households. It also got federal

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subsidies, lower-cost deployment technology, cheap financing, and a new municipal concern: resilience against future pandemics. Thus, even the leasttechnologically savvy developers have prioritized broadband since mid-2020.

Typical costs to pass an apartment door with fiber are usually less than \$1,500 and far less than \$1,000 in new construction. That allows builders to consider it even when projected full tenancy might take a year or more to achieve. The deployed network can be sold for more than \$2,000 per door these days. The peak was \$4,000 for a short time a decade ago, but revenue potential as well as deployment costs have fallen faster.

### **HOW ACCURATE ARE PROJECTIONS?**

Many unprecedented forces are at work; most are not yet settled by society. In specific locations, they could tip the balance one way or another. Thus, Broadband Communities' detailed data should only be a starting point for deployers, consultants and vendors.

I'm still struggling with one data issue of particular concern: In urban districts and inner-ring suburbs, there has been an environmentally friendly move to subdivide older, larger dwellings into multiple smaller apartments. The resulting new dwelling units in older buildings are not fully reflected in census and HUD data. Small homes are ideal for seniors, singles and young families. Most such buildings are already passed by fiber or at least good coax.

The census has begun reporting finer-grained data on MDUs with fewer than five dwelling units. I expect to have more on this next year.

There are 40,000 communities in the U.S., and only 19,000 require formal construction permits. The census inflates the numbers it collects by about 3 percent in its national reports.

In many states, significant developments are built outside city or town borders in unincorporated areas and then folded into those communities once construction is finished. Therefore, although the number of units completed nationally tends to be about 7 percent

below the number started, the number of dwelling units completed is sometimes more significant in a given location. MDU completions have grown to be successful at a higher rate in the past few years - closer to a 3 or 4 percent drop from starts.

### **OTHER ISSUES**

- **Labor shortages.** The pandemic did not slow the pace of construction much at first in 2020. Most jurisdictions that had severe lockdowns exempted most outdoor construction work. Construction labor eventually became tight in 2020, mainly because many urban areas finally restricted onsite construction work, especially indoors, as a result of COVID-19. That loosened in 2021, as the winter COVID-19 peak subsided and vaccinations took hold. But it tightened again in a few locations as the Delta variant ignited a fourth COVID-19 surge and only loosened with the so-called BA variants, which tend to be milder. The trend toward wood-frame MDUs continues to take hold. That, in turn, allows more labor to be handled in factories.
- Weather. Winter has been stormy in much of the country for the past two years. Scorching weather in the West and Northeast hindered the summer construction season this year and in 2021. Central and Eastern states experienced stormy weather, with plenty of intense tropical storms in the South.
- **Insurance.** Years of record fires and floods have made fire and flood insurance prohibitively expensive in many communities. That, in turn, makes mortgages harder to get. Until this year, the issue did not impact MDUs in Western towns bigger than rural forest enclaves. Now it often does. Insurance rates could moderate a bit next year as higher interest earnings on the "safe" investments demanded by state insurance regulators stimulate a modest push to regain market share. But the effect seems smaller than some housing economists I talked to expected.
- Own or rent? Most new MDU

- housing, as noted, is being filled by renters, not owners, even for cases in which individual mortgage financing is possible. That's good (also as noted) for broadband network deployers. It is always easier to deal with one landlord than a homeowners association or individual apartment owners. Broadband is already there when those rental buildings flip to condominium ownership. But that possibility for MDUs is likely more than a few years into the future. It may come faster for rented singlefamily homes.
- **Migration from cities.** This "trend" is overblown. Some flights from some cities are particularly congested and high-priced. But in most places, the issue is secondary. More-distant suburbs beckon families seeking more space and the appeal of only having to commute a few days a week. That puts demand on single-family homes.
- Small MDUs. The tables accompanying this article demonstrate that most small communities also go for small MDUs. There has been a long-term trend in the Northeast and Upper Midwest toward planned-unit developments (PUDs) and cluster housing. In the West and South, PUDs have always been common.
- Working space. The recent idea of providing common MDU areas for communal workspace may be a victim of COVID-19 going forward. Instead, realtors report more interest in home offices. That means apartment floor area may grow. Parking requirements are already being eased in many urban and dense suburban areas. The average floor areas belie this, however. Apartment sizes are dropping, and the median is now just a bit more than 1,000 square feet - down about 10 percent in the past three years.

