



NORTH DAKOTA
housing
FINANCE AGENCY

NDSU | NORTH DAKOTA STATE UNIVERSITY

2022 NORTH DAKOTA STATEWIDE HOUSING NEEDS ASSESSMENT

Nancy Hodur
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North Dakota Housing Finance Agency Advisory Board

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Stakeholders

North Dakota Department of Commerce * North Dakota Department of Human Services * USDA Rural Development * North Dakota Department of Health * North Dakota Department of Public Instruction * North Dakota Office of the State Tax Commissioner * North Dakota Department of Corrections and Rehabilitation * North Dakota State Hospital * North Dakota League of Cities * North Dakota Association of Counties * North Dakota Planning Association * North Dakota Continuum of Care * North Dakota Association of REALTORS® * North Dakota Apartment Association * North Dakota Association of Home Builders * AARP North Dakota * North Dakota Long Term Care Association * Community Action Partnership of North Dakota * Greater North Dakota Chamber * Bismarck-Mandan Board of REALTORS® * Badlands Board of REALTORS® * Jamestown Board of REALTORS® * Minot Board of REALTORS® * Fargo-Moorhead Area Association of REALTORS® * Williston Board of REALTORS® * Grand Forks Area Association of REALTORS®

MUCH MORE INFORMATION IN THE FULL REPORT

Full Report

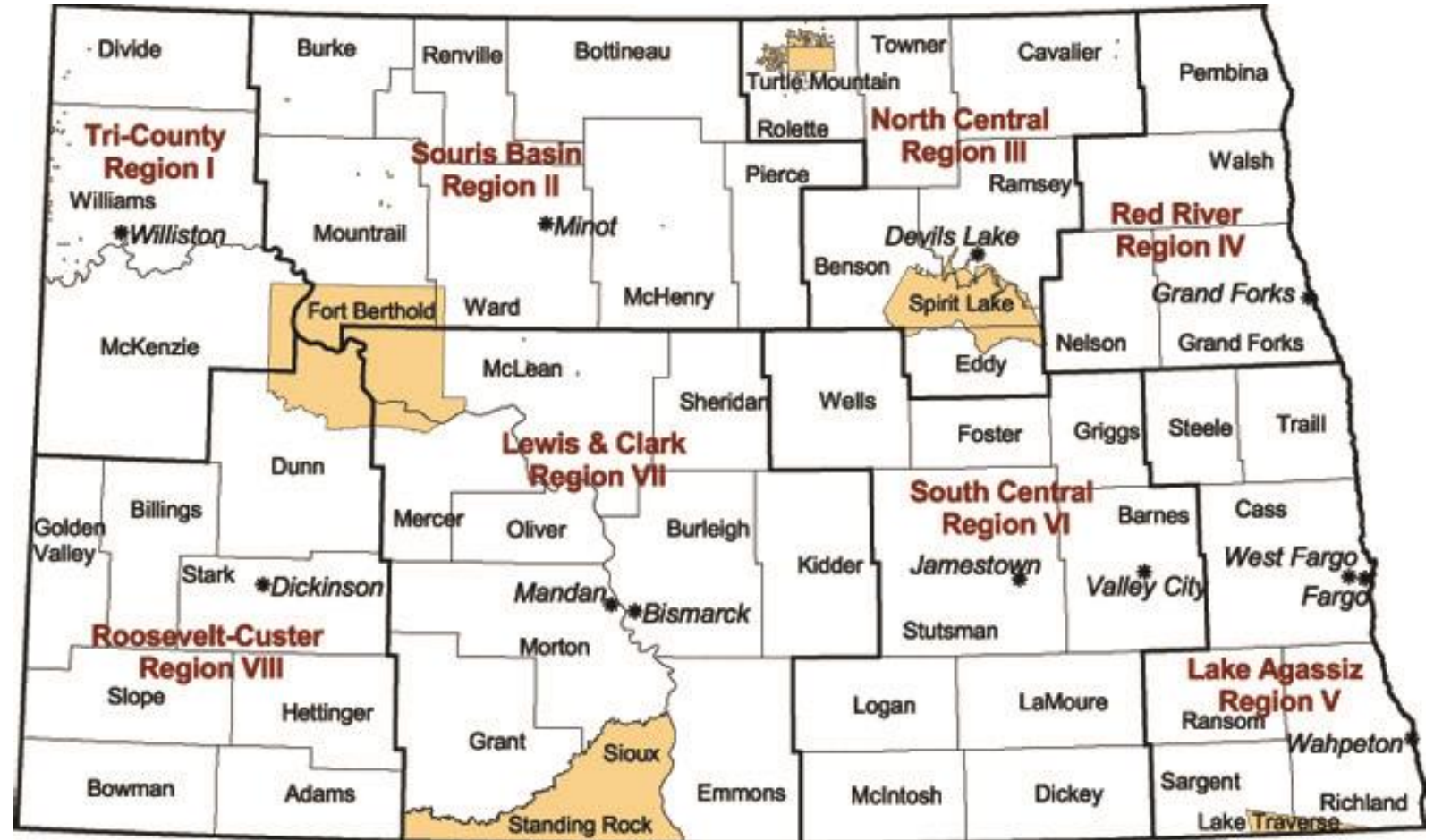
- Data and information on recent trends and current conditions on a wide range of demographic, socio-economic, and housing indicators
- Persons with disabilities
- Poverty
- Homelessness
- Housing profiles for counties, planning regions, 12 largest cities, and reservations
- **Much, much more!**

This Presentation

- Key Demographic Trends
- Population and Housing Need Projections
- Market Conditions
- Housing Prices
- Rent and Income Restricted Multifamily Housing
- Discussion and Conclusions

GEOGRAPHIES

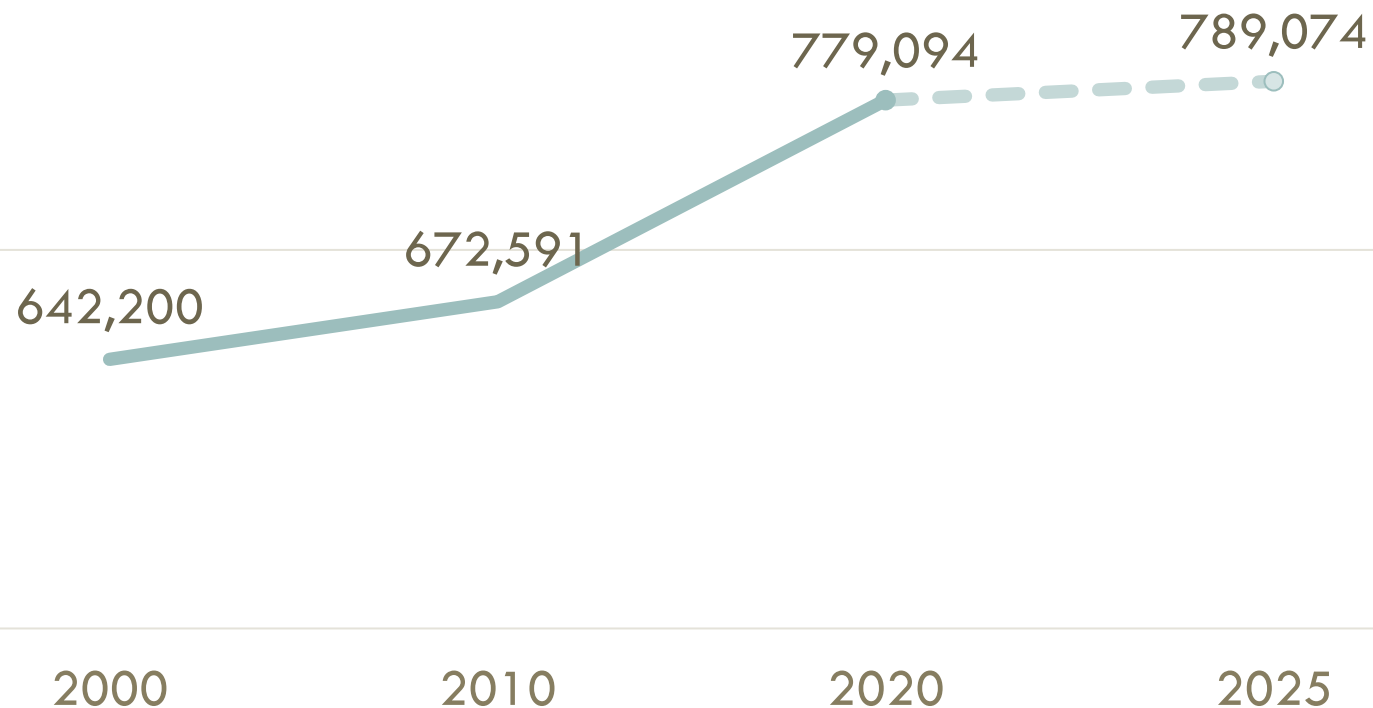
- 8 Planning Regions
- 53 Counties
- 12 Largest Cities
- 4 Reservations



RECENT TRENDS AND CURRENT CONDITIONS

Population and
Economy

STATE POPULATION, 2000-2010 AND 2025 PROJECTIONS

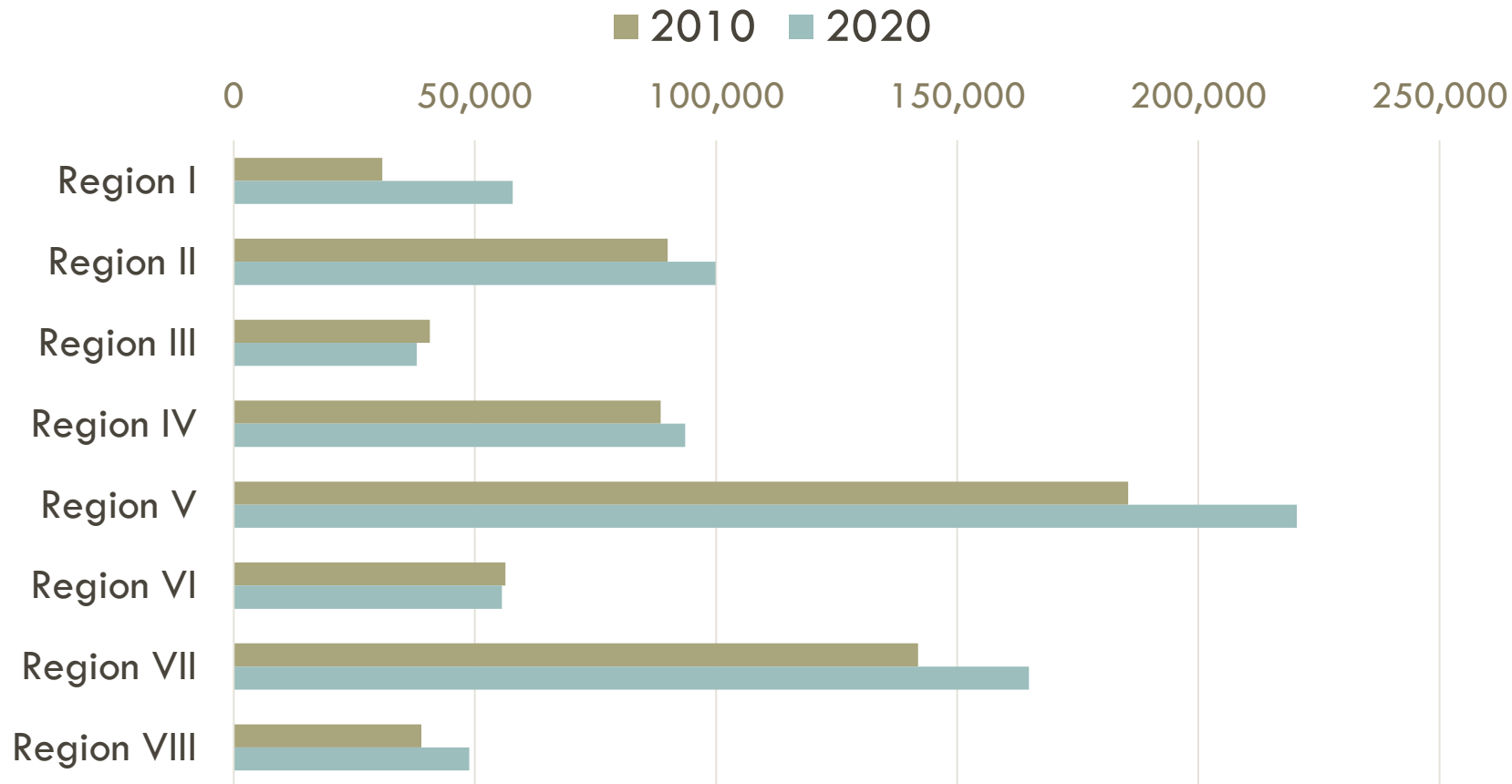


Source: U.S. Census Bureau (2021a)

- After dramatic increase in population in the past decade, population growth is projected, but at a much more moderate rate.
- Will talk more about population projections later.

