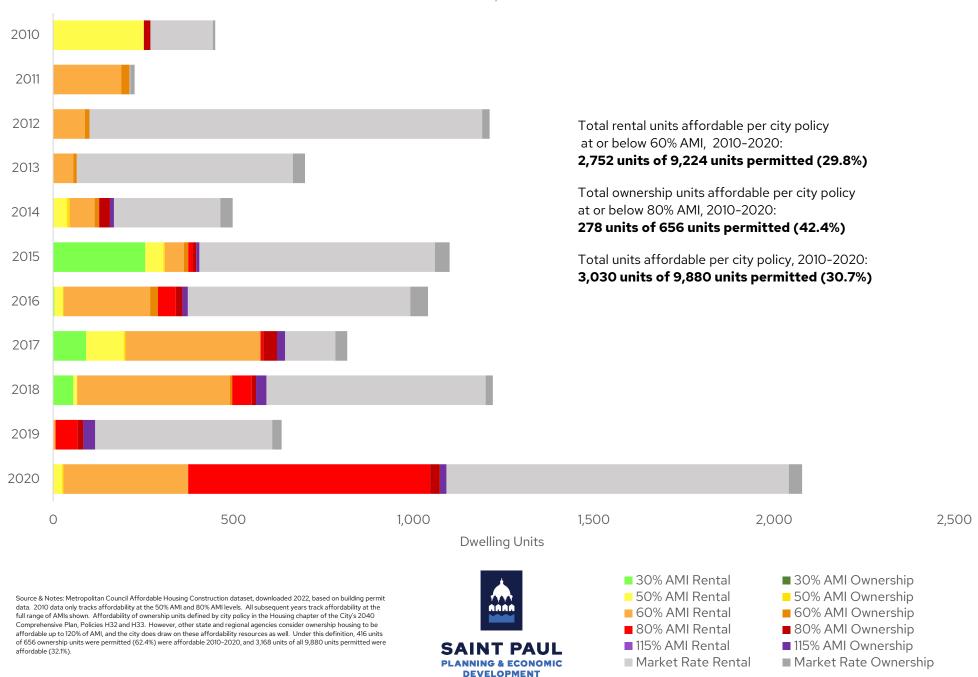
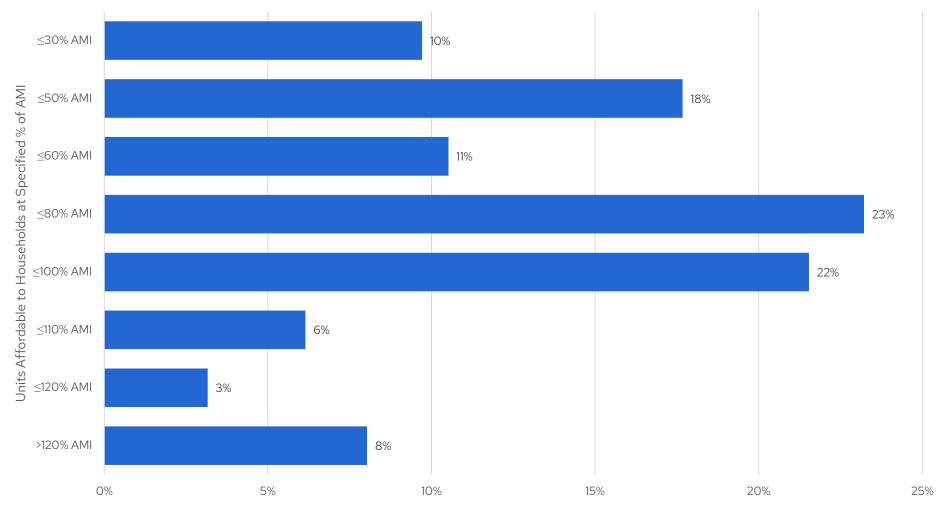
Housing Construction and Publicly Subsidized Affordability, 2010-2020

June 17th, 2023



New Housing 2010-2020 by Affordability of Unit

Among Occupied Housing Untis Constructed 2010-2020 • Valid for understanding generalized trends only • June 19th, 2023



