

EIGHTH BIENNIAL REPORT | 2025

HEALTH ISSUES FOR THE STATE OF NORTH DAKOTA



CHAPTER ONE:

THE POPULATION OF NORTH DAKOTA AND ATTENDANT HEALTHCARE NEEDS

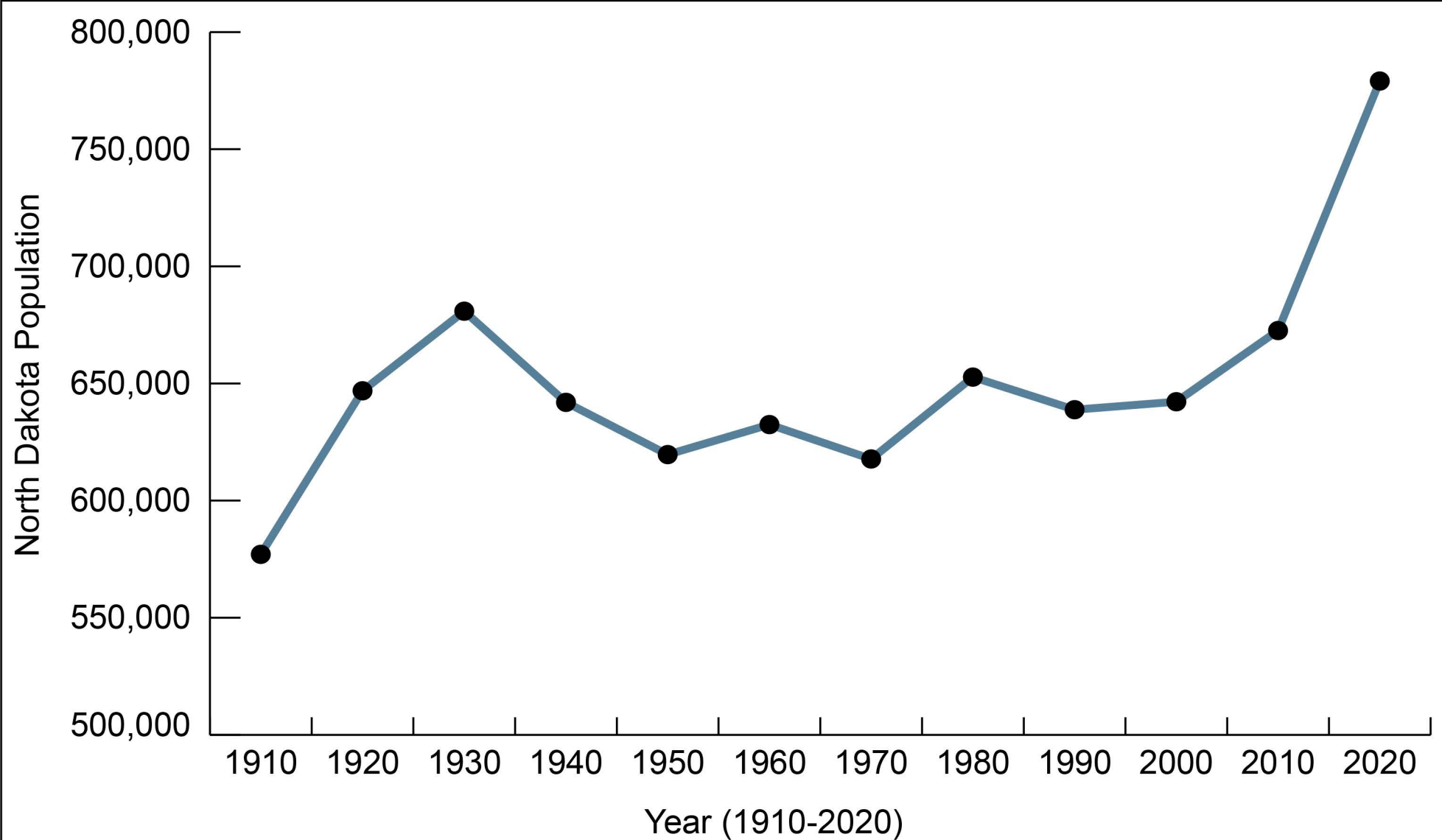


Figure 1.1. Population of North Dakota from 1910 to 2020.^{2, 3} ND population increased from 577,056 in 1910 to 680,845 in 1930, decreased to 617,761 in 1970, and then increased to 672,591 in 2010. North Dakota's highest population was in 2020. In 2020, the U.S. Census Bureau estimated population was 779,094. North Dakota has gained more than 100,000 residents since 2000, when the population was 642,200.

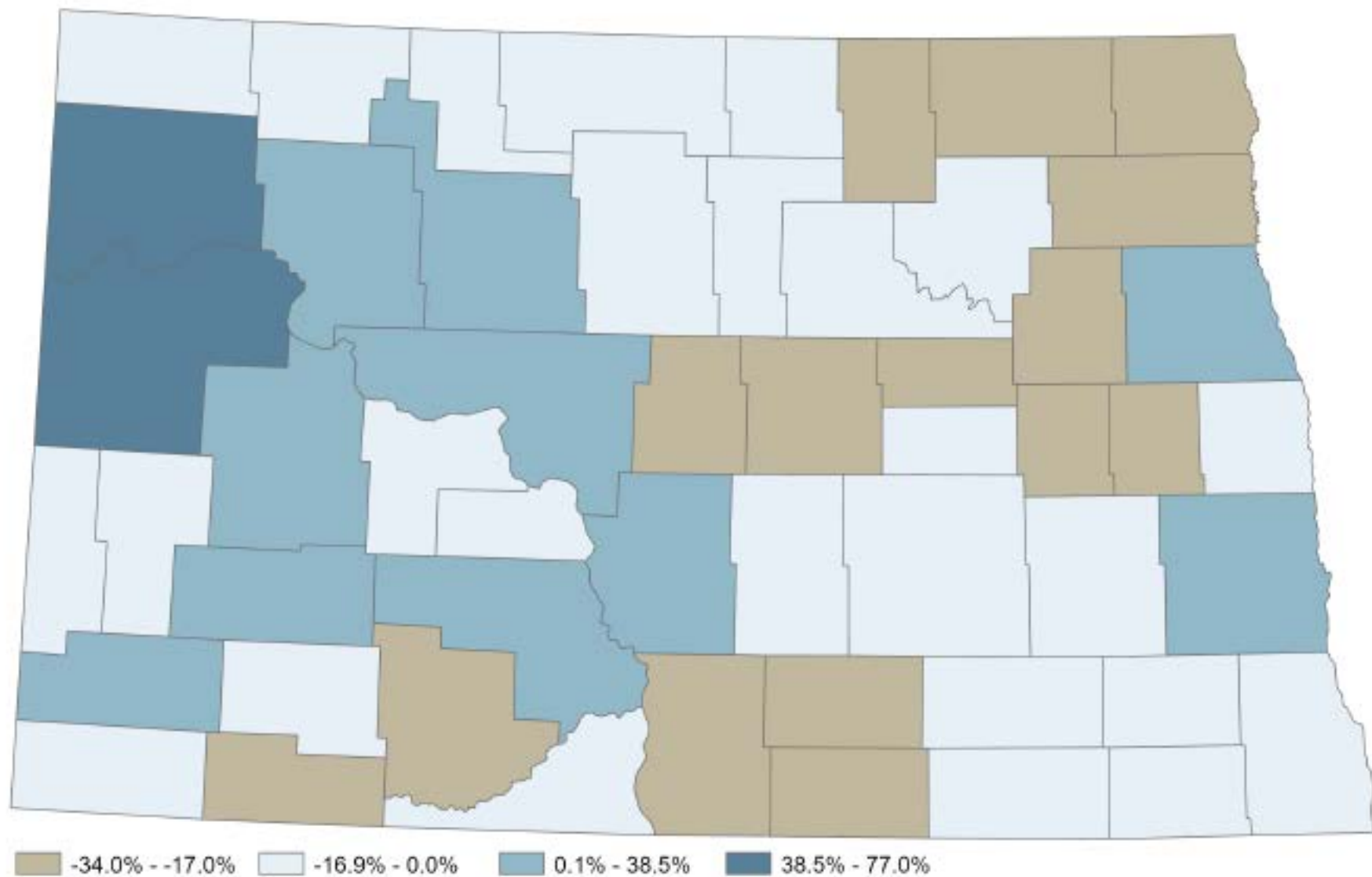


Figure 1.2. Percentage change in county population from 2000 to 2022.^{3,4} Five counties have increased their population by greater than 30% from 2000 to 2022. These five counties are Cass, McKenzie, Mountrail, Stark, and Williams. From 2000 to 2022, 41 counties have lost population.