REGIONAL POPULATION CHANGE

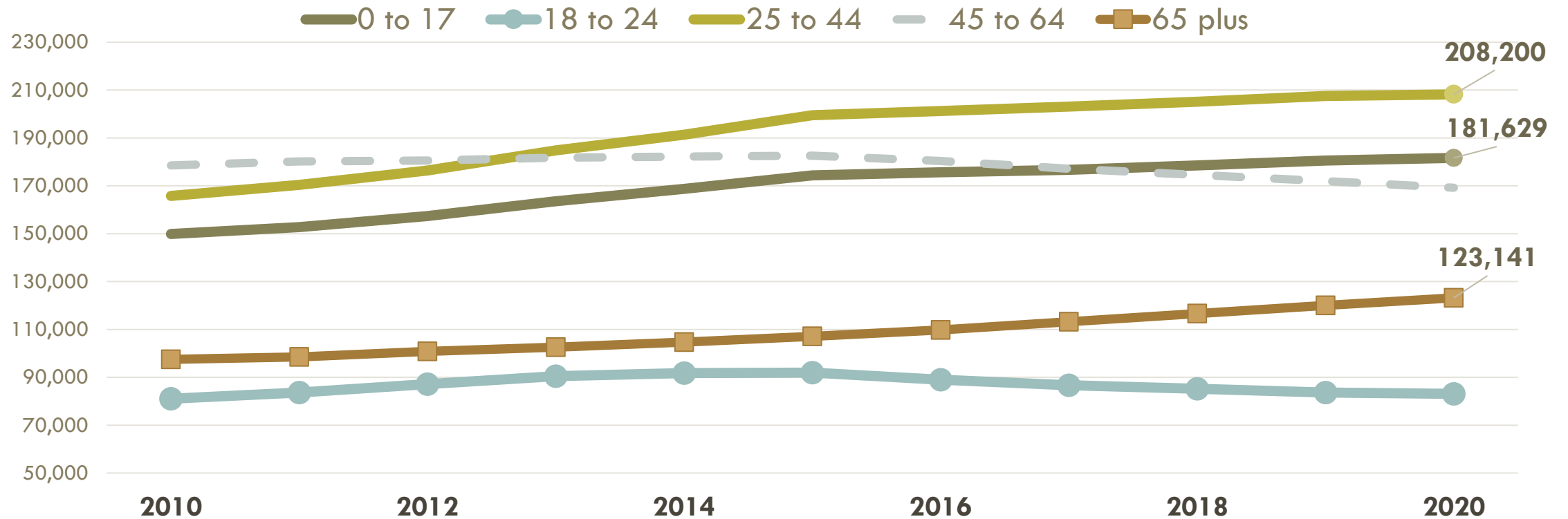
2010 TO 2020 CENSUS



- Population increased for most regions from 2010 to 2020
- Exceptions were Regions III and VI that experienced slight declines

Source: Center for Social Research (2022b)

STATE POPULATION BY AGE

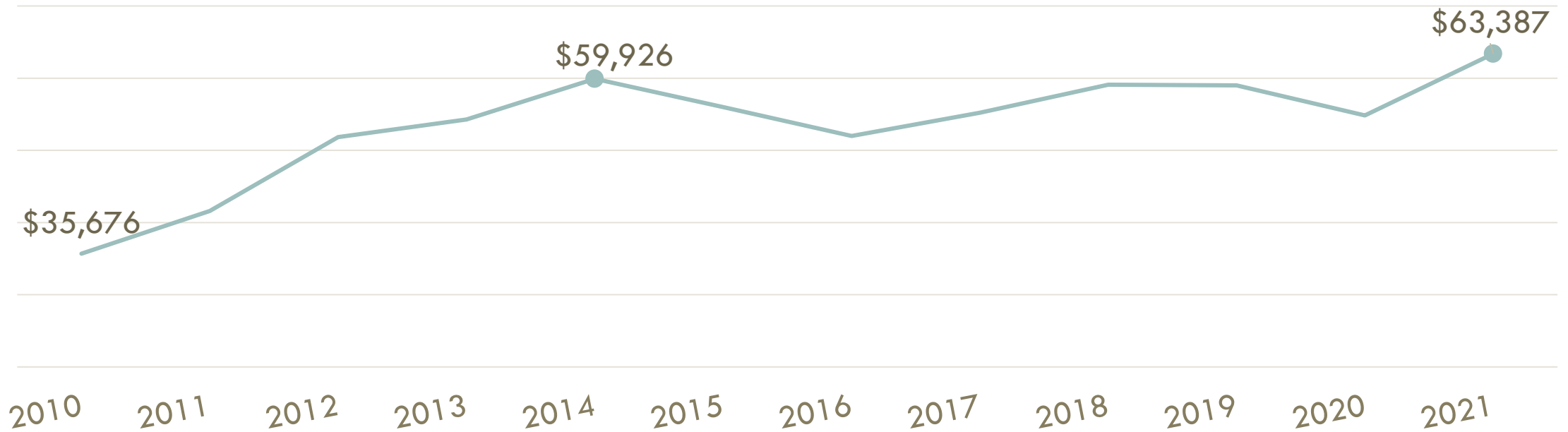


Source: U.S. Census Bureau (2021 a)

- After 2010, children under 18, adults ages 25-44, and adults 65 and older grew to their largest sizes.
- Age groups 18-24 and 45-64 decreased in size since 2010

GROSS STATE PRODUCT IN NORTH DAKOTA

Millions of Current Dollars

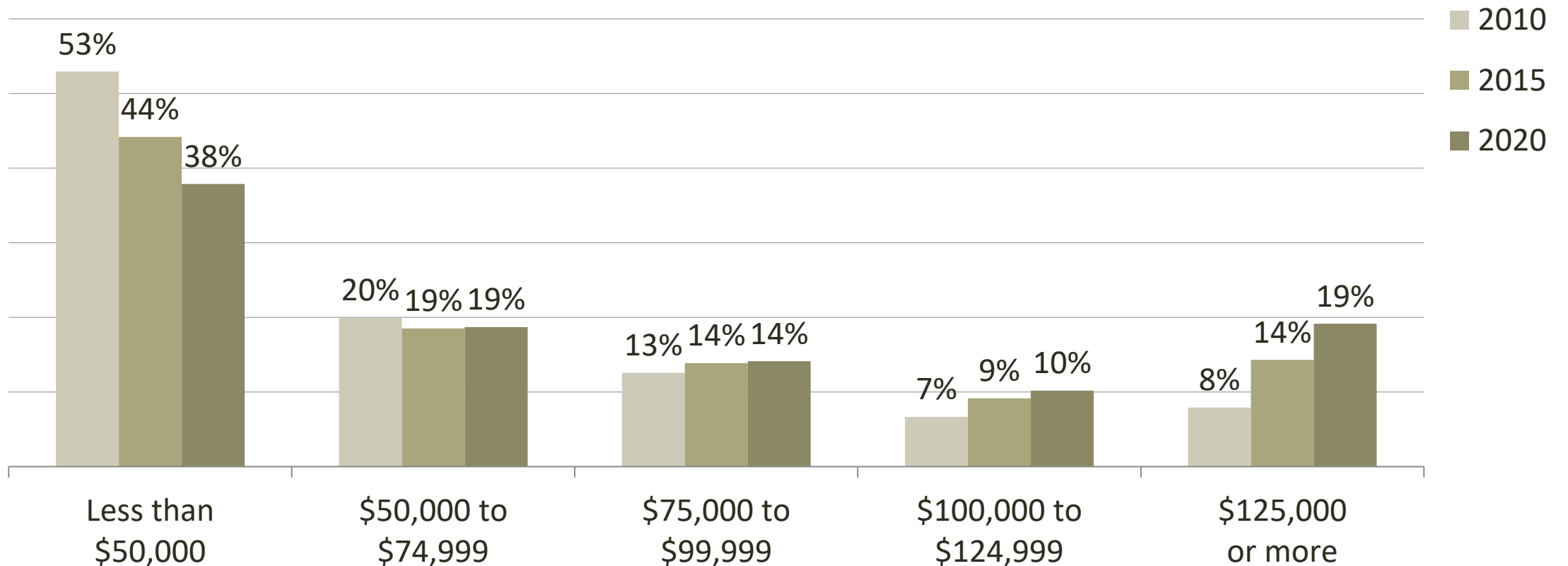


Source: U.S. Bureau of Economic Analysis

- Like population, overall increase in GSP (measure of state's economy) was substantial from 2010 to 2020
- After two dips (2016 recession, 2020 COVID-19 pandemic lockdown and restrictions), GSP is at its highest point

HOUSEHOLD INCOME IN NORTH DAKOTA

North Dakota Households by Household Income Level,
2010, 2015, and 2020



TAKEAWAY: RECENT TRENDS AND CURRENT CONDITIONS

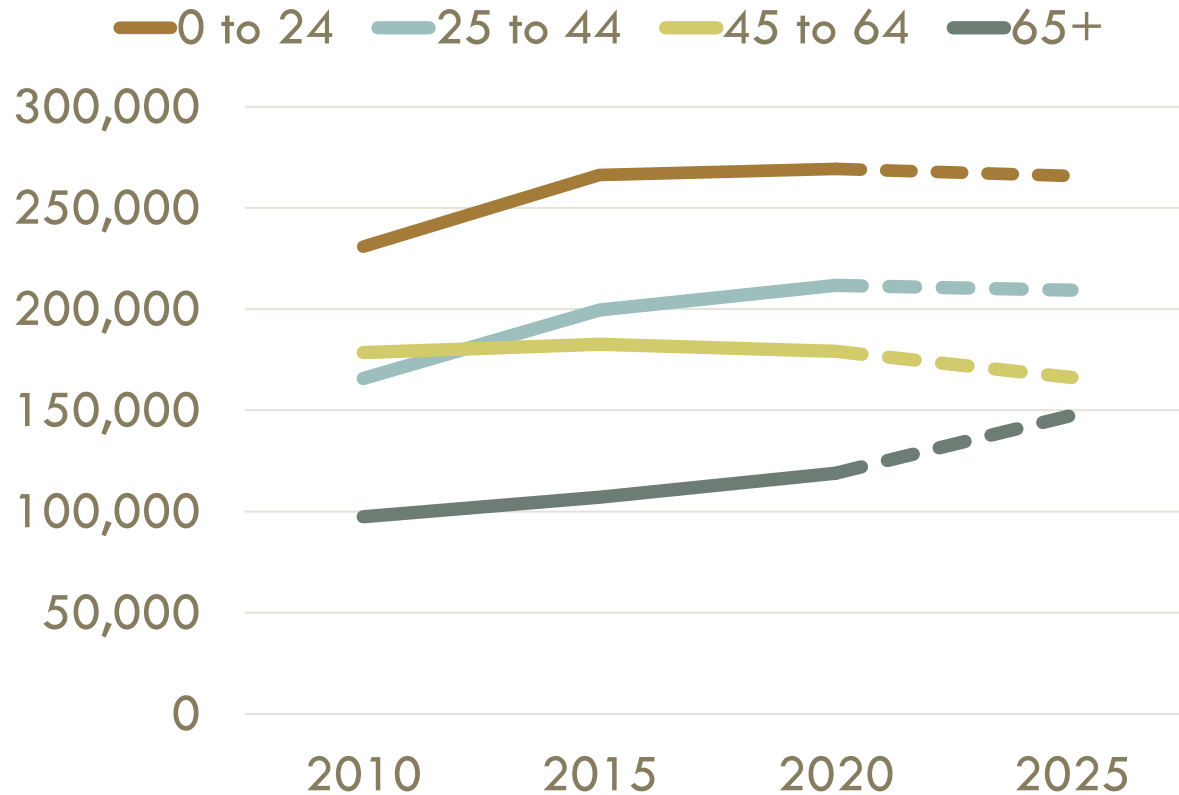
- Population growth has moderated in the second half of the past decade.
- The most striking change in population growth is the continued increase in the baby boom cohort and that trend is consistent regionally across the state.
- A strong economy fueled a substantial increase in gross state product and household income, however that did not translate into an increase in household income across all income categories.
- Little change in middle income brackets.

PROJECTIONS

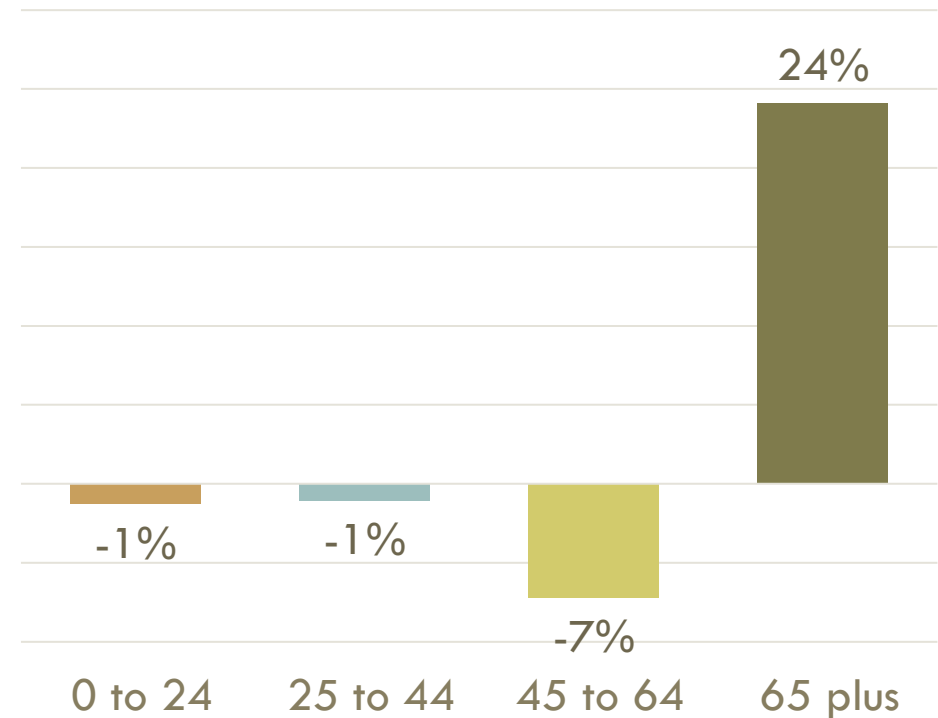
Population, household characteristics, and housing needs

TOTAL STATE POPULATION BY AGE

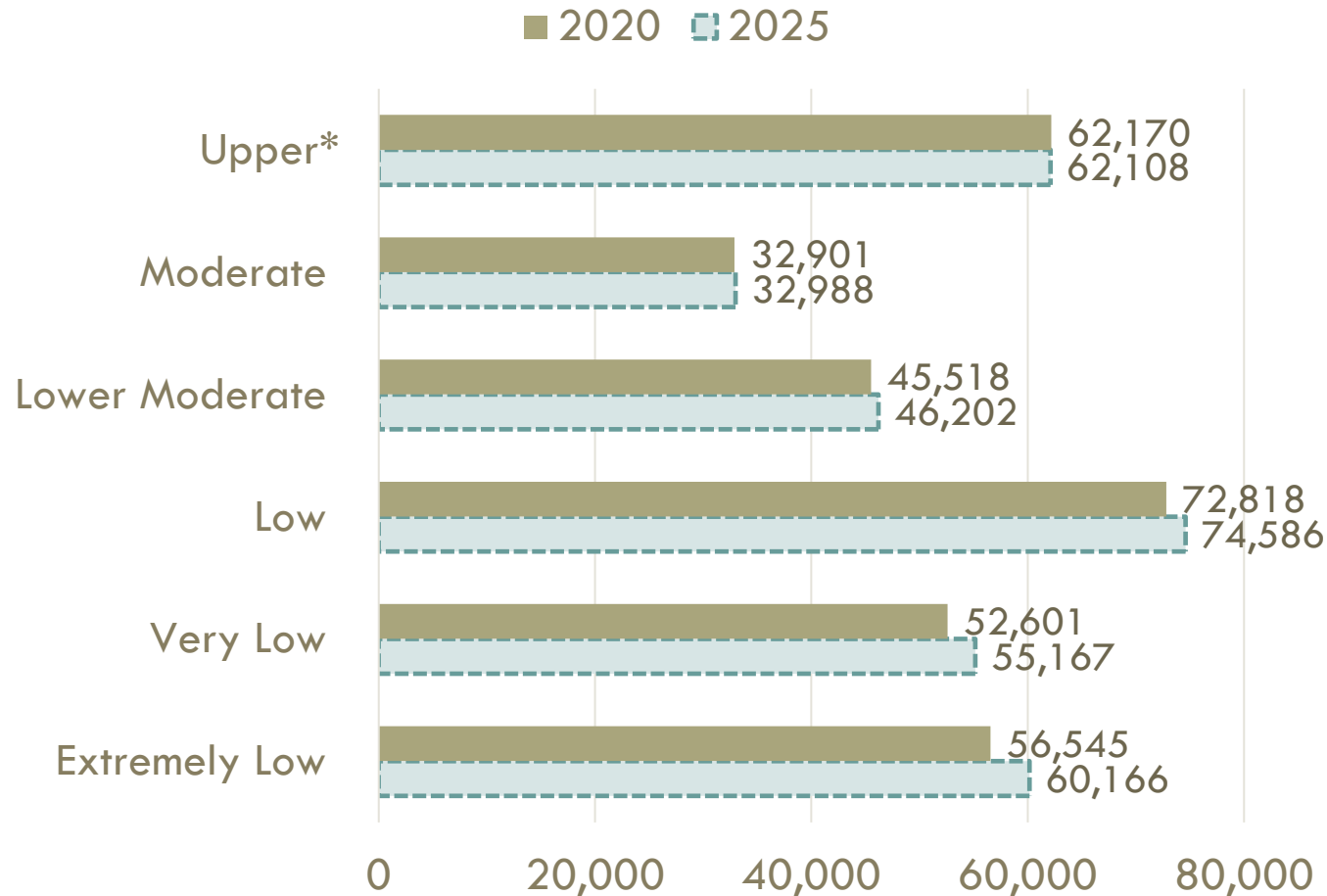
2010-2020, 2025 PROJECTION — AND PERCENT CHANGE FROM 2020 TO 2025