### **HOUSEHOLD FORMATION**

The nation has been building or rehabilitating about 1.5 million new dwelling units annually for the past decade. Given 140 million residential units (including some nursing homes, residential hotels, vacation homes and college dorms), that's a 1 percent rate, mainly for replacing obsolete and destroyed units.

Nevertheless, population growth is almost zero as a result of 1.2 million more deaths than usual since January 2020 from COVID-19, a stressed health care system (especially nursing homes), comorbidities, and a sharp decline in legal immigration. On the other hand, household formation, though slowing, remains stable. Many COVID-19 deaths were among the elderly, often living in group homes or multigenerational households. Tragic, of course, but unlikely to vastly reduce overall household formation.

Moreover, there is a vast reservoir of qualified potential buyers. Census surveys as late as 2020 show that more than half of all adults aged 18 to 29 live with parents or guardians – the highest percentage in almost 75 years. Some increase that year may be a result of college students sent home from dormitories and off-campus housing by the census date – April 1, 2020 – as campuses closed, but that accounts for at most two percentage points of the increase.

The naturalization of legal resident immigrants until a few years ago was close to 1 million per year. In 2019, that fell to 800,000. In 2020, it was 600,000. True, the Trump administration delayed citizenship ceremonies during its years in office, and that backlog has partly cleared – 809,000 were naturalized in the fiscal year ending September 30, 2021. But whether these immigrants are citizens or legal aliens with work permits, they are already here. However, citizenship brings higher credit scores and more excellent mortgage worthiness for already legal residents.

Although the bulk of new construction is aimed at the current rental market, construction quality and design features often anticipate eventual conversion to condominiums. Typical units, even in MDUs meant for today's college dorm market, are one or two bedrooms.

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MDUs, as one might expect, tend to have fewer units per structure in rural areas and are garden apartments. Indeed, in rural population centers of fewer than 50,000 people, garden and dwelling-above-store apartments are not uncommon and are easy to wire, providing broadband as long as the community is well connected to the outside world.

Nonresidential MDUs – hotels, hospitals and dormitories – are more common in the South, as are retirement communities in rural areas, even though rural populations have declined more in the South than elsewhere since 2010. The South has more counties than any other region where retirement or vacation housing is the dominant economic activity.

Small regional and local broadband carriers move quickly to take advantage of opportunities presented by new residential construction.

Local carriers do not usually need the census to tell them what is happening in their communities. National property owners and managers must strengthen connections to local carriers to seize opportunities.

More than half of all new MDUs are being built in the South (see Chart 2), but more than 300 metropolitan statistical areas (MSAs) saw construction permitting one MDU with at least five units last year. (MSAs have at least one urbanized area with a minimum population of 50,000.)

The Census Bureau does not report detailed data at the city level for housing starts but does report it for permits issued. It also reports regional data less entirely than it does national data.

As researcher Michael Render of RVA reports consistently in his market

surveys, broadband is the most soughtafter amenity among renters and
prospective buyers. Render says almost
60 percent of residents work from home
occasionally. Still, it was unclear from
census data how many households or
occupied dwelling units have residents
working *only* from home. Do both
members of a family tend to work at
home? Only one? Is the pattern different
for couples than young workers sharing
living space to split the rent? Is the job
part-time or full-time? Now we know,
thanks to COVID-19. Anyone who
could work from home did.

Render also says that pre-COVID-19, one-fifth of all families ran a business from home – up from just 9 percent in 2010 (12 percent of residents with fiber connections in 2010). Is the home business a small added income or a significant part of family income? With the pandemic, it may be the only source of family income.

The best advice is for existing MDU owners and managers to survey the needs of their tenants and prospective tenants. �

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