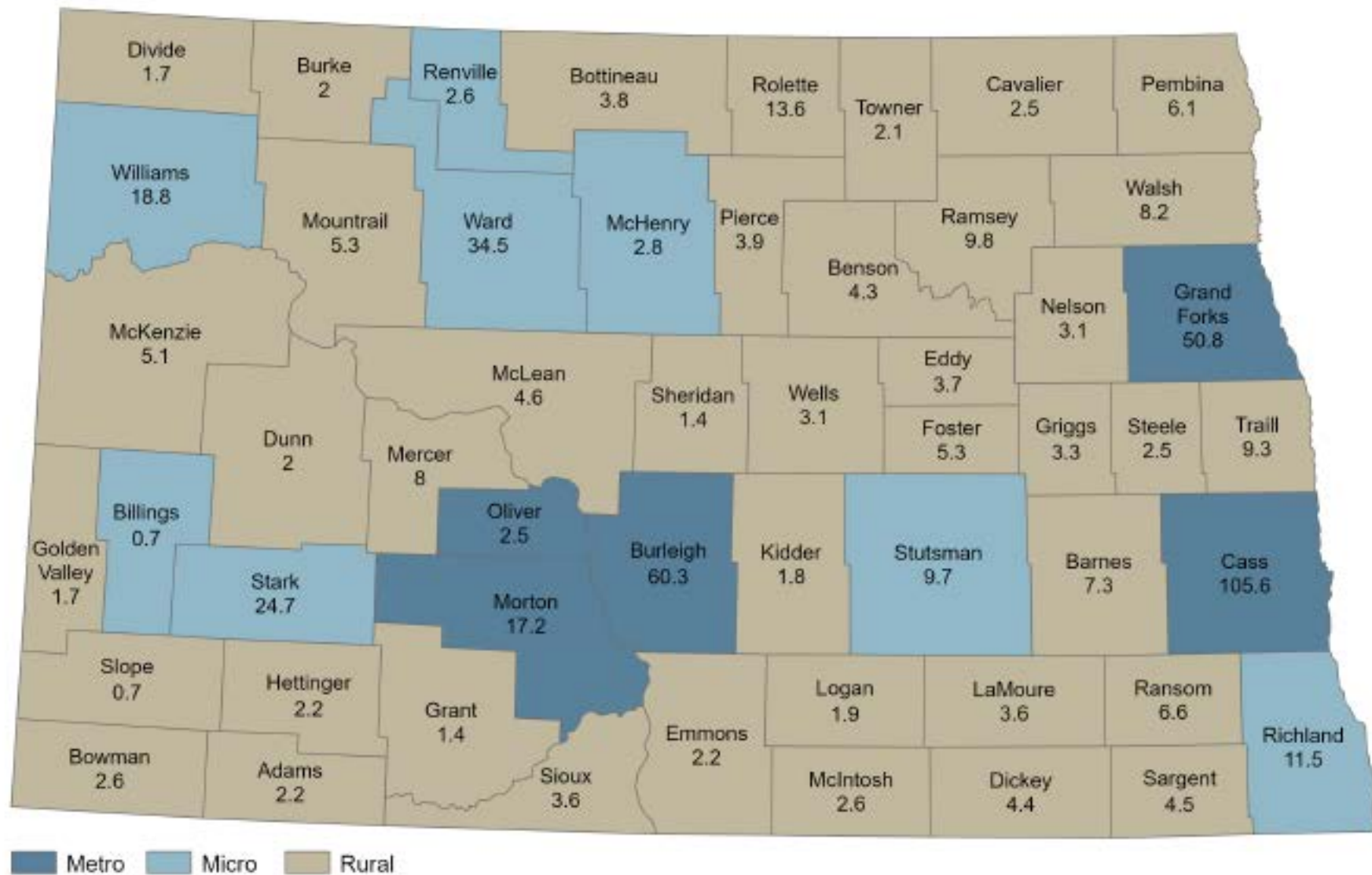
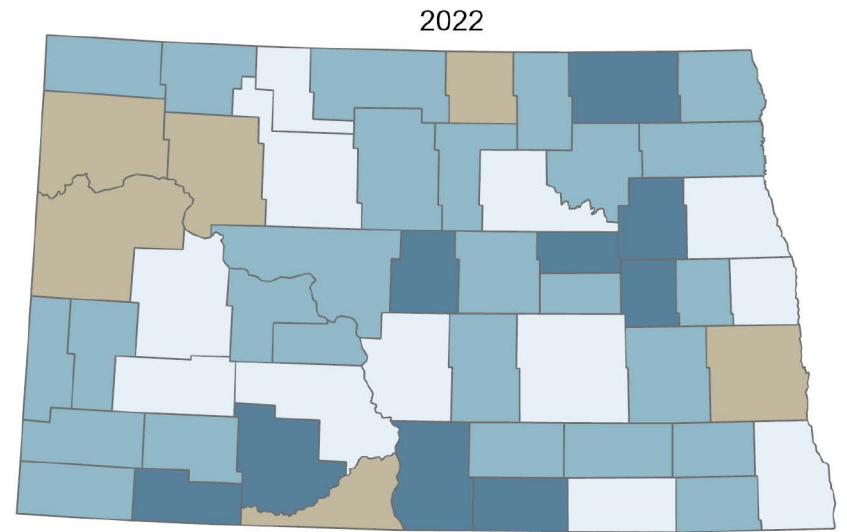
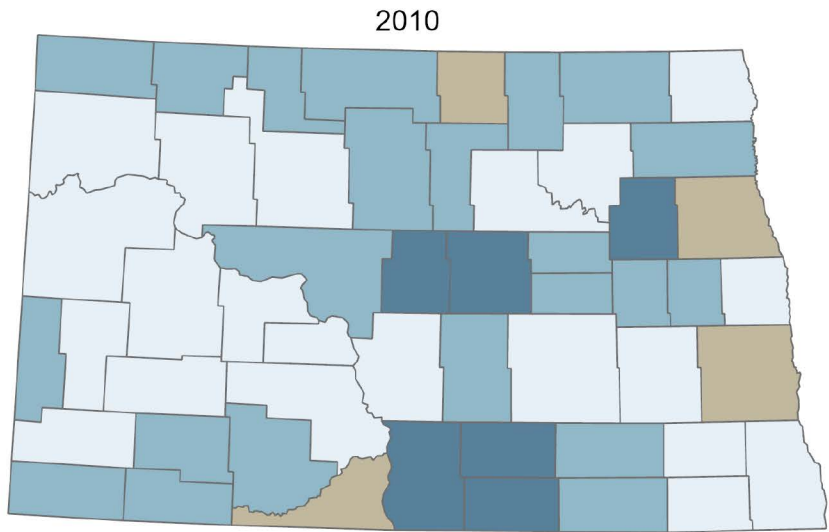
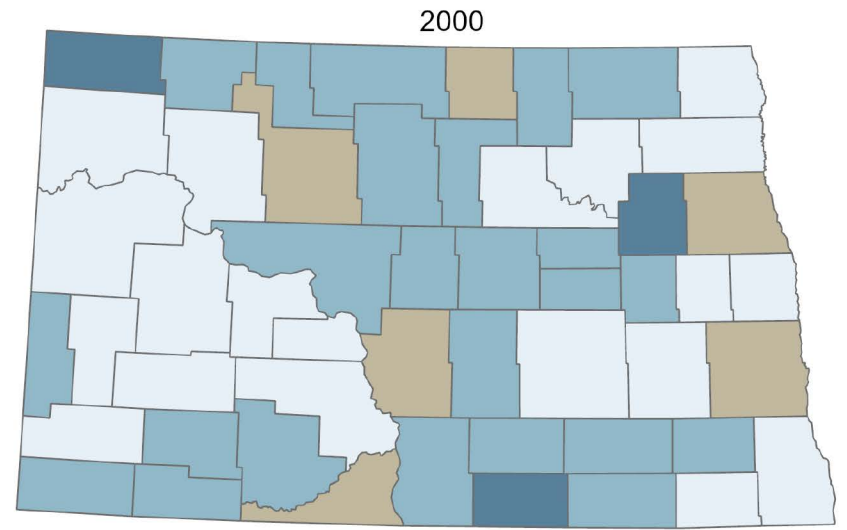
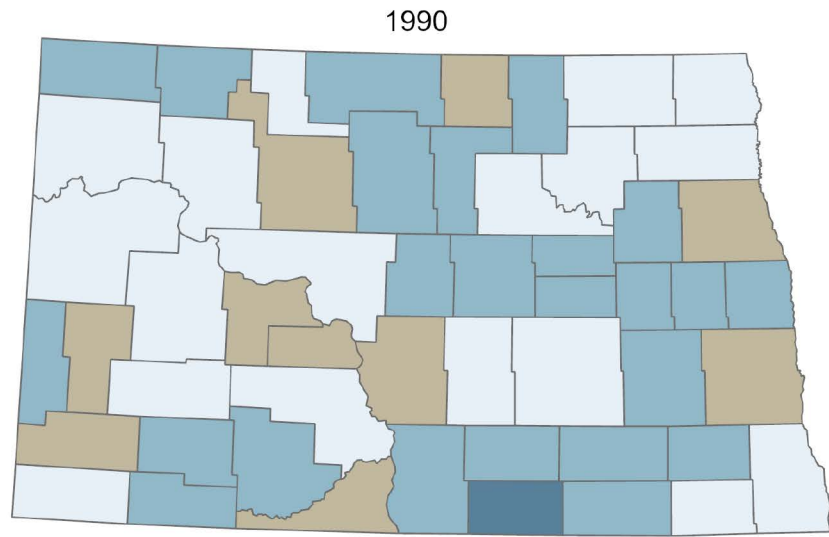