Change: 2020 to 2025



PROJECTED CHANGE IN HOUSEHOLDS BY INCOME



- Higher income households are expected to hold steady
- Lower income households are expected to increase by 2025

Household Income	% Change 2020 - 2025
Extremely Low (less than) \$26,070)	6.4%
Very Low (\$26,070-\$43,450)	4.9%
Low (\$43,451-\$69,520)	2.4%
Lower Moderate (\$69,521-99,935)	1.5%
Moderate (\$99,936-\$121,660)	0.3%
Upper (greater than \$121,661)	-0.1%

Source: Center for Social Research (2022b)

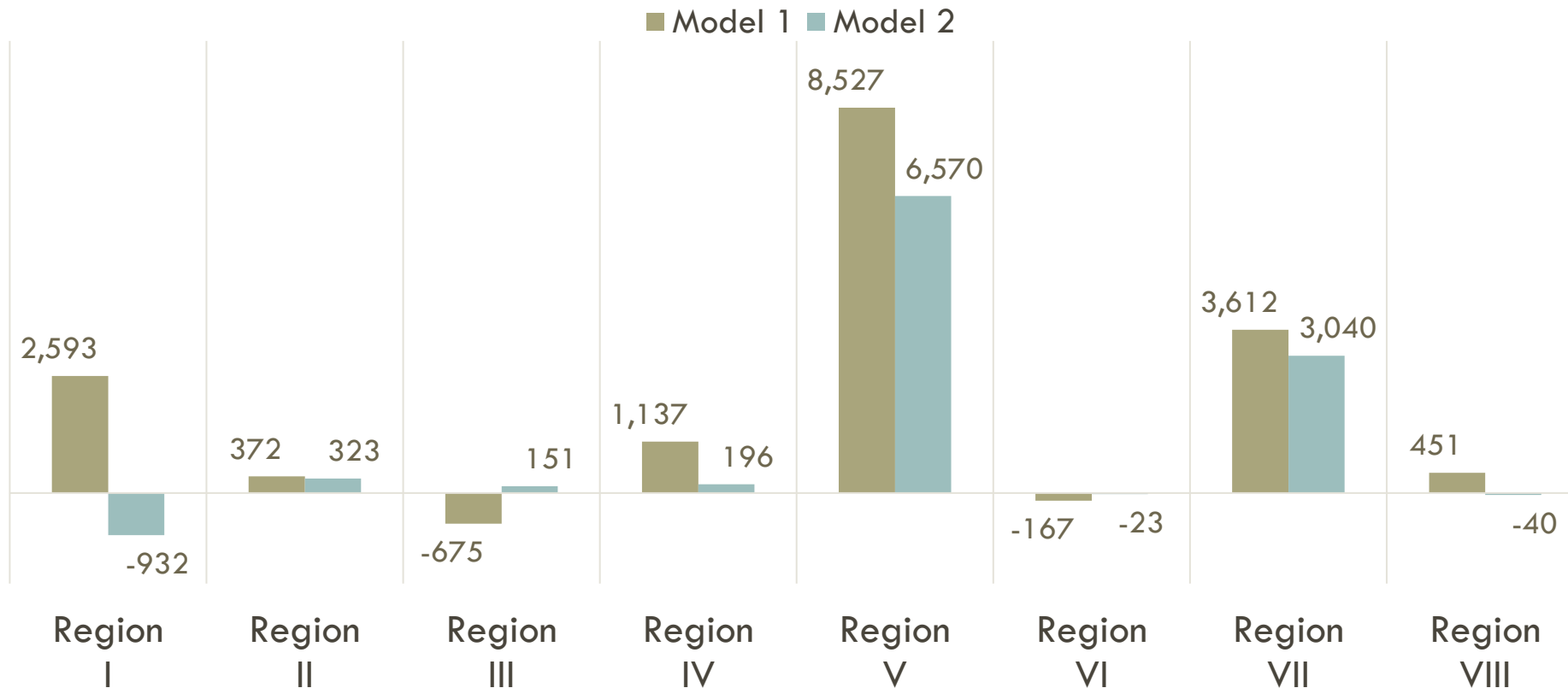
HOUSING NEEDS MODEL ASSUMPTIONS

- Project population with a standard cohort model.
- Apply historic distributions of various householder characteristics (age, income, tenure) to population projections to project characteristics of future householders.
- Historic relationship between households (also referred to as occupied housing), and total number of housing units was used to project future housing needs.
- Assumptions:
 - Historic trends will remain stable over the study period.
 - The current inventory of housing is adequate (neither surplus or shortage) and meets housing needs.
 - Model does not take into consideration consumer preferences nor potential changes in population or housing needs based on potential changes in demographic or economic conditions.

2025 HOUSING PROJECTIONS

Model 1: New housing units by 2025 if current building trends continue

Model 2: New housing needed by 2025 based on population projections



Population projections would suggest more moderate housing needs compared to recent building trends.

Projected housing needs 9,285 housing units.

10,280 if you don't net out the negative numbers.

The negative numbers in some regions suggest current inventory and housing needs fairly well aligned.

TAKEAWAY: PROJECTIONS

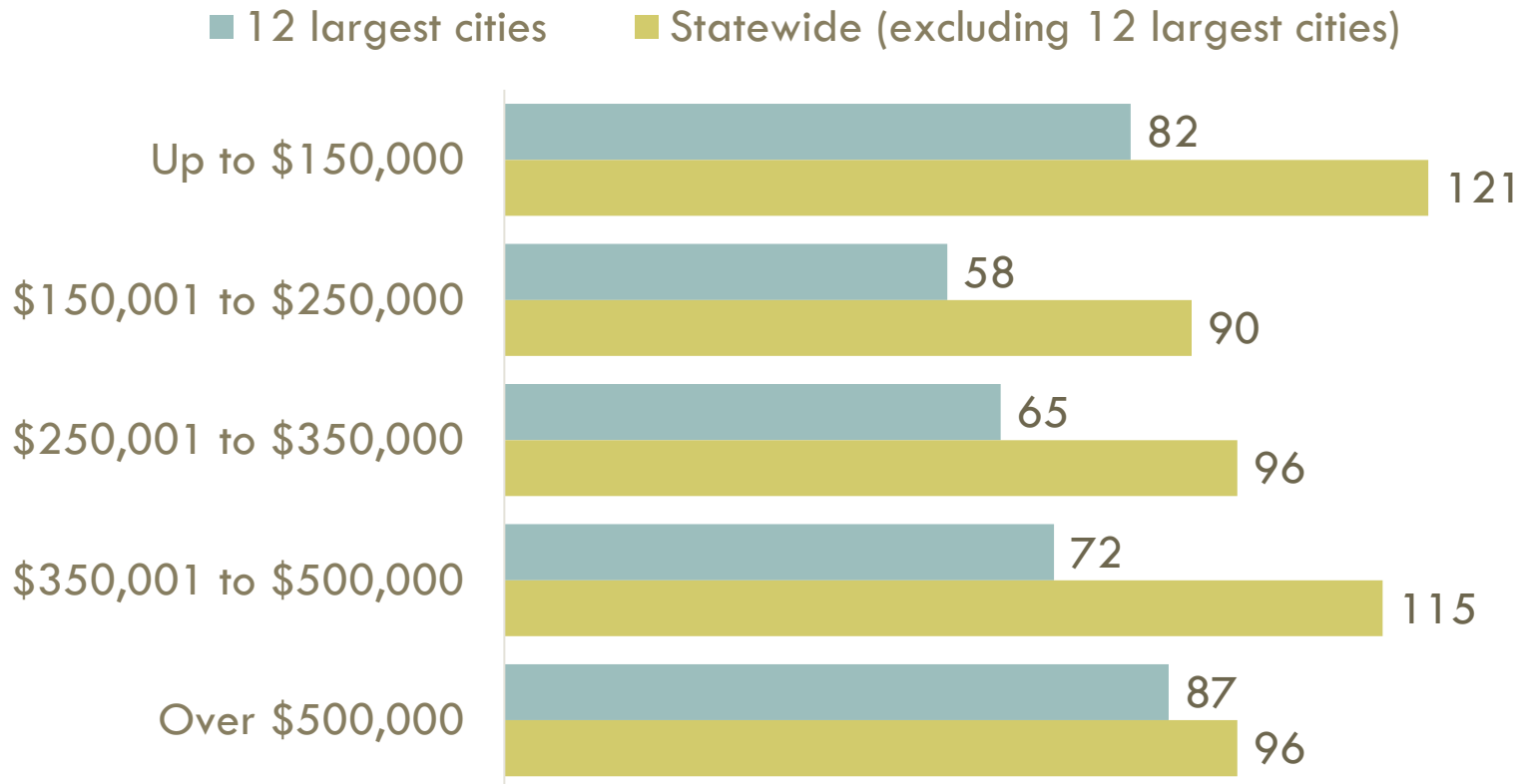
- Aging baby boomers will be a significant demographic driver of housing needs.
- Projections suggest an increase in the number of lower income households which suggests the need for affordable housing to meet needs of lower income households and seniors.
- Projections suggest more modest housing needs than recent building trend.
- Projections suggest current inventory of housing and future housing needs are reasonably well aligned.
- However, need to keep in mind how the model works.
- Model is based on housing “need” based on population characteristic, projected changes in population and gross housing numbers
- The model does not take into consideration market conditions or characteristics of the existing housing inventory.
- Future needs are based on historic relationships, and those relationships are assumed to be in equilibrium and constant.
- Model is not scenario driven.

MARKET CONDITIONS

Multiple Listing Services of North
Dakota Data

MARKET CONDITIONS

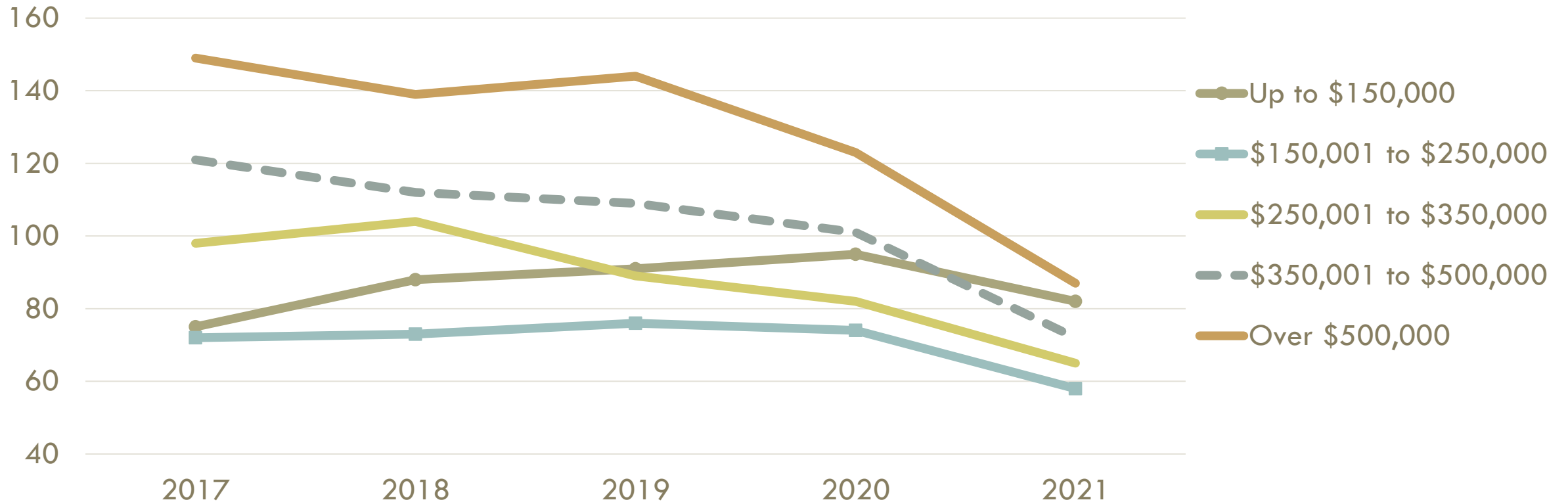
AVERAGE DAYS ON MARKET, 2021



- Rural residential homes spend more days on market, on average than urban area homes
- Lower-mid-priced residential homes (\$150,001 to \$250,000) spend the least amount of time on market, even in rural markets