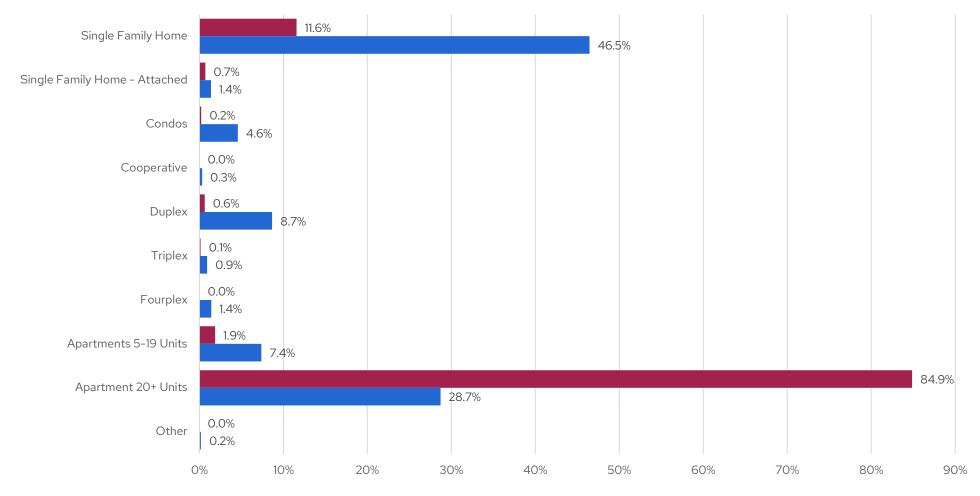
Percentage of Units in Category

Data source and methodology: As noted in subtitle, this data is only sufficiently accurate to paint a very general portrait of housing affordability, given limitations of microdata samples and inherent margins of error in the survey data source. Monthly gross rent data derived from US Census Bureau American Community Survey (ACS) 2017-20215-year dataset as queried through IPUMS-USA. Steven Ruggles, Sarah Flood, Matthew Sobek, Danika Brockman, Grace Cooper, Stephanie Richards, and Megan Schouweiler. IPUMS USA: Version 13.0 ACS 2017-20215-year. Minneapolis, MN: IPUMS, 2023. https://doi.org/10.18128/D010.V13.0. Microdata sample only includes occupied units, and units not reporting any gross rent data were omitted from this analysis. Housing dates utilize IPUMS/ACS age of housing datapoint. American Community Survey rent data compared to HUD Maximum Gross Rents - Data for 2021, as collated annually by the City of Saint Paul in internal document "Income Limits and Maximum Gross Rents - City of Saint Paul, MN" (2021). Analysis utilizes HUD-derived industry norms for analyzing typical household size and affordability: studio apartment affordability assumes 1 person household; 1 bedroom apartment affordability assumes 5 person household, 3 bedroom affordability assumes 5 person household.



Units by Housing Type

Among Units Constructed 2010-2020 vs Overall Housing Stock • June 17th, 2023



Percentage of Units in Category

Data source and methodology: Analysis utilized Ramsey County GIS Parcel Geodatabase was utilized as downloaded from Minnesota Geospatial Commons. "DwellingType" attribute was utilized and reclassified into the simplified categories shown above. Congregate-type uses (assisted living facilities and nursing homes) as well as vacant parcels that contradictorily still showed housing units were excluded. The "Other" category is a representation of the Dwelling Type of "Single Family w/ Accessory Unit", which seems likely not to fully correspond to the definition of an "Accessory Dwelling Unit" in city code, and was therefore left labeled as "Other" to avoid confusion between competing government definitions of this type of housing.

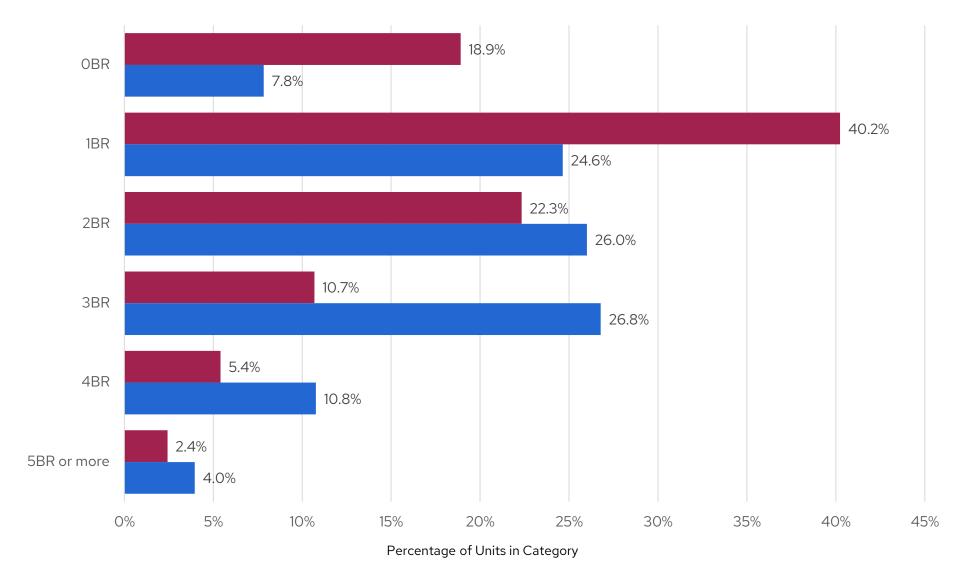


■ Units Constructed 2010-2020

Overall Housing Stock

Unit Bedroom Size Mix

Among Units Constructed 2010-2020 vs Overall Housing Stock • June 17th, 2023



Data source and methodology: For parcels with 1 to 3 living units, Ramsey County GIS Parcel Geodatabase was utilized as downloaded from Minnesota Geospatial Commons. For parcels with 2 to 3 units, only a total number of bedrooms on parcel is available in County data structure, not a per-unit allocation of bedrooms, so bedrooms had to be modeled by allocating across living units listed on parcel using an appropriate methodology to model unknowable data. Each combination of unit bedroom combinations was identified given known parameters, and then each combination proportionally represented in manual allocations, using 0 to 5BR allocations, per unit as appropriate. 9.6% of the total units in the city were on these parcels with 2 to 3 units, meaning at most 9.6% of units were misallocated, and in the real world assuredly far less than that, bringing this roughly to a tolerable margin of error. For parcels with 4 or more living units, a custom query of Ramsey County's CAMA system was utilized by Ramsey County Assessor's office staff on behalf of the City of Saint Paul. YearBuilt in County GIS Parcel Database used to delineate the 2010-2020 construction period.



■ Units Constructed 2010-2020

■ Overall Housing Stock

Market Rate and Publicly-Subsidized Affordable New Dwelling Unit Starts, 2010-2020

Symbolized by number of new units and predominant type of units in building • Wednesday, June 21, 2023 v2