Figure 1.3. Population densities (number of people per square mile) of metropolitan, micropolitan, and rural counties in North Dakota, 2022.^{3, 5}



5.9% - 12.7%

12.8% - 20.0%

20.1% - 27.1%

28.1% - 34.2%

Figure 1.4. Percent of population aged 65 and over in 1990, 2000, 2010, and 2022.^{3, 4, 6, 7}

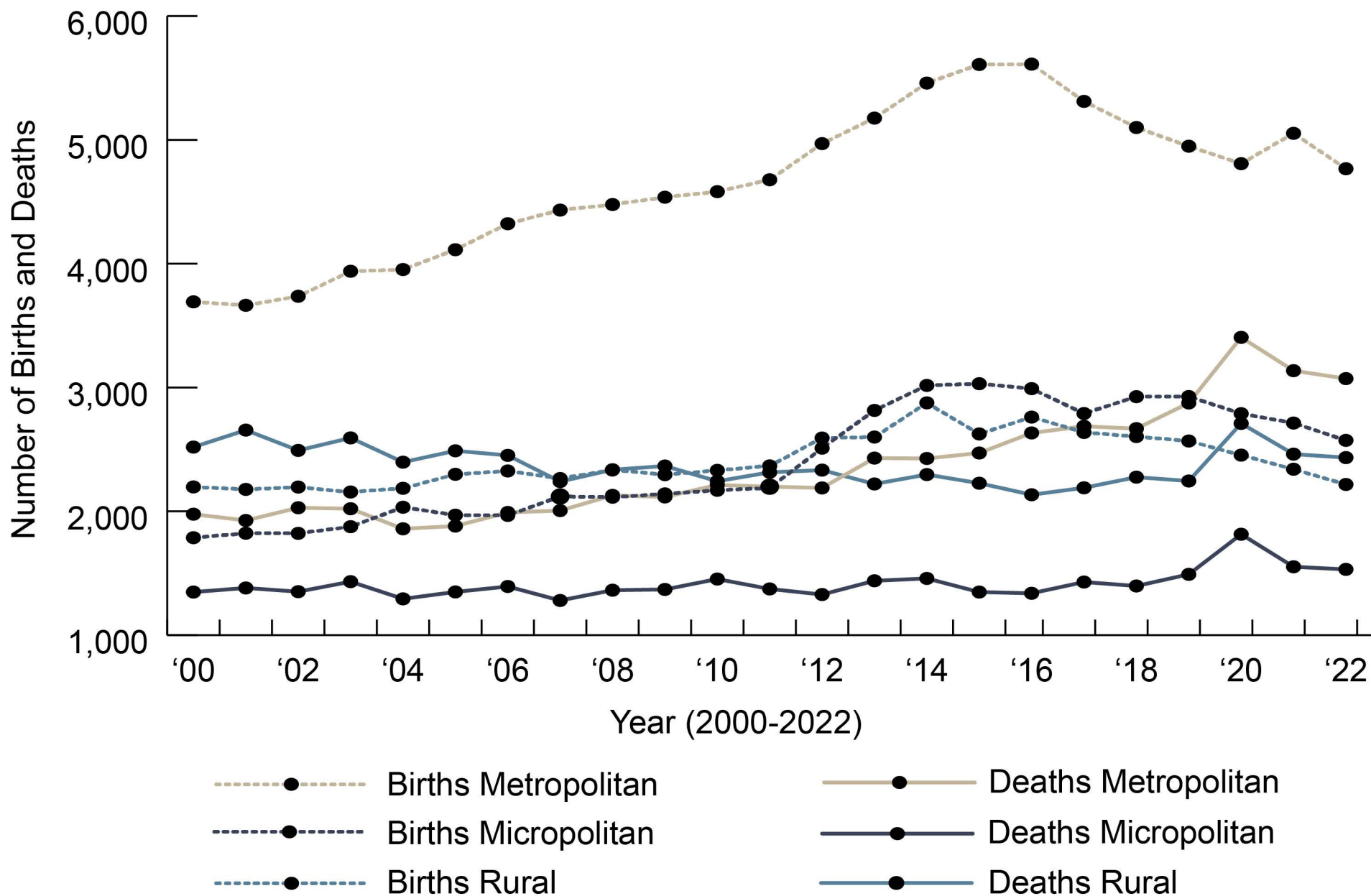


Figure 1.5. Number of births and deaths in North Dakota from 2000 to 2022 by metropolitan, micropolitan, and rural counties.^{5, 8} Metropolitan births have been rapidly increasing. Rural and micropolitan births have been increasing slightly. Rural, metropolitan, and micropolitan deaths all increased in 2020.

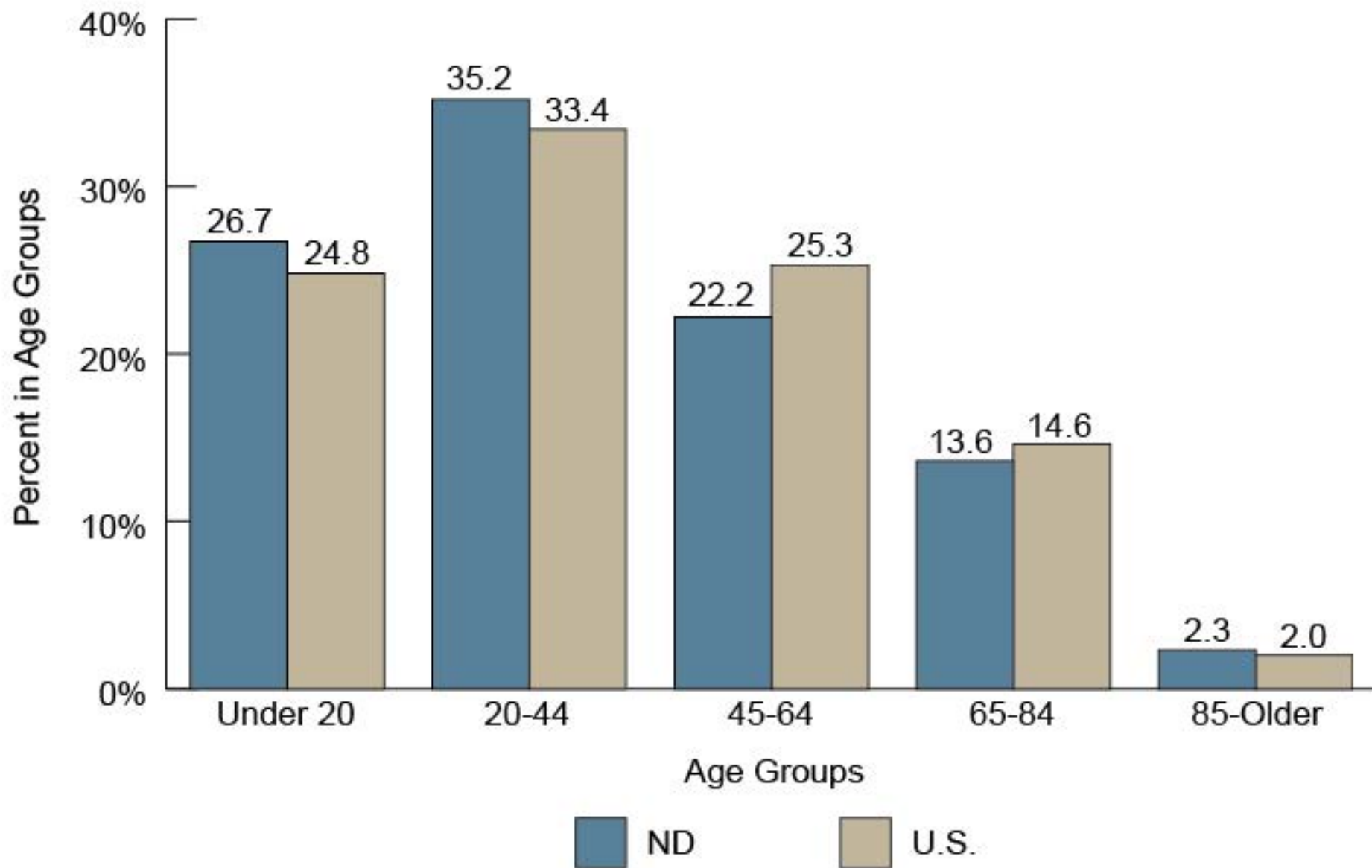


Figure 1.6. Age of people in North Dakota compared with U.S. in 2022.³ There are more North Dakotans 85 and older compared with the U.S. population. There are lower percentages of North Dakotans in the 45 to 64 and 65 to 84 age categories relative to the U.S. population.