DAYS ON MARKET — URBAN AREAS IN ND

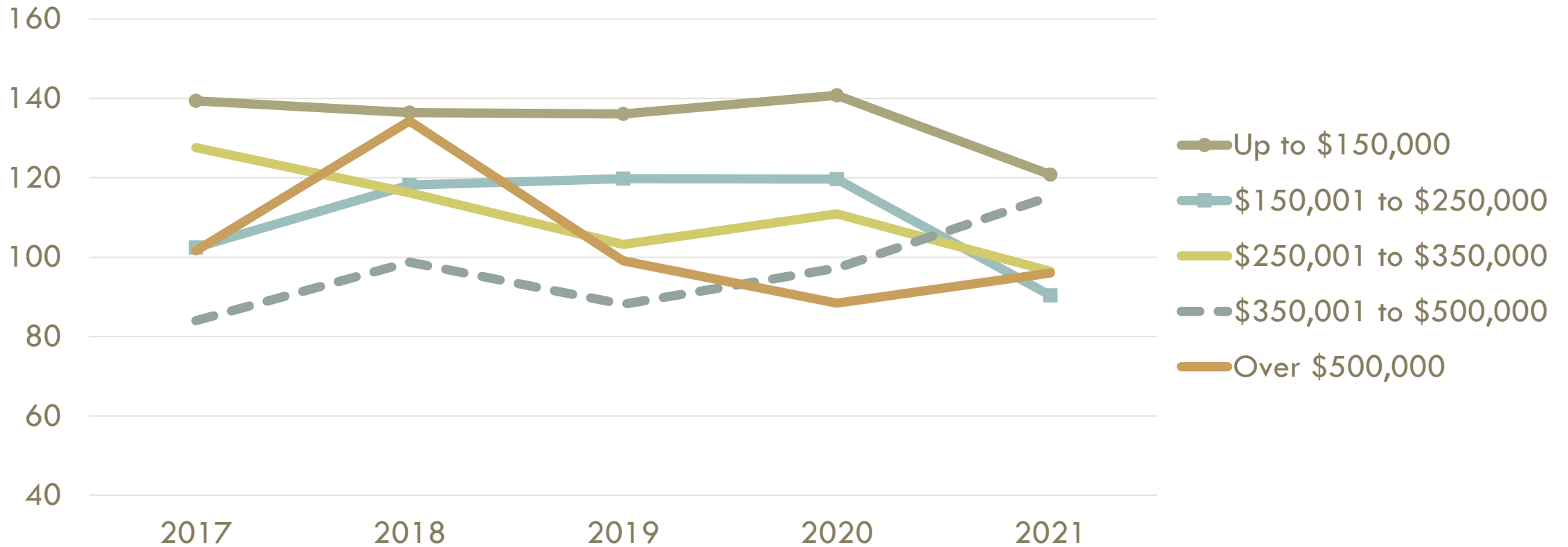
Average Number of Days on Market for Residential Homes Sold, 12 Largest Cities in North Dakota, 2017 to 2021



Source: Multiple Listing Services of North Dakota (2022)

DAYS ON MARKET — RURAL AREAS IN ND

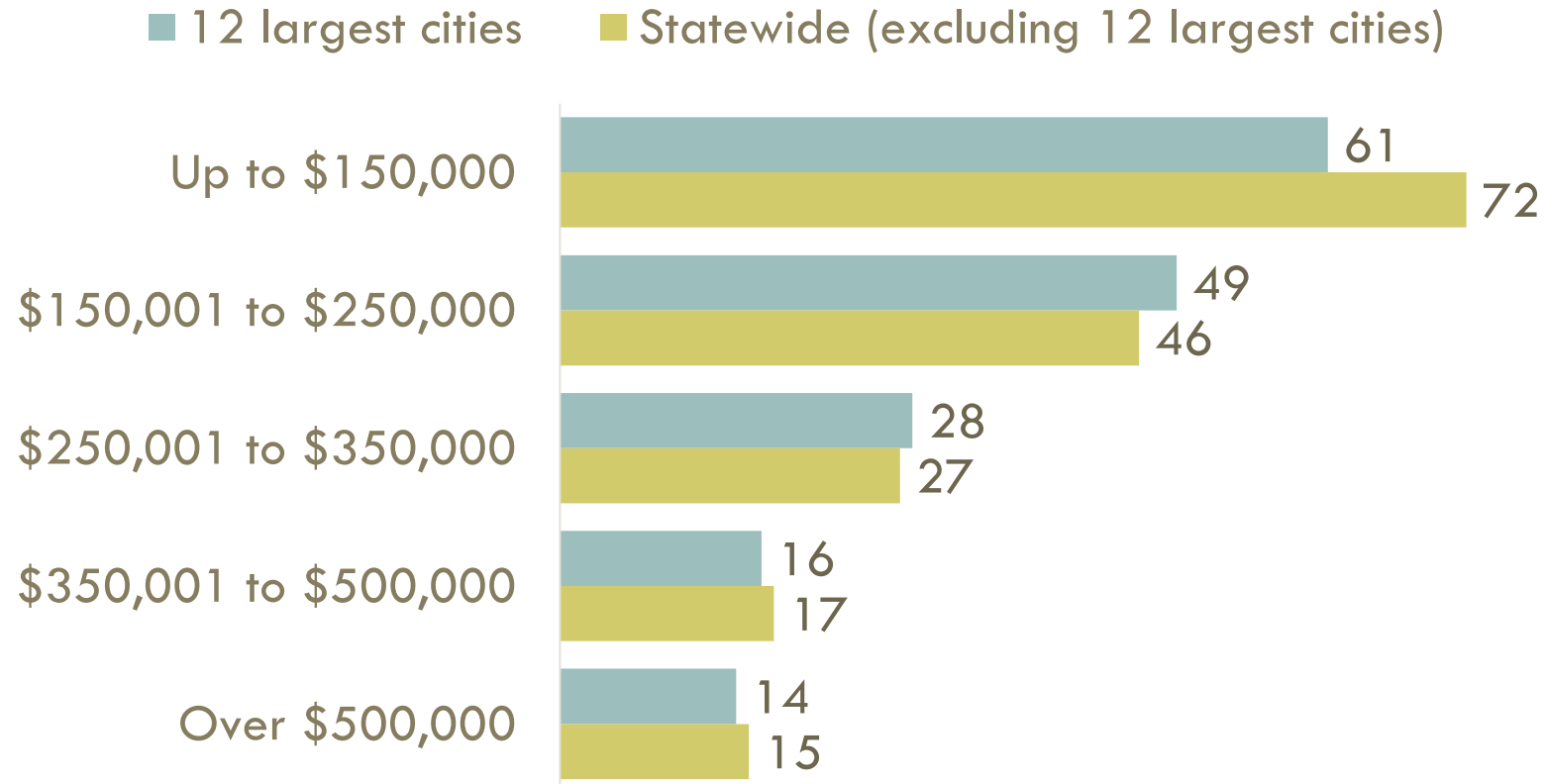
Average Number of Days on Market for Residential Homes Sold in North Dakota, Excluding the 12 Largest Cities, 2017 to 2021



Source: Multiple Listing Services of North Dakota (2022)

MARKET CONDITIONS

AVERAGE AGE AT LISTING, 2021



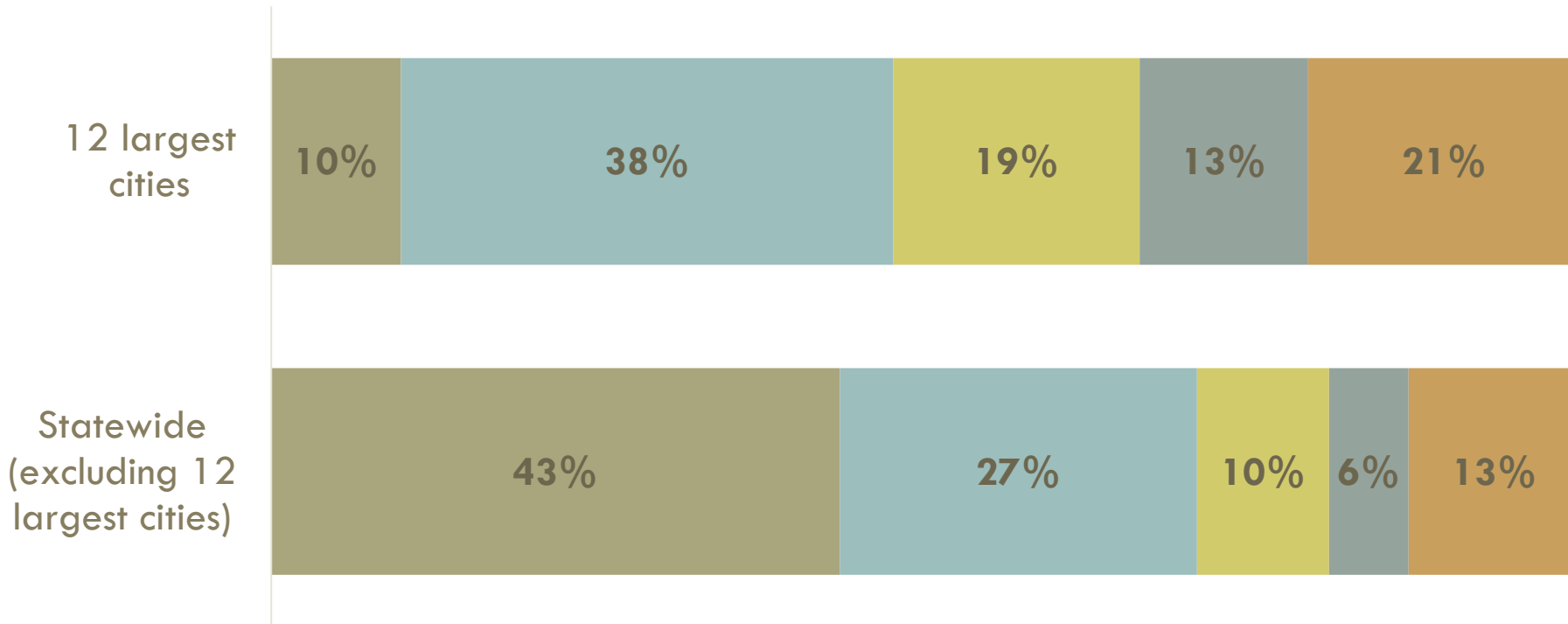
The lower the housing price, the higher the average age of homes sold.

More pronounced in rural areas.

Housing under \$150,000 on average 10 years older in rural ND

MARKET CONDITIONS

AVERAGE PRICE PER SQUARE FOOT, NEW AND EXISTING HOUSING, 2021

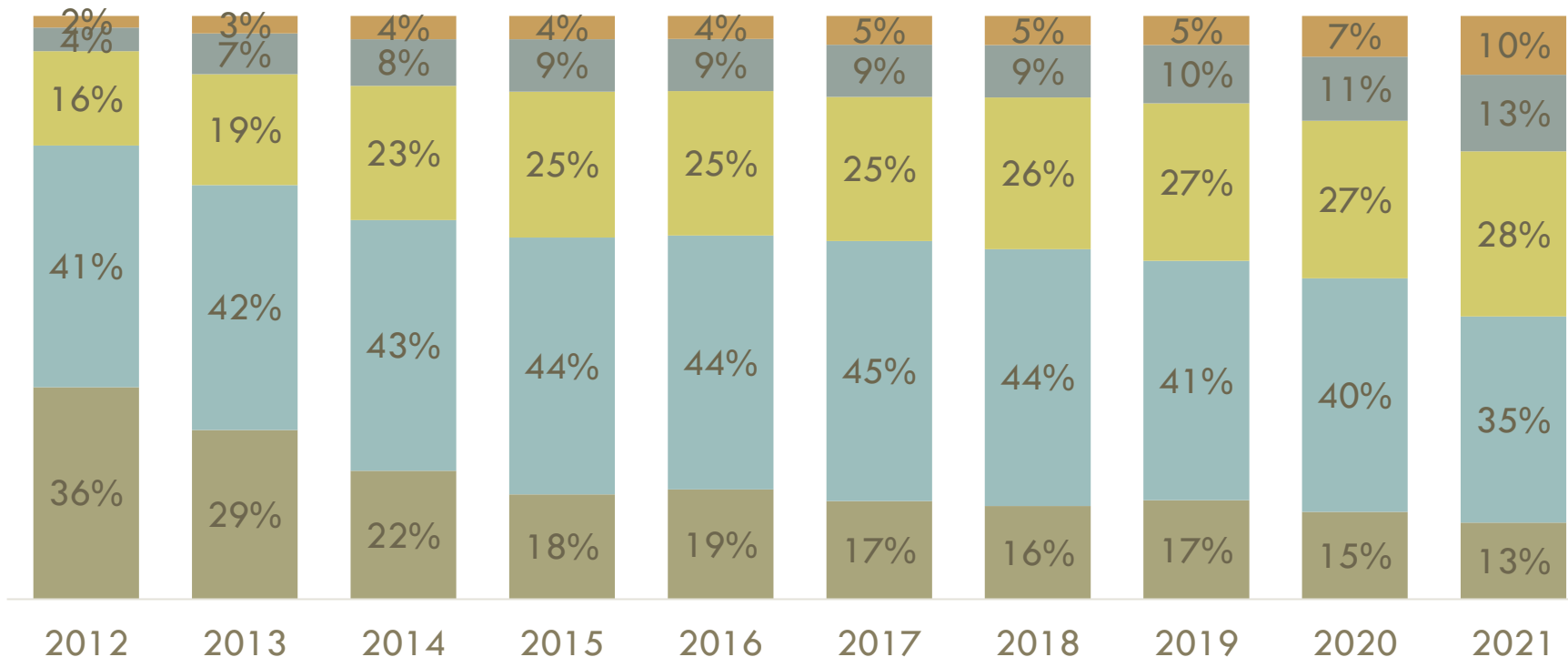


- In rural areas, 70% of homes were sold for \$150/sq ft or less
- In the urban areas, only 48 % of homes were sold for \$150/sq ft or less
- 53% housing sold for more than \$150/sq ft in urban cities compared to only 29% in rural areas

MARKET CONDITIONS

HOMES SOLD BY PRICE, 12 LARGEST CITIES

Up to \$150,000
 \$150,001 to \$250,000
 \$250,001 to \$350,000
 \$350,001 to \$500,000
 Over \$500,000