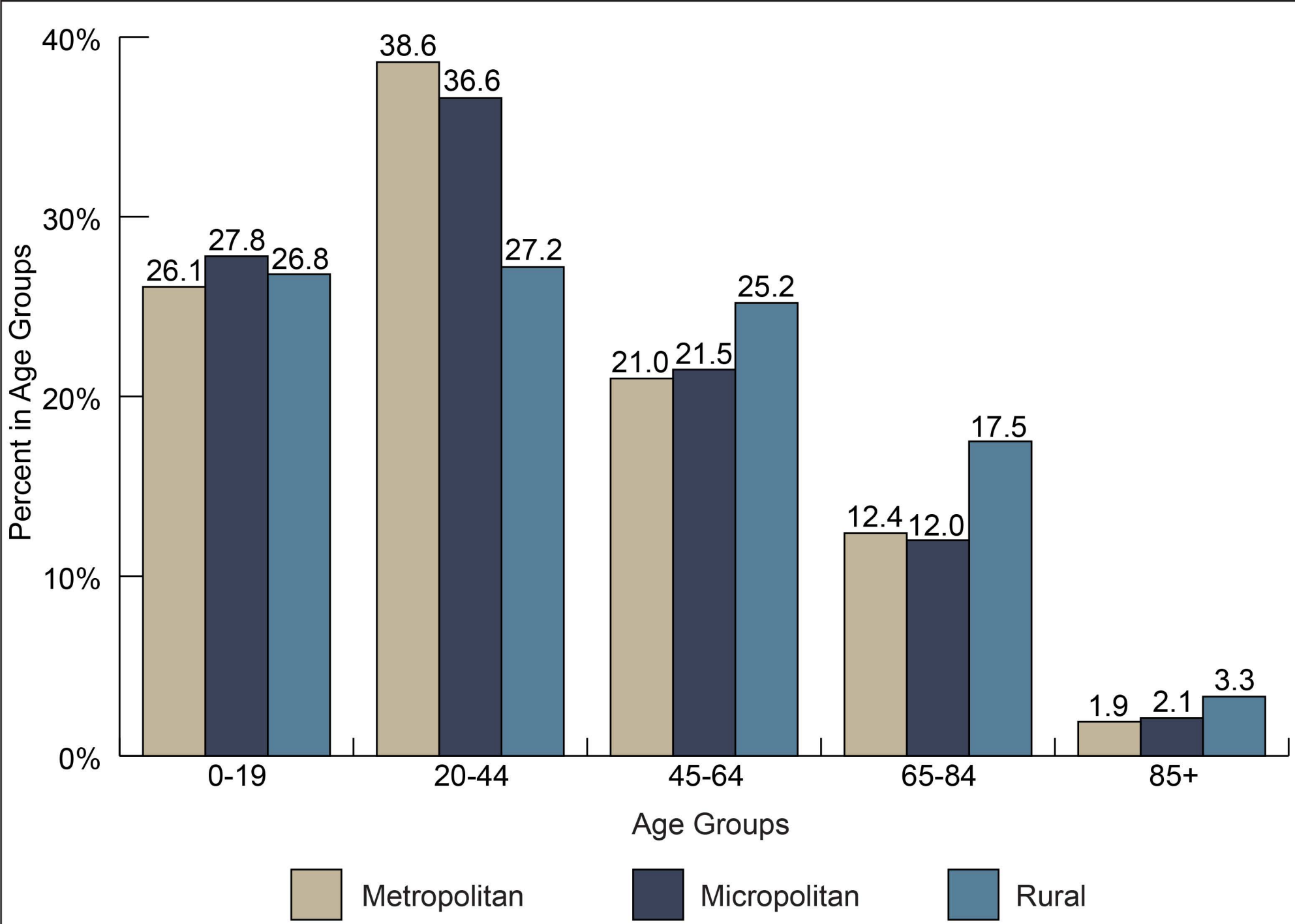


Figure 1.7. Age of people in North Dakota by metropolitan-rural status, 2022.^{3, 5}

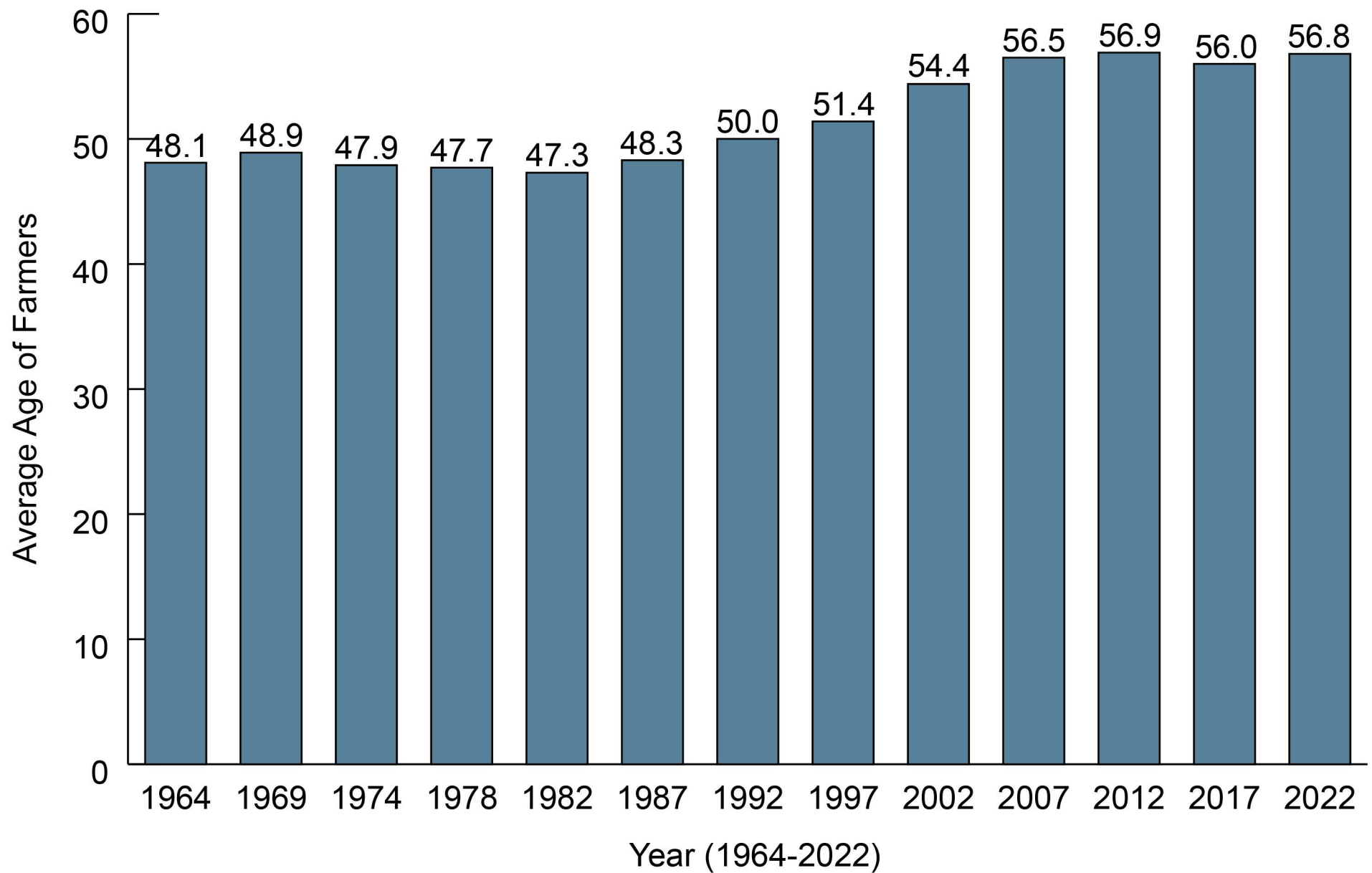


Figure 1.8. Average age of North Dakota farmers from 1964 to 2022.¹⁰ The increase in average age has been especially pronounced in North Dakota farmers, whose average age rose from 47.3 to 56.8 years from 1982 to 2022.

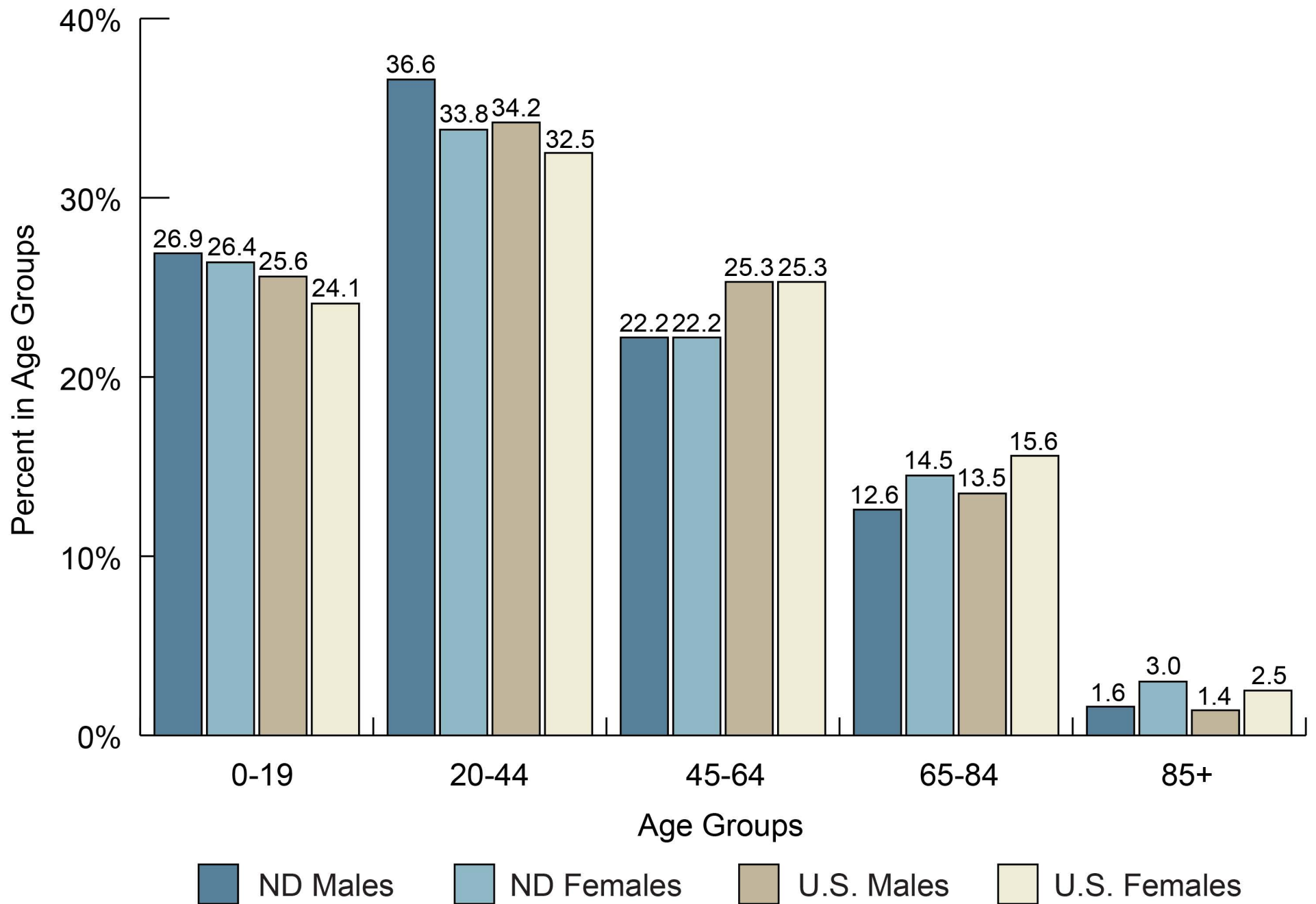


Figure 1.9. Age and sex of people in North Dakota compared to the U.S., 2022.³

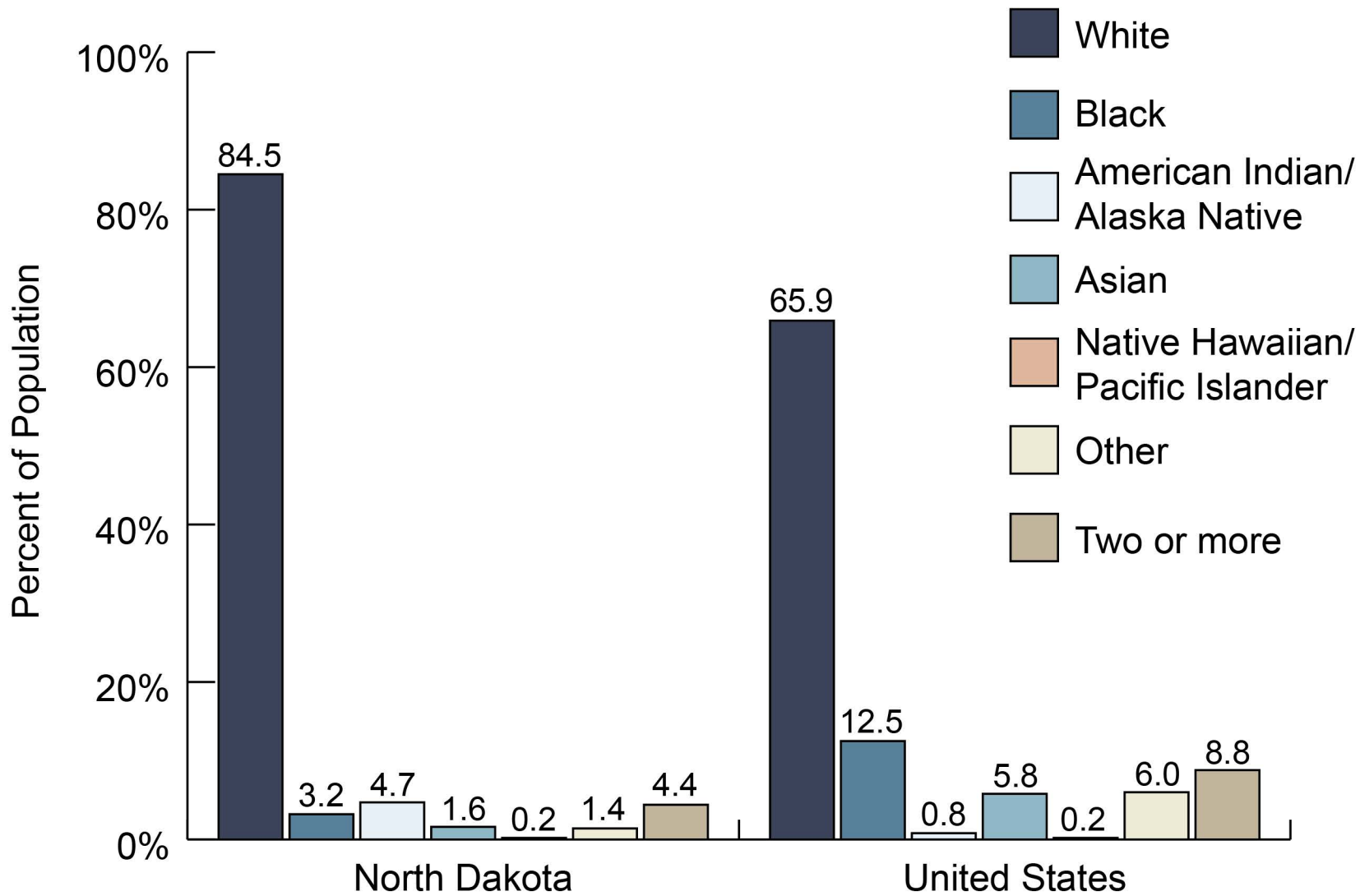


Figure 1.10. Percent of population by racial group for North Dakota and the U.S., 2022.³