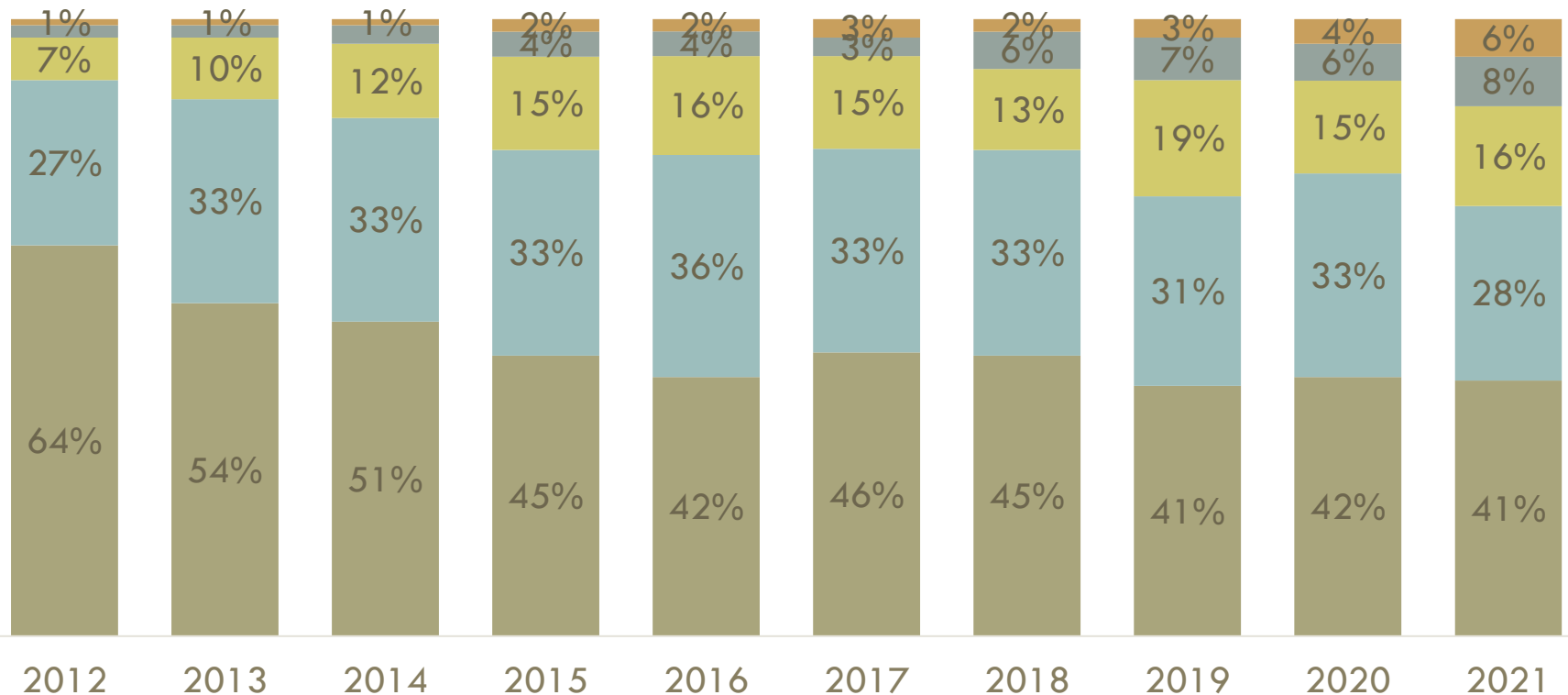


In North Dakota's 12 largest cities, in 2012, just 2% of homes sold for over \$500,000 compared to 10% in 2021.

By contrast, 36% of homes sold for less than \$150,000 in 2012 compared to 13% in 2021.

MARKET CONDITIONS

HOMES SOLD BY PRICE, RURAL NORTH DAKOTA



In rural areas, 64% of homes sold for \$150,000 or less in 2012, compared to 41% in 2021

Trends overall were similar in rural ND as urban, although not as pronounced, especially for higher price sales.

TAKEAWAYS: MARKET CONDITIONS

- Average number of days on market has declined in both rural and urban parts of the state.
- Home are on the market longer in rural ND than in urban cities across all price ranges.
- The percentage of homes sold at higher prices is increasing as a percentage of total sales.
- The percentage of home sold at lower prices is decreasing as a percentage of total sales.
- Will be interesting to see how interest rates impact these trends in 2022.
- The housing inventory is old, especially lower priced housing which is much older than higher priced sales.
- So much more that we can do with these data. Just scratched the surface.

HOUSING PRICE ANALYSES

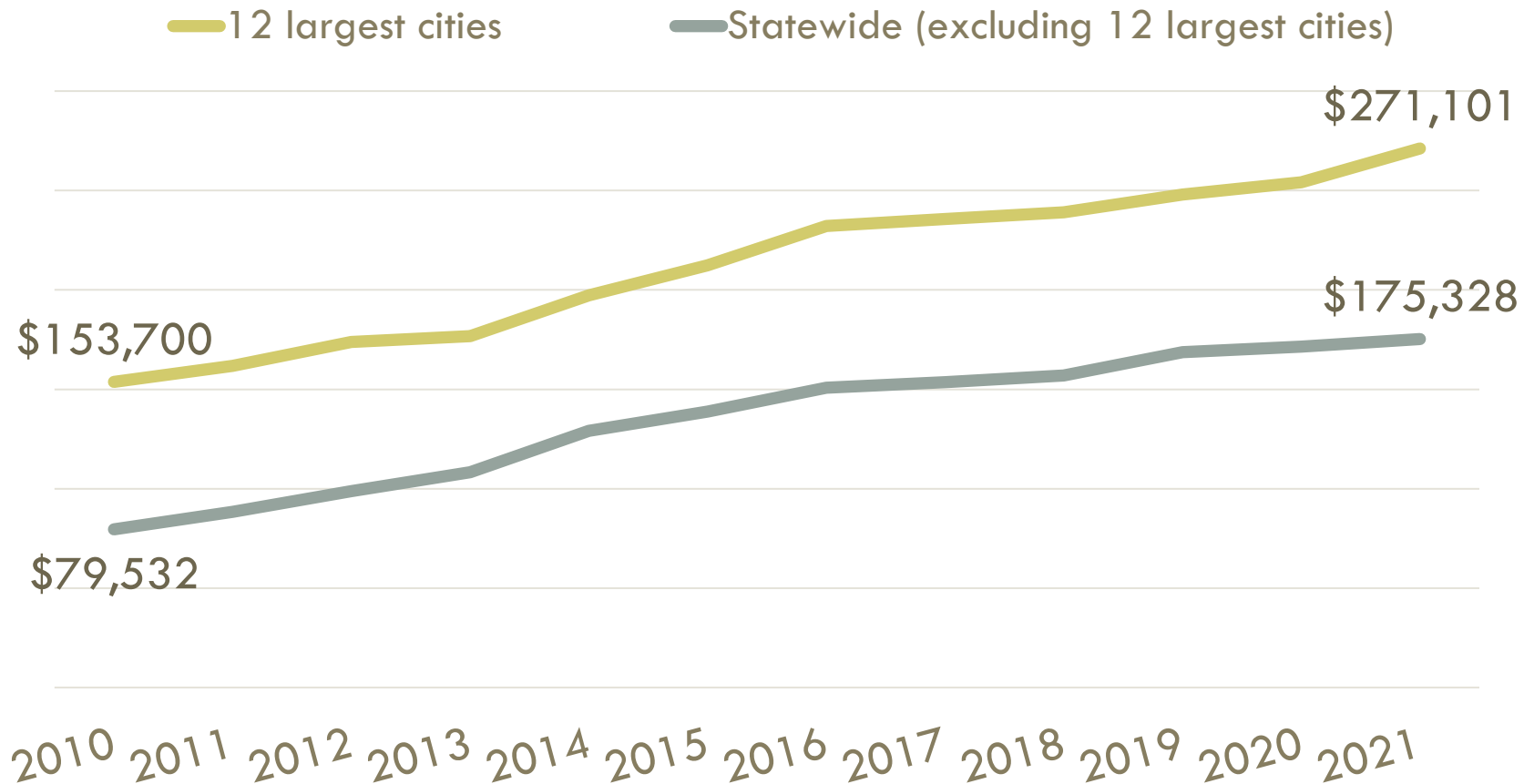
Multiple Listing Services
and Sales Ratio Study

ANALYZING SALES THROUGHOUT THE STATE

- We heard complains in 2015 that the ACS data on housing prices are not accurate, too low.
- To address concerns, the 2016 housing study reported average verified prices of residential homes sales from the ND Office of State Tax Commissioner Sales Ratio Study. Also including average verified prices from the sales ratio study in this assessment.
- Also in this study, with the cooperation of the state's Multiple Listing Services, we were able to analyze data from the Multiple Listing Services in North Dakota.
- While both the MLS and SRS have some limitations, both are based on actual transactions and provide good estimates of average housing prices.

AVERAGE PRICE OF RESIDENTIAL HOMES SOLD

SALES RATIO DATA



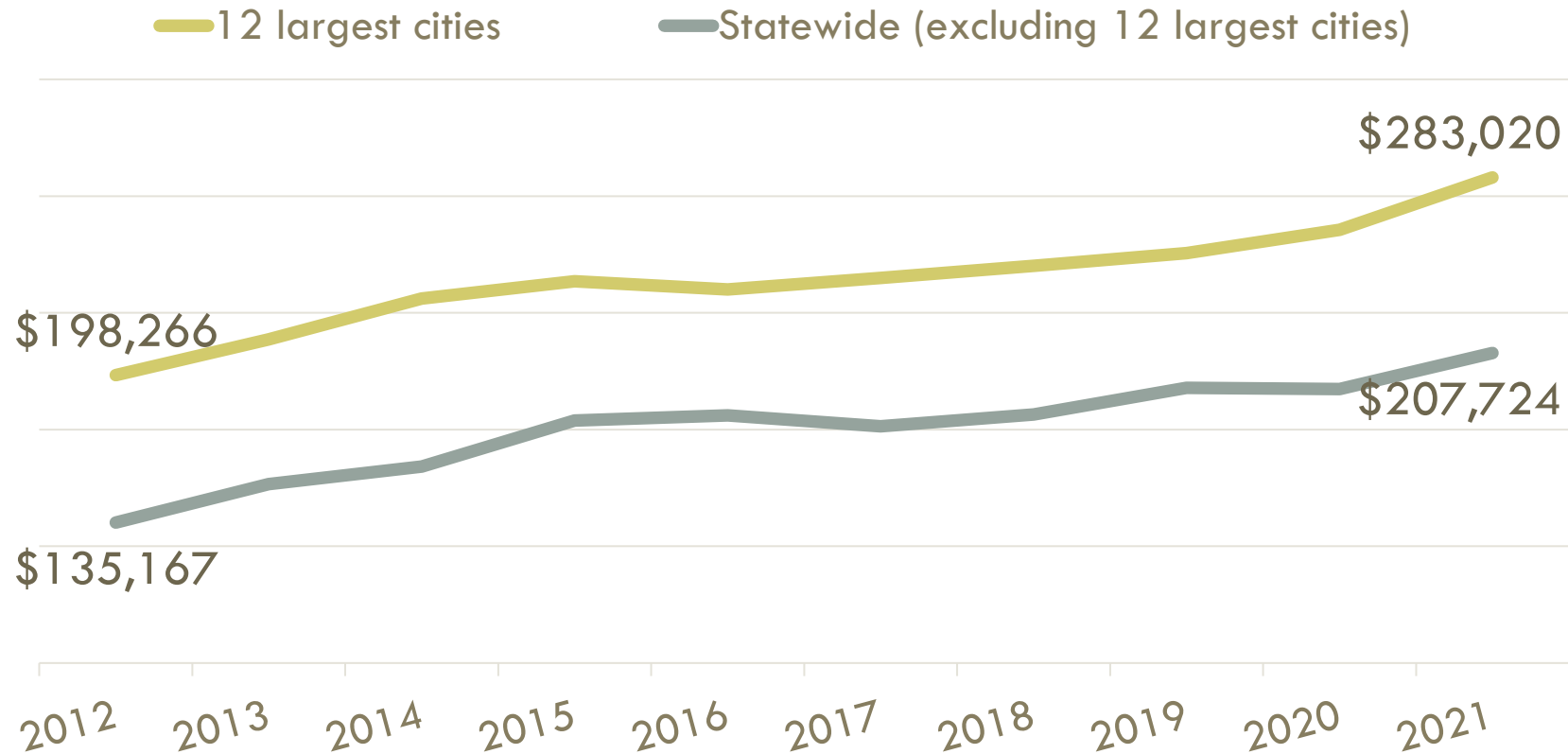
Since 2012 Average Verified Prices have:

Increased by 56% in 12 largest cities

Increased by 78% in rural ND

AVERAGE PRICE OF RESIDENTIAL HOMES SOLD

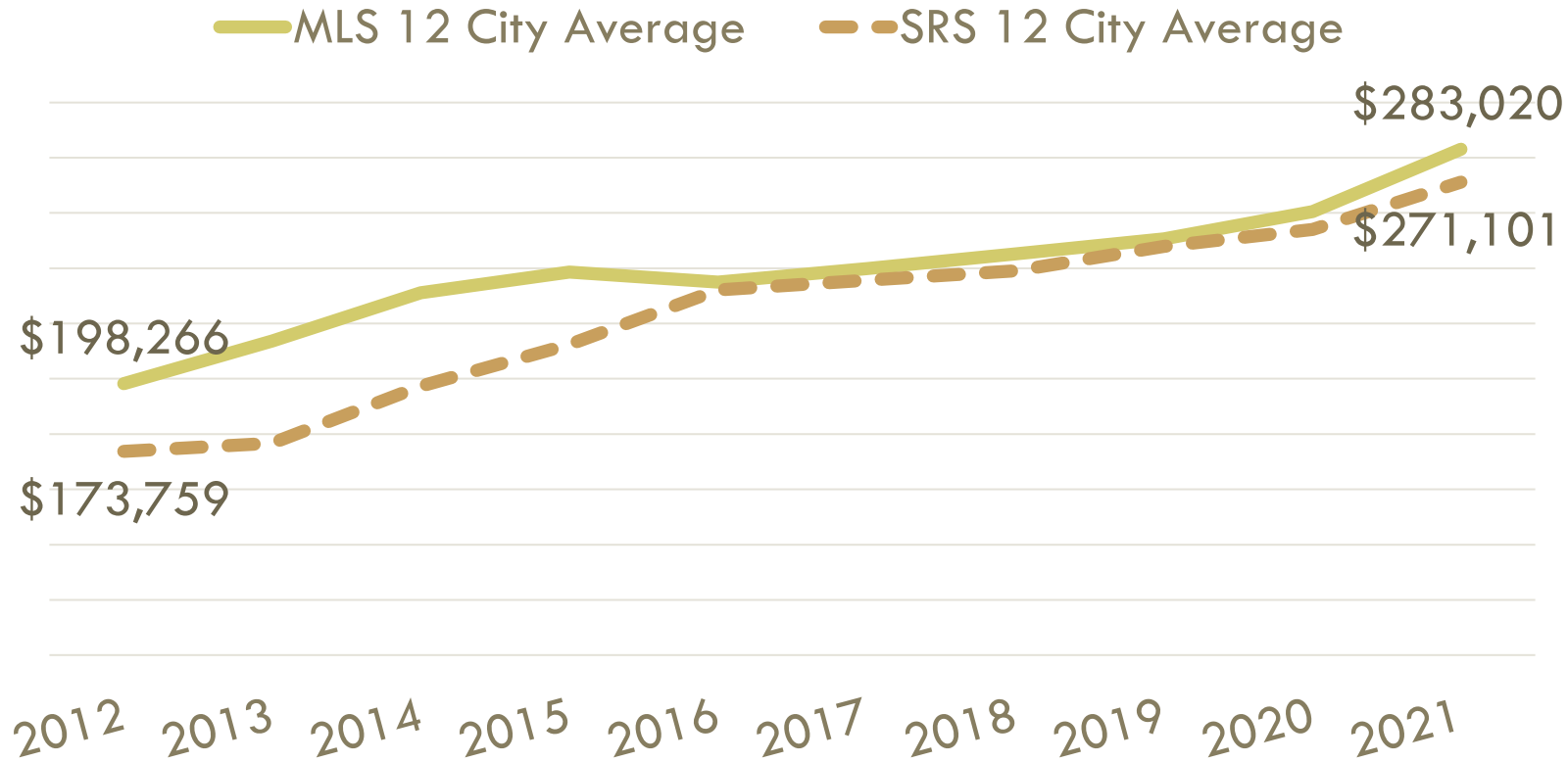
MLS DATA



- Since 2012 Average Prices have:
- Increased by 12% in 12 largest cities
 - Increased by 54% in rural ND