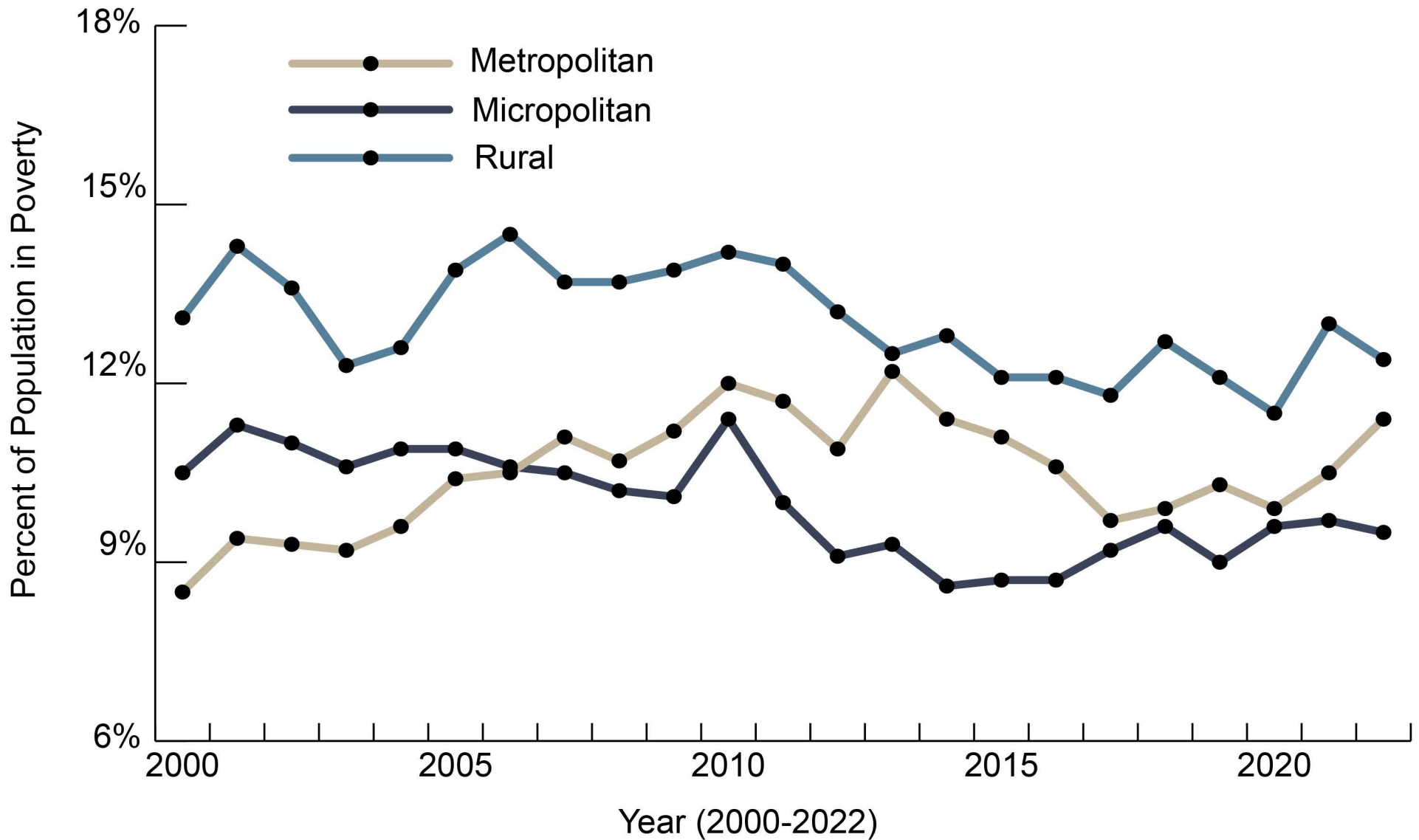


Figure 1.11. Poverty in North Dakota by metropolitan, micropolitan, and rural areas, 2000-2022.^{5, 15}

In 2022, the federal Office of Management and Budget (OMB) considered the poverty level for a family of two to be \$18,310 and for a family of four it was \$27,750. In 2022, 11.2% of North Dakota residents were in poverty (the U.S. had 12.6% in poverty). The poverty rate from 2000 to 2022 was higher in rural North Dakota than other areas. Between 2010 and 2022, the poverty rate decreased by varying amounts for metropolitan, micropolitan, and rural areas of North Dakota.

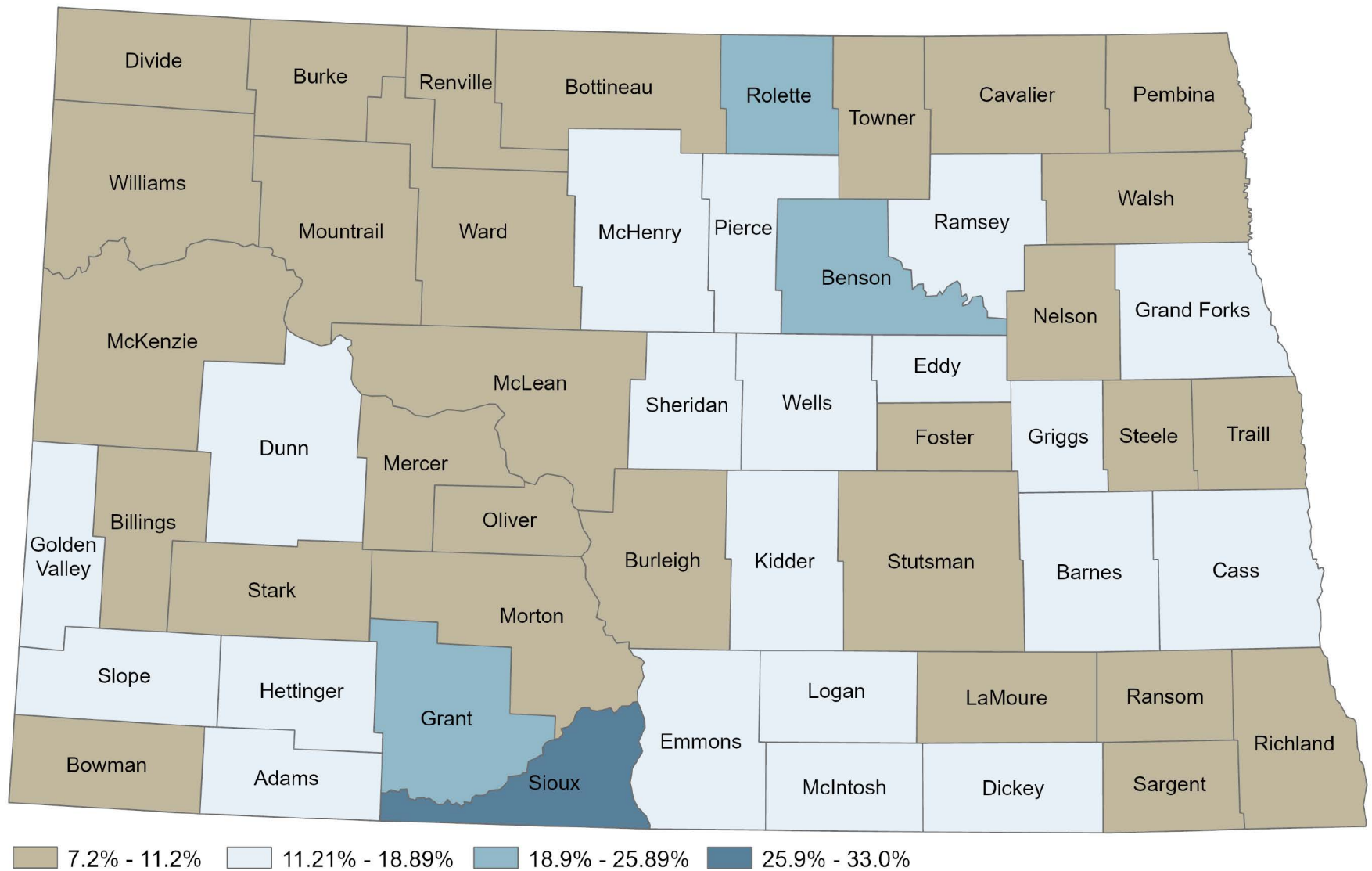


Figure 1.12. Percent of population in poverty in North Dakota, by county, 2022.^{5, 15}

In 2022, four counties had more than 20% of their population in poverty. These four counties are designated as rural and have significant American Indian populations. Twenty-three counties in North Dakota have poverty rates less than or equal to 10%.

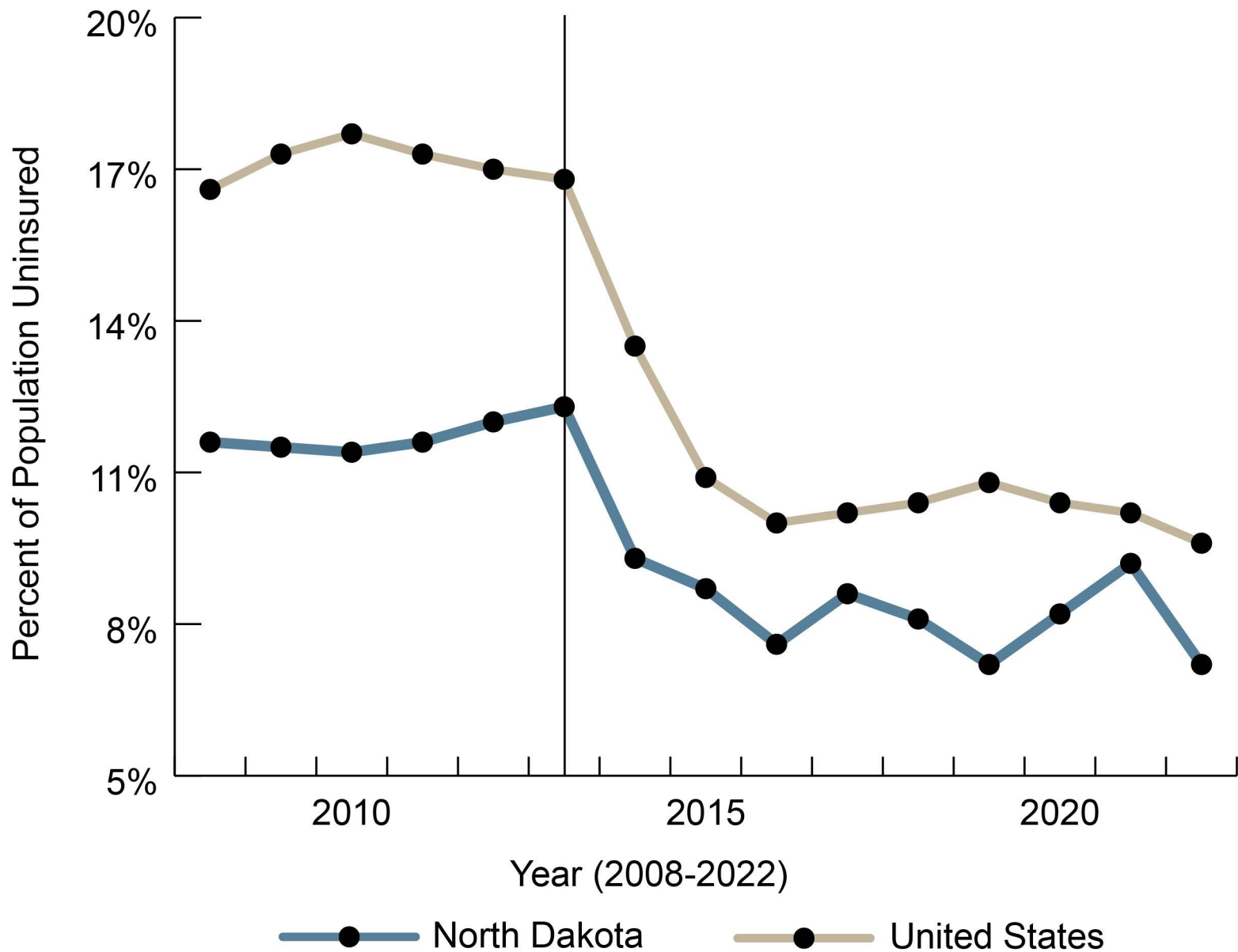


Figure 1.13. Uninsured population of North Dakota and the U.S., 2008-2022.¹⁸
 The black vertical line represents the point in time when penalties for not having health insurance went into effect in 2013.

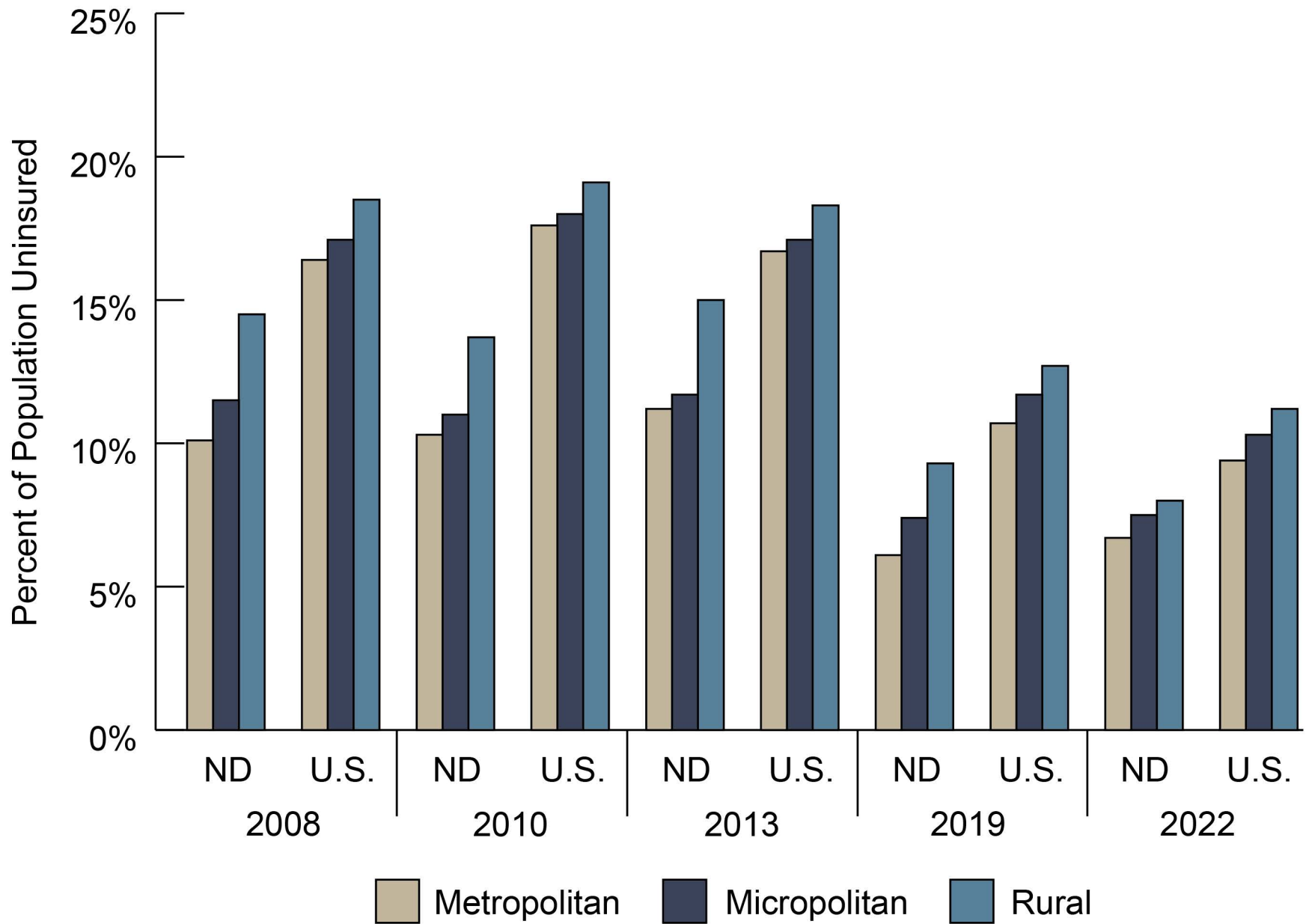


Figure 1.14. Percent of population uninsured by metropolitan-rural status for North Dakota and the U.S., selected years 2008-2022.¹⁸