AVERAGE PRICE OF RESIDENTIAL HOMES SOLD

SALES RATIO DATA AND MLS COMPARISON – FOR 12 LARGEST CITIES

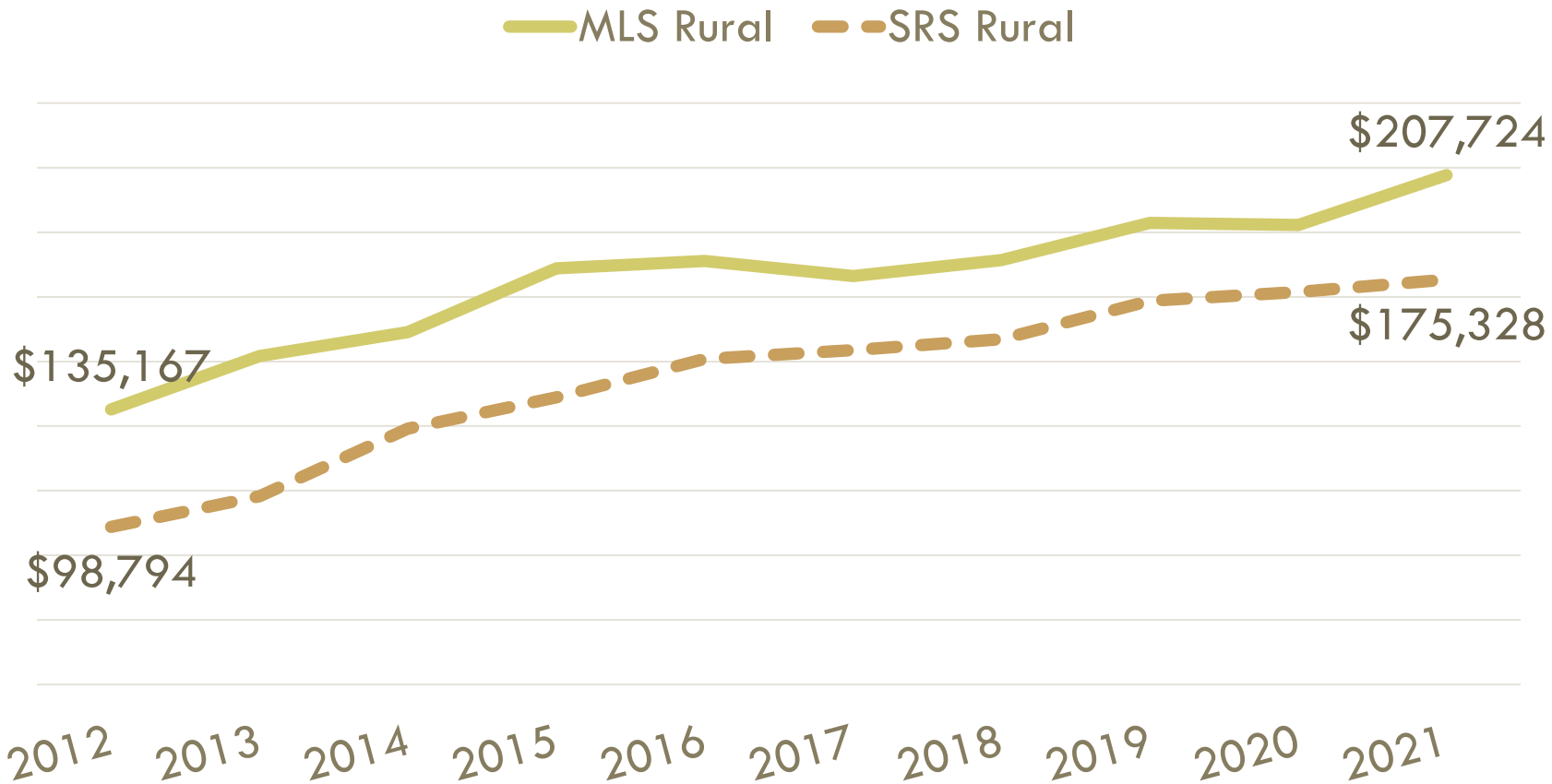


Trends for city sales data are very similar between SRS and MLS.

In 2021, the difference between datasets was 4% for the 12 largest cities.

AVERAGE PRICE OF RESIDENTIAL HOMES SOLD

SALES RATIO DATA AND MLS COMPARISON — FOR RURAL AREAS



While MLS data for rural areas are higher than SRS, the trends for are very similar between datasets.

In 2021, the difference between datasets was 18% for the rural areas.

TAKEAWAY: HOUSING PRICE ANALYSIS

- The Sales Ratio data is a publicly available time series for housing prices in North Dakota.
- It is the best available data on average prices for rural counties and small cities. Limitations include:
 - No data on property characteristics.
 - Potential for year-to-year variability due to a few high- or low-priced transactions in a given year.
- MLS is an excellent source of data statewide, for the 12 largest cities, and combined rural areas.
- There were an insufficient number of transactions in the MLS data to compare rural sales by individual county or planning region.
 - Far fewer sales in small communities and rural areas are listed on one of the Multiple Listing Services.
 - Not enough observations to have confidence in MLS data by county, by state planning region and in some cases smaller cities.
- Overall, the two datasets track very well. They indicate similar trends and estimates of average prices, which provides a high degree of confidence in the accuracy of the data.
- Reported sale prices are similar between datasets for North Dakota statewide, most of the 12 largest cities, and aggregated rural areas.
- Think we finally have a good handle on housing prices. There is so much more we can do. We didn't look at medians, distributions, pulling out outliers, etc.

HOUSING AFFORDABILITY

Homeownership rates,
rental trends, income-
restricted housing, and
unit availability

HOME OWNERSHIP AFFORDABILITY BY HOUSEHOLD INCOME, 2020

Household Income Category	Income Limits based on the 2020 MFI of \$86,900 in North Dakota defined by HUD	Maximum Affordable Purchase Price	Home Sales that Met Affordability Limits based on Purchase Price
Extremely Low	Less than \$26,070	\$78,864	795
Very Low	\$26,070 - \$43,450	\$131,440	2,128
Low	\$43,451 - \$69,520	\$210,305	5,835
Lower Moderate	\$69,521 - \$99,935	\$302,313	8,325
Moderate	\$99,936 - \$121,660	\$368,033	8,977
Upper	\$121,661 or more	\$441,640	9,342
Lower (0-60% MFI)	Less than \$52,140	\$157,729	3,179

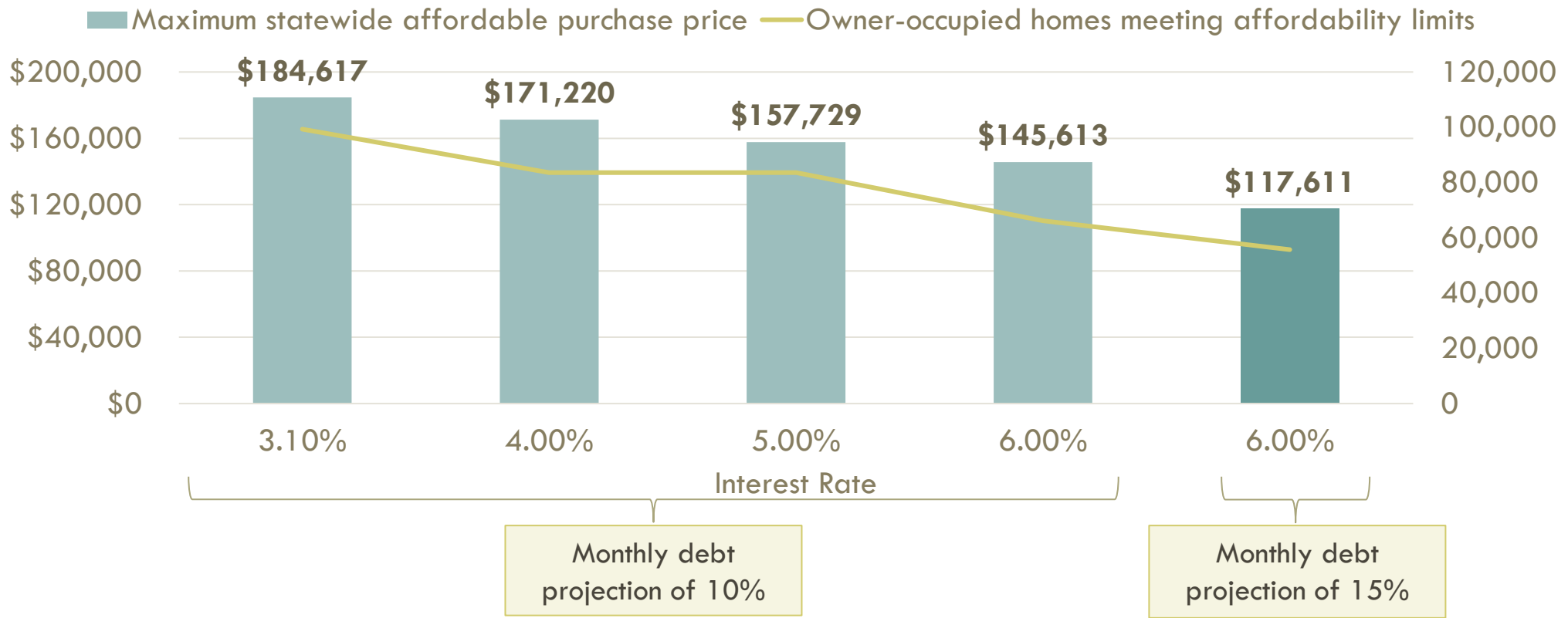
Assumptions for the Maximum Affordable Purchase Price: 30-year loan fixed at 5%, property taxes at 1% of the loan, property insurance at 1% of the loan, 5% down, front-end debt-to-income ratio at no more than 28%, back-end ratio including all monthly debts at no higher than 36%

AFFORDABLE HOUSING OPTIONS FOR RENTERS THAT WANT TO BUY

- There are ~66,525 lower income households that rent (income of less than \$52,140)
- Assume 10% of lower income households want to buy: ~6,525
- According to MLS data there were only 3,179 homes sold in 2020 that would have been affordable for lower income households.

Household Income	Total Households	Approximation of Householders that Rent	Homes Sold Meeting Affordability Income Limits
Extremely Low	56,545	35,013	795
Very Low	52,601	27,211	2,128
Low	72,818	28,710	5,835
Lower Moderate	45,518	12,263	8,325
Moderate	32,901	5,796	8,977
Upper	62,170	5,454	9,342
Lower 0-60% MFI	121,682	66,525	3,179

AFFORDABILITY EXAMPLE: IMPACT OF HIGHER INTEREST RATES ON LOWER INCOME HOUSEHOLDS (EARNING LESS THAN \$52,140)

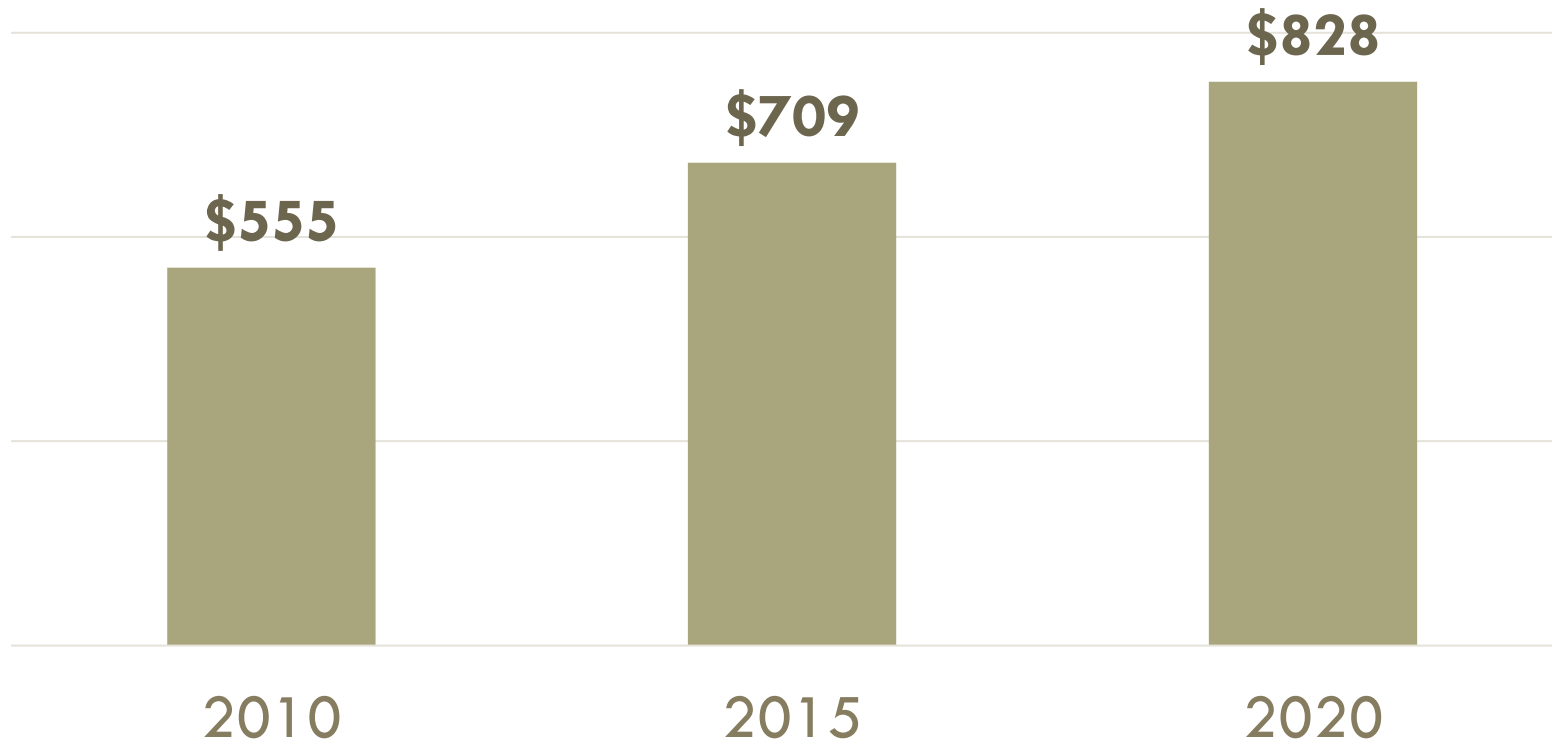


Assumptions: 30-year loan fixed, property taxes at 1% of the loan, property insurance at 1% of the loan, front-end debt-to-income ratio at no more than 28%, back-end ratio including all monthly debts at no higher than 36%

Note: Lower income households are defined as those households earning less than \$52,140 in 2020 (i.e. up to 60% MFI)

STATEWIDE CHANGE IN MEDIAN RENT

Median Monthly Gross Rent in North Dakota



Median rent in North Dakota was less than \$600 just 10 years ago - that's a 49% increase in 10 years.

2020 ACS Data

- Efficiency: \$628
- 1-bedroom: \$690
- 2-bedroom: \$826
- 3-bedroom: \$1,118
- 4-bedroom: \$1,327

RENTAL AFFORDABILITY BY HOUSEHOLD INCOME, 2020

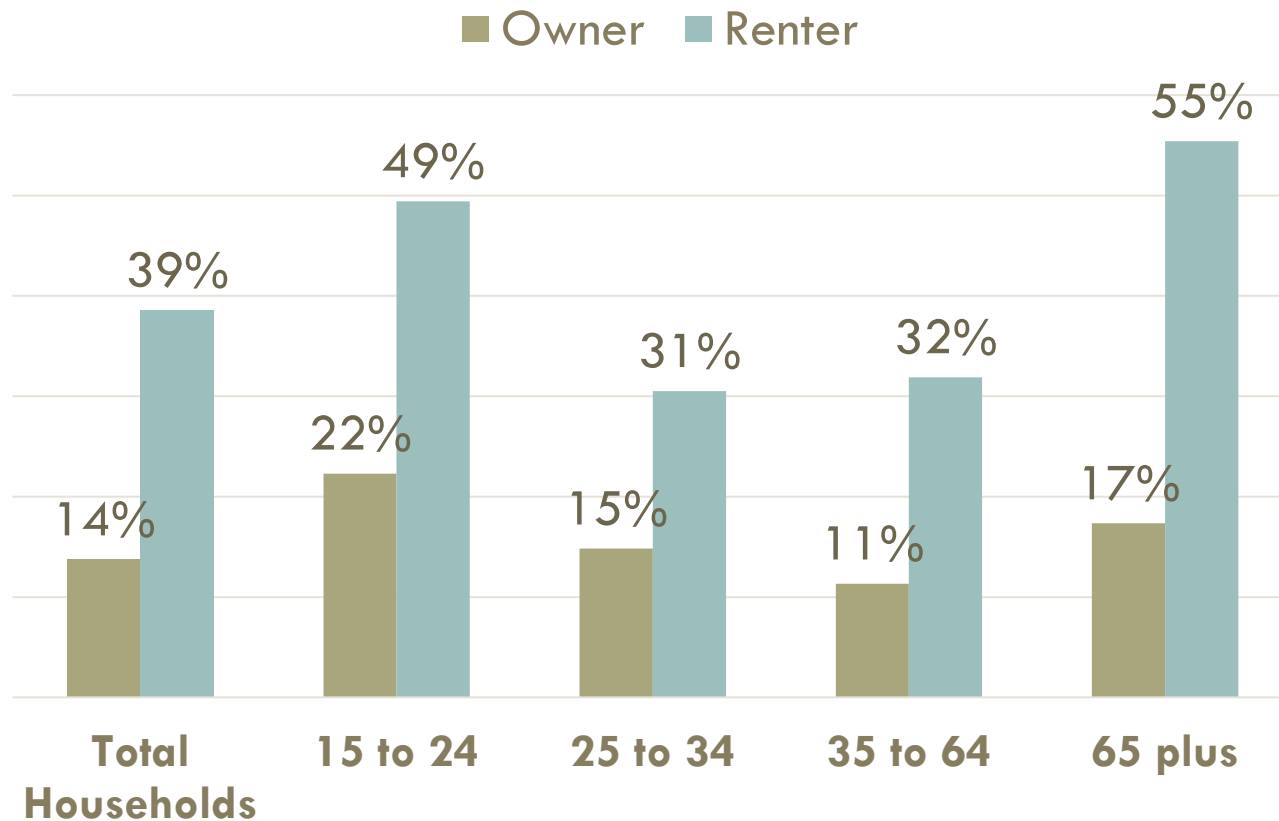
Household Income Category	Income Limits based on the 2020 MFI of \$86,900 in North Dakota defined by HUD	Affordable Monthly Housing Costs
Extremely Low	Less than \$26,070	\$652
Very Low	\$26,070 - \$43,450	\$1,086
Low	\$43,451 - \$69,520	\$1,738
Lower Moderate	\$69,521 - \$99,935	\$2,498
Moderate	\$99,936 - \$121,660	\$3,042
Upper	\$121,661 or more	\$3,650
Lower (0-60% MFI)	Less than \$52,140	\$1,304

Affordable monthly housing costs: rental price a family can pay without spending more than 30% of income on housing

Extremely Low income category can't afford median state rent (\$828) as of 2020

Note: This is a median, not an average.

HOUSING COST-BURDENED HOUSEHOLDS IN NORTH DAKOTA, BY AGE OF HOUSEHOLDER, 2020



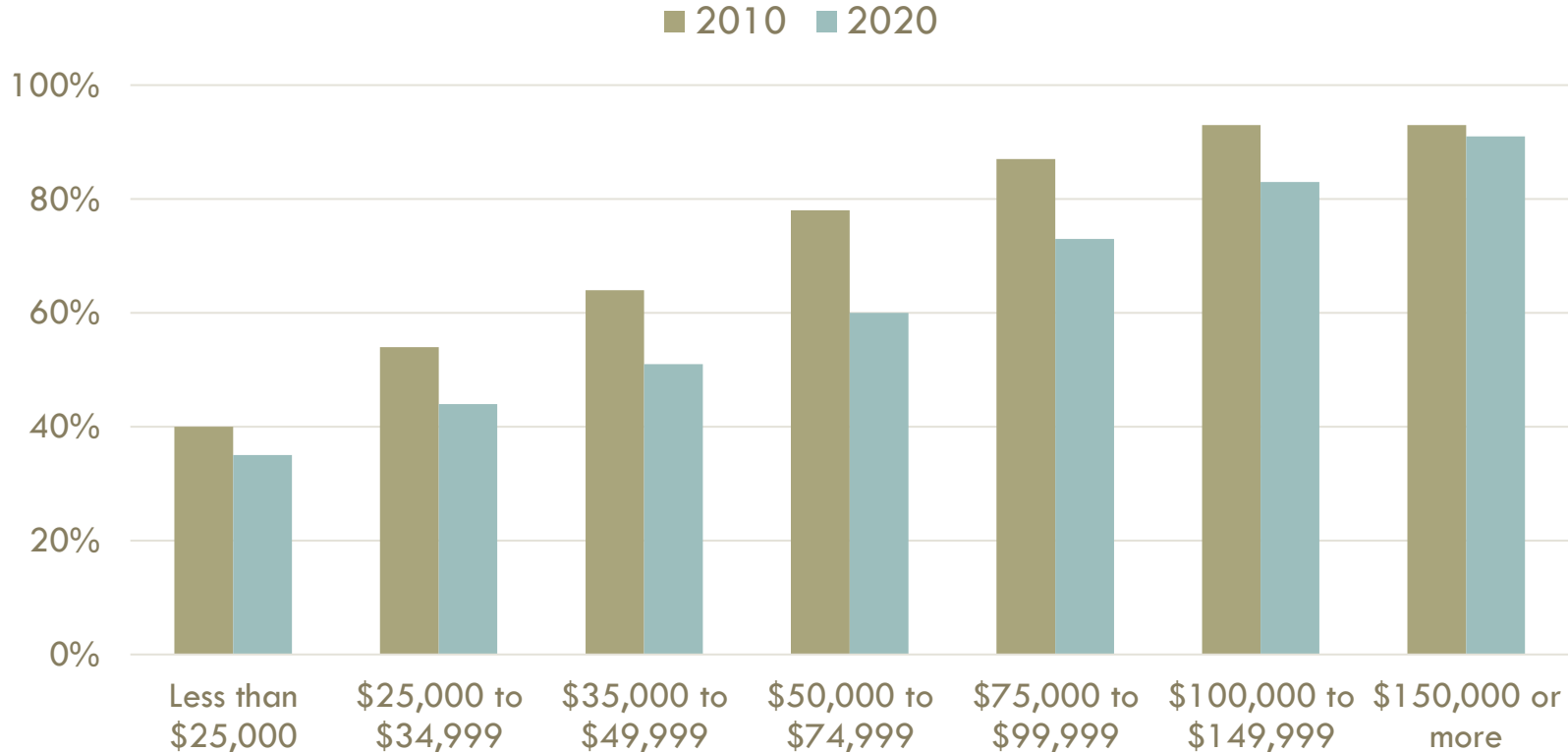
Cost Burdened defined:
Householders spending at least 30% of household income toward housing costs

The youngest and oldest renters are more burdened than middle-aged households

- About half of renters ages 15-24 and ages 65+ were burdened by housing costs in 2020

TREND IN HOME OWNERSHIP RATES BY INCOME

Home Ownership Rates by Household Income in North Dakota



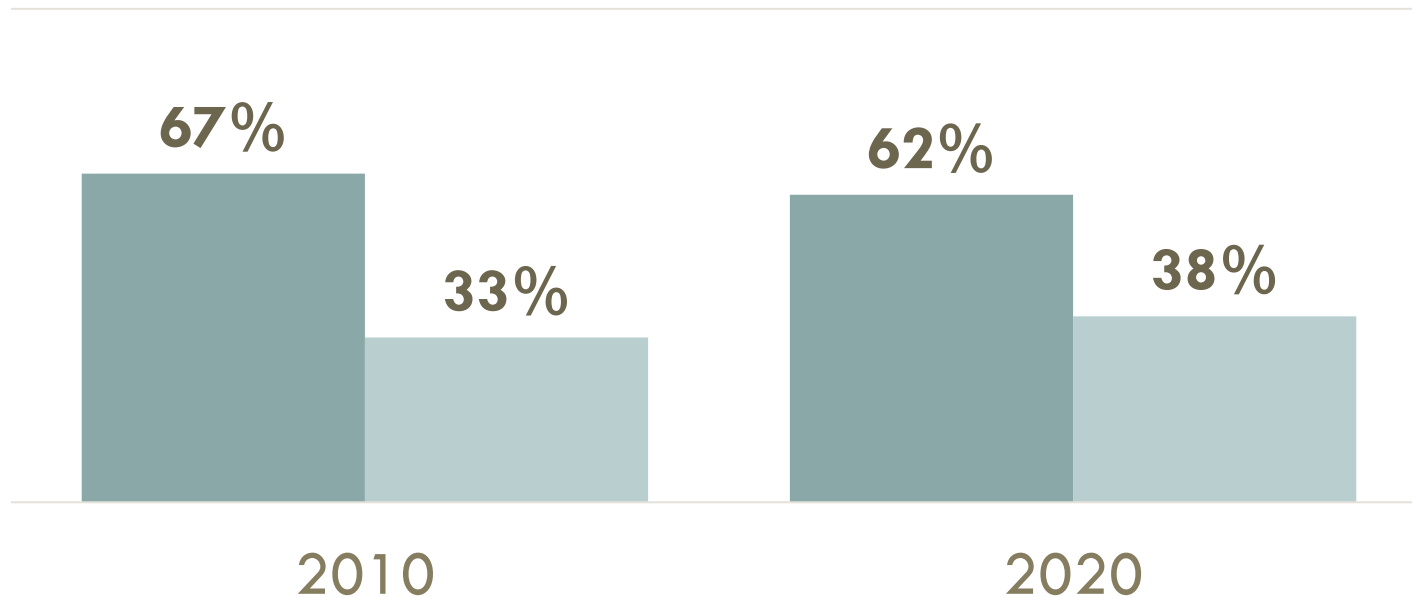
Household Income	% Change 2010 - 2020
Less than \$25,000	-12.5%
\$25,000 to \$34,999	-18.5%
\$35,000 to \$49,999	-20.3%
\$50,000 to \$74,999	-23.1%
\$75,000 to \$99,999	-16.1%
\$100,000 to \$149,999	-10.8%
\$150,000 or more	-2.2%

Source: U.S. Census Bureau (2021C)

CHANGE IN HOUSING TENURE IN NORTH DAKOTA

Housing Tenure in North Dakota, 2010 and 2020

■ Owner-Occupied ■ Renter-Occupied



With a decrease in homeownership, there is an increase in renter-occupied housing.

The percent of renter occupied housing has increased by 5% since 2010.

TAKEAWAY: HOUSING AFFORDABILITY

- Decrease in owner occupied housing and increase in rental occupied housing.
- Declining home ownership rates across income categories.
- Substantial increase in median rents over the past decade.
- While most North Dakotans can afford housing, lower income households are especially cost constrained.
- A substantial portion of renters are cost burdened, especially younger and senior householders which suggests we have an issues with rental affordability.
- While inventory numbers may suggest an adequate number of housing units at various levels of affordability, MLS data show that very few homes sold are affordable to low income households.

RENT AND INCOME RESTRICTED MULTIFAMILY HOUSING PROGRAMS

Public Housing Authorities,
USDA Section 515, HIF, LIHTC,
HUD PBCA/Mod Rehab

UNDUPLICATED NUMBER OF RENT AND INCOME-RESTRICTED HOUSING UNITS

- Properties receive funding from multiple sources, so if you just sum them up you double-count the units.
- Properties that participate in multiple programs must adhere to the guidelines of the program with the most restrictive guidelines.
- So not only do you need to control for multiple programs, must control for multiple guidelines.

Total Units: 15,564

Affordable Units: 14,677

**Total Units with
No Duplication: 13,219**

**Affordable Units with
No Duplication: 12,361**

INCOME RESTRICTED UNITS BY INCOME CATEGORY

Income restrictions are concentrated in lower income ranges of household income between \$43,451 and \$69,520.

Not many units at the low and high end of income restrictions.

In reality, there are few units that are available to Extremely Low and Very Low Income households.

Income Category	HUD Income Limits	Income-Restricted Housing Units
Extremely Low Income	0 to 30% MFI Less than \$26,070	951
Very Low Income	31% to 50% MFI \$26,070-\$43,450	1,953
Low Income	51% to 80% MFI \$43,451-\$69,520	8,633
Lower Moderate and Moderate Income	81% to 140% \$69,521-\$121,660	824
Total		12,361

INCOME-RESTRICTED LOW INCOME HOUSING

UNIT COUNT BY AGE

Placed in Service Date	Income Restricted Housing Units	Percent of Total
1960-1969	325	2.6%
1970-1979	1,370	11.1%
1980-1989	1,406	11.4%
1990-1999	2,370	19.2%
2000-2009	2,107	17.0%
2010-2019	3,786	30.6%
2020 or newer	997	8.1%
Total	12,361	100.0%

Substantial building activity in the past decade to accommodate impacts of rapid population growth and housing shortages, especially in oil impacted counties.

However, more than 40% of subsidized housing is at least 20 years old.

11% built in the 80's making them 40-50 years old.

14% of units were built in the 60s and 70s and are 50-60 years old.

TAKEAWAYS: RENT AND INCOME RESTRICTED MULTI-FAMILY HOUSING

- Careful when discussing how many income restricted low income housing units are in the state....It's complicated.
- Careful when estimating the number of units available at various income restrictions....It's complicated.
- It is very easy to overestimate the number of units and difficult to sort out what the actual income restrictions are.
- Limited number of income restricted units for extremely low income households and those that have more moderate incomes.
- With the exception of low income housing built since 2000, the inventory of income restricted low income housing is old....Not complicated.

WHERE DO WE GO FROM HERE?

Summary, key findings,
implications

IMPLICATIONS

- 2016 study was influenced by unprecedented population growth the state. The theme then was just keep building.
- Housing needs based on historic relationships between population and household characteristics suggest that the state's inventory of housing is relatively aligned with projected future needs. Projections suggest the need for approximately 10,000 housing units.
- Current market conditions suggest that is not the case.
- Affordable housing that goes on the market, comes off quickly, except the oldest and least expensive housing.
- Generally speaking affordable housing is older and may require renovations.
- Income restricted low income rental properties are also older and likely in need of renovation.
- With increasing prices and lack of affordable inventory, homeownership is declining and renter occupied housing is increasing.
- This suggests a greater need to focus on housing needs based on household characteristics, market conditions and consumer preference, especially lower income households and seniors.

WHAT NEXT

- We need to do a deeper dive into the MLS data to better describe market conditions.
- Further examination of characteristics of housing inventory.
- We have good market data which will enable a more in depth examination of market conditions.....what is on the market, what is selling, characteristics of property, etc.
- This will help to further define consumer preferences and provide additional insight into characteristics of homes that meet those preferences to better define and refine housing needs.
- Are there other issues to be examined. For example, we are hearing a lot from smaller communities trying to attract developers. Small town have data limitations.
- The plan going forward is to update this study on a regular basis and to create a digital resource that can be updated as new data become available.
- Exactly what Version 2.0 looks like to be determined.

FINALLY

- What I presented today just scratched the surface of what is in this report.
- The main document and supporting materials are a repository of data and information.
- Our goal as researchers - and the Housing Finance Agency's goal - is to gather all these data and information, understand the data, analyze them, and try to put them in a format that helps community leaders, non-profits, and state and local governments assess recent trends and current conditions to develop programs and policy ensuring safe and adequate housing in North Dakota.
- Throughout this process we have worked to try to boil down all of this information down to make it as useable and accessible as possible.
- Feedback on what is most useful or data that we could provide that we didn't is extremely helpful and appreciated.
- Tell us what you need to know and we will try to figure it out.

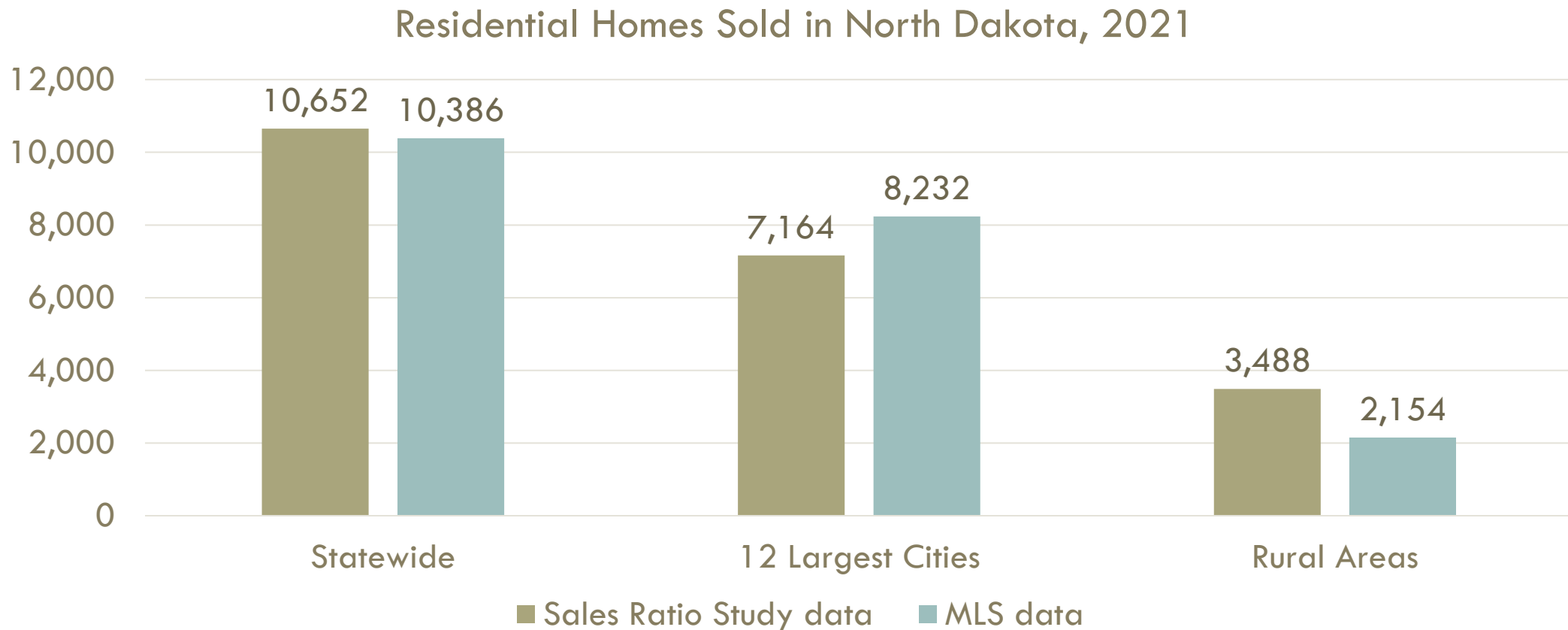
QUESTIONS?

Contact Information

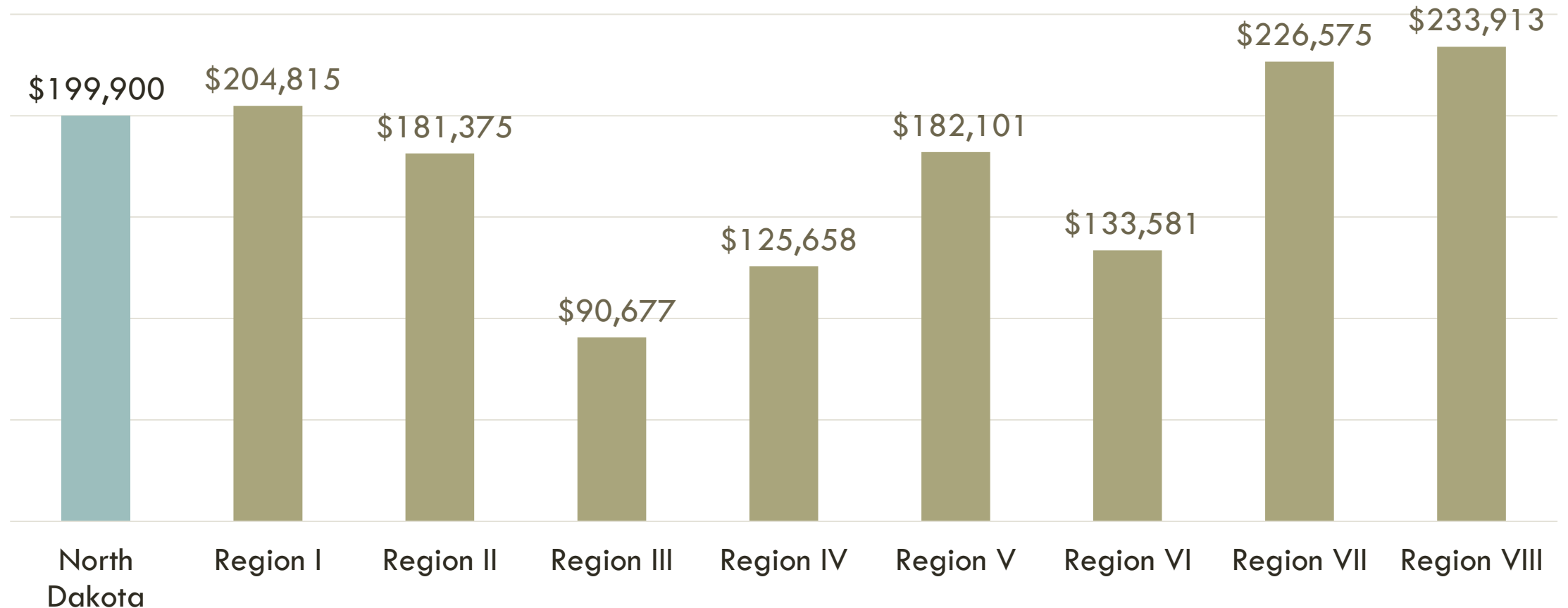
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NUMBER OF OBSERVATIONS SRS AND MLS DATA



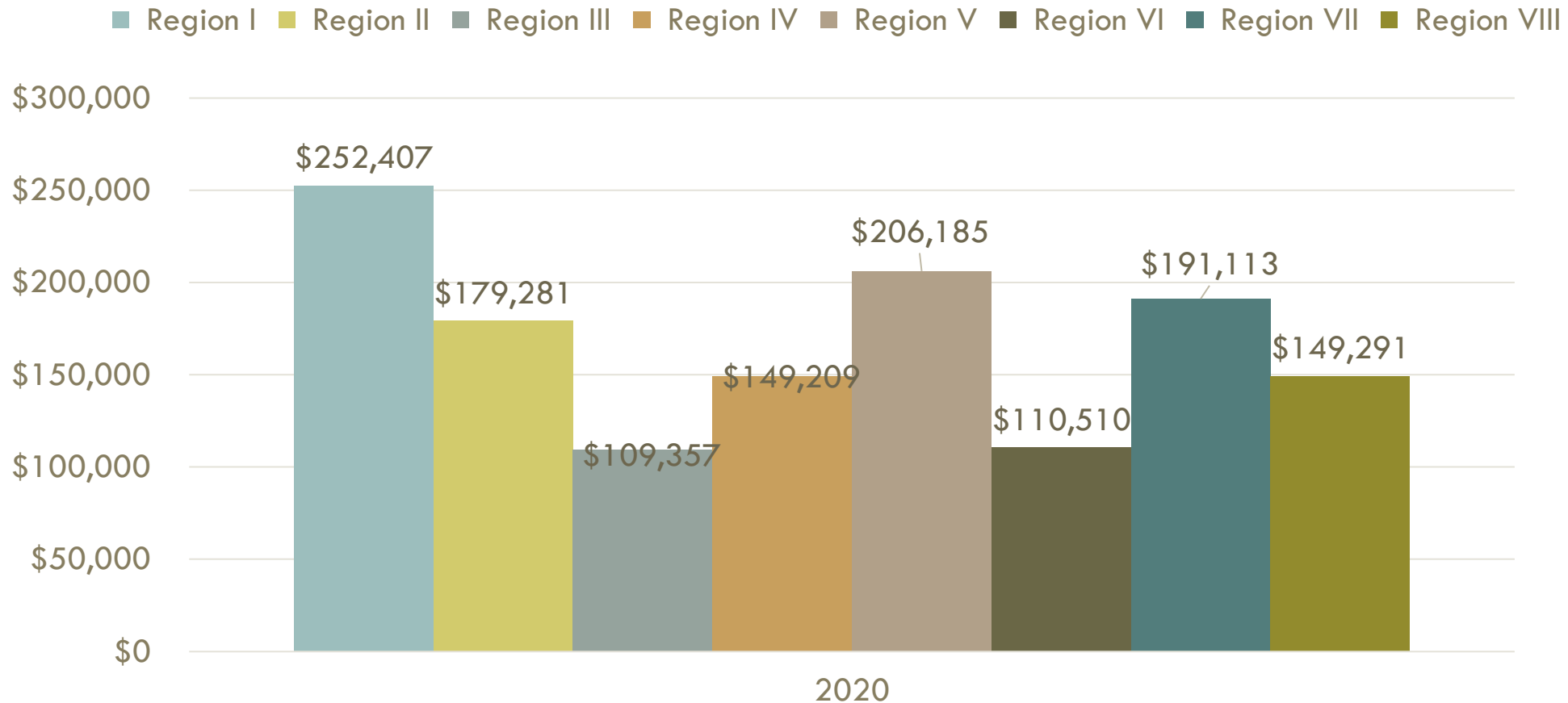
MEDIAN HOUSING VALUE FOR OCCUPIED HOUSING IN NORTH DAKOTA, 2020



Source: U.S. Census Bureau (2021C)

AVERAGE SALES PRICE, STATE PLANNING REGIONS

SALES RATIO STUDY



Source: North Dakota Office of State Tax Commissioner (2022)