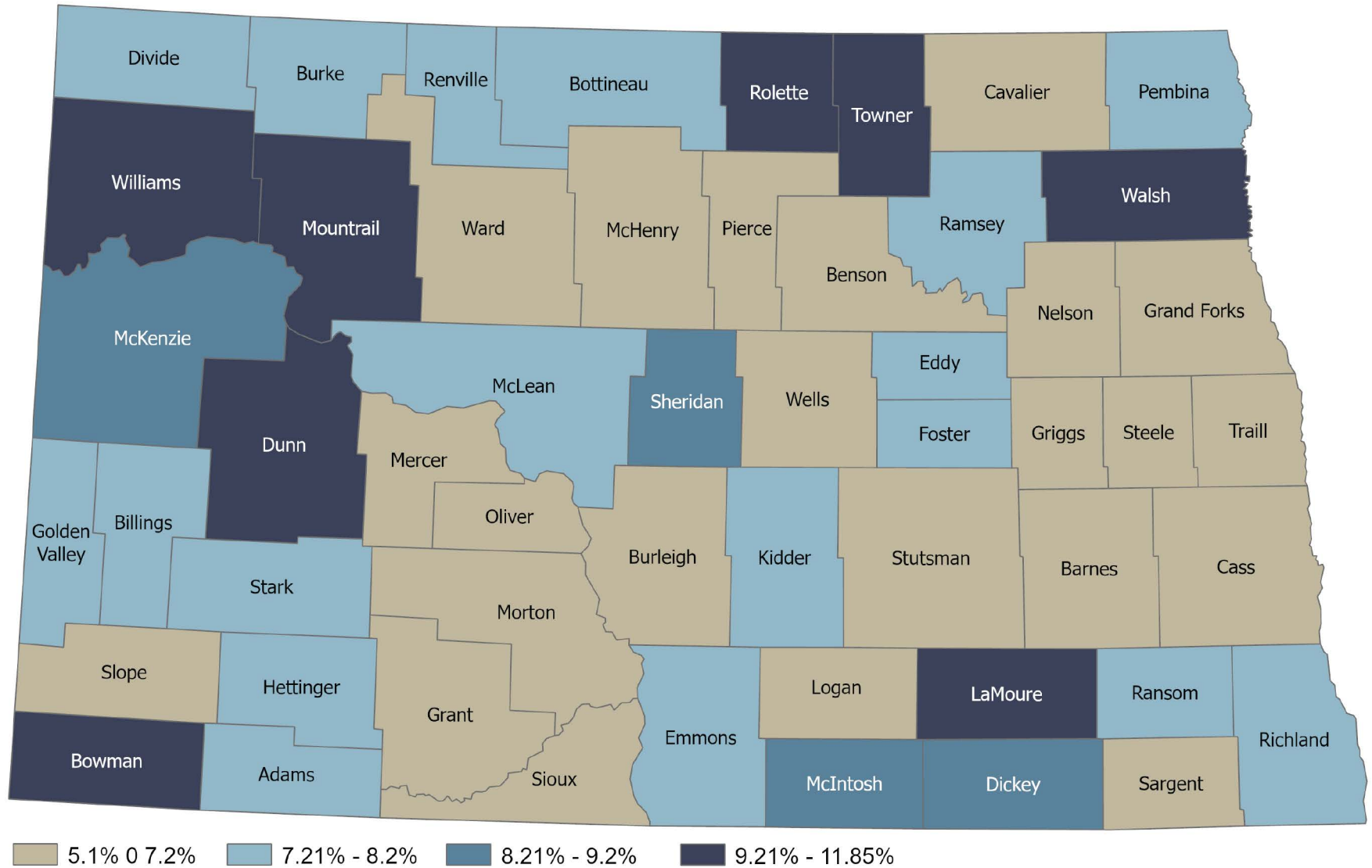


Figure 1.15. Population uninsured by county, North Dakota, 2022.¹⁸

Category		North Dakota		United States	
		N	%	N	%
Total Veterans		43,674	7.4	16,955,133	6.6
Period of Service	World War II	781	1.8	296,811	1.7
	Korean War	2,458	5.6	1,012,520	6.0
	Vietnam War Era	14,303	32.7	5,846,975	34.4
	Gulf War (8/1990-8/2001)	9,879	22.6	3,915,074	23.0
	Gulf War (9/2001 or later)	12,727	29.1	3,973,341	23.4
Age	18-34	4,925	11.3	1,461,505	8.6
	35-54	10,962	25.1	4,038,454	23.8
	55-64	7,462	17.1	3,112,711	18.3
	65-74	10,478	24.0	4,245,542	25.0
	75 and Older	9,847	22.5	4,136,921	24.3
Sex	Male	39,340	90.1	15,354,467	90.3
	Female	4,334	9.9	1,640,666	9.7
Race and Ethnicity	White	39,939	91.4	13,220,431	77.8
	Black	557	1.3	2,104,915	12.4
	Asian	191	0.4	317,154	1.9
	American Indian Alaska Native	1,158	2.7	117,180	0.7
	Native Hawaiian Pacific Islander	130	0.3	34,457	0.2
	Other	389	0.9	357,199	2.1
	Two or More Races	1,310	3.0	843,797	5.0
	Hispanic or Latino	1,145	2.6	1,349,506	7.9
Educational Attainment	No High School	2,528	5.8	837,866	4.9
	High School or GED	12,436	28.5	4,571,939	26.9
	Associate's Degree	16,193	37.1	6,241,475	36.7
	Bachelor's Degree	11,312	25.9	5,116,747	30.1
Poverty/ Disability	Below Poverty	2,579	5.9	1,167,552	6.9
	Disabled	11,566	26.5	4,982,715	29.3

Table 1.2**Summary of demographics of North Dakota's population by metropolitan, micropolitan, and rural areas, 2022.³**

Category	Metropolitan		Micropolitan		Rural	
	N	%	N	%	N	%
Total Population	392,722	50.6	188,201	24.2	195,951	25.2
Sex						
Male	199,916	50.1	98,776	24.7	100,653	25.2
Female	192,806	51.1	89,425	23.7	95,298	25.2
Age						
Under 20	102,649	26.1	52,234	27.8	52,529	26.8
20-44	151,579	38.6	68,862	36.6	53,316	27.2
45-64	82,571	21.0	40,502	21.5	49,412	25.2
65-84	48,506	12.4	22,597	12.0	34,224	17.5
85 and Older	7,417	1.9	4,012	2.1	6,470	3.3
Race						
White	335,909	85.5	161,828	86.0	158,688	81.0
Black	17,125	4.4	6,462	3.4	1,646	0.8
American Indian/ Alaska Native	8,075	2.1	3,112	1.7	25,097	12.8
Asian	9,018	2.3	2,210	1.2	1,246	0.6
Native Hawaiian/ Pacific Islander	1,064	0.3	265	0.1	130	0.1
Other	4,205	1.1	4,576	2.4	1,924	1.0
Two or More	17,326	4.4	9,748	5.2	7,220	3.7
Ethnicity						
Hispanic or Latino	13,362	3.4	11,762	6.3	8,065	4.1
Not Hispanic or Latino	379,360	96.6	176,439	93.8	187,886	95.9
Poverty						
Yes	43,717	11.4	17,088	9.5	23,402	12.4
No	339,028	88.6	163,014	90.5	164,987	87.6
Uninsured						
Yes	21,820	6.7	11,513	7.5	11,638	8.0
No	304,108	93.3	142,249	92.5	133,676	92.0

CHAPTER TWO:

SOCIAL DRIVERS OF HEALTH IN NORTH DAKOTA

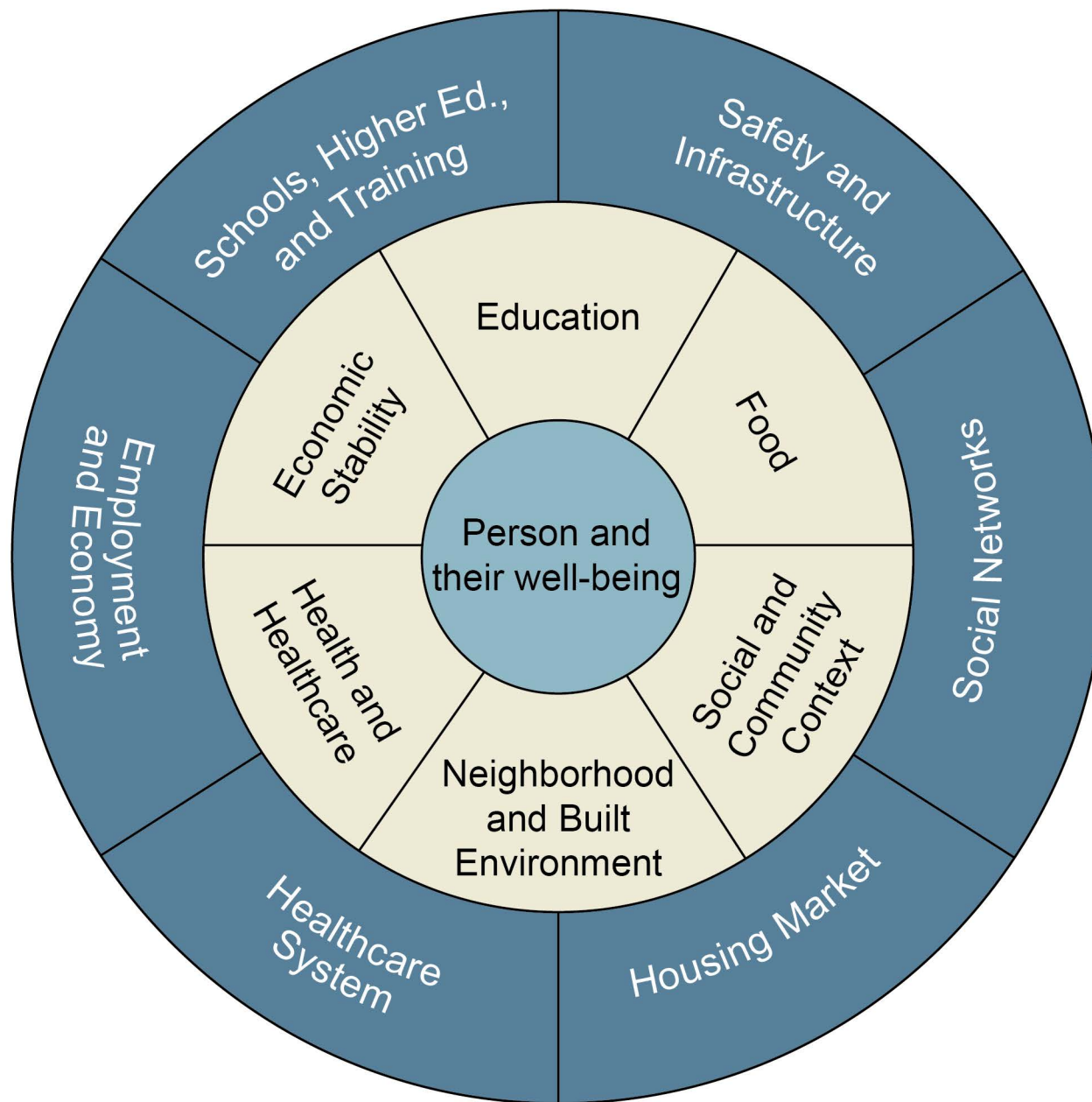


Figure 2.1. Social drivers of health.³ The innermost circle represents the individual, the middle ring represents an individual's immediate environment, and the outermost ring represents other outside influences on an individual's immediate environment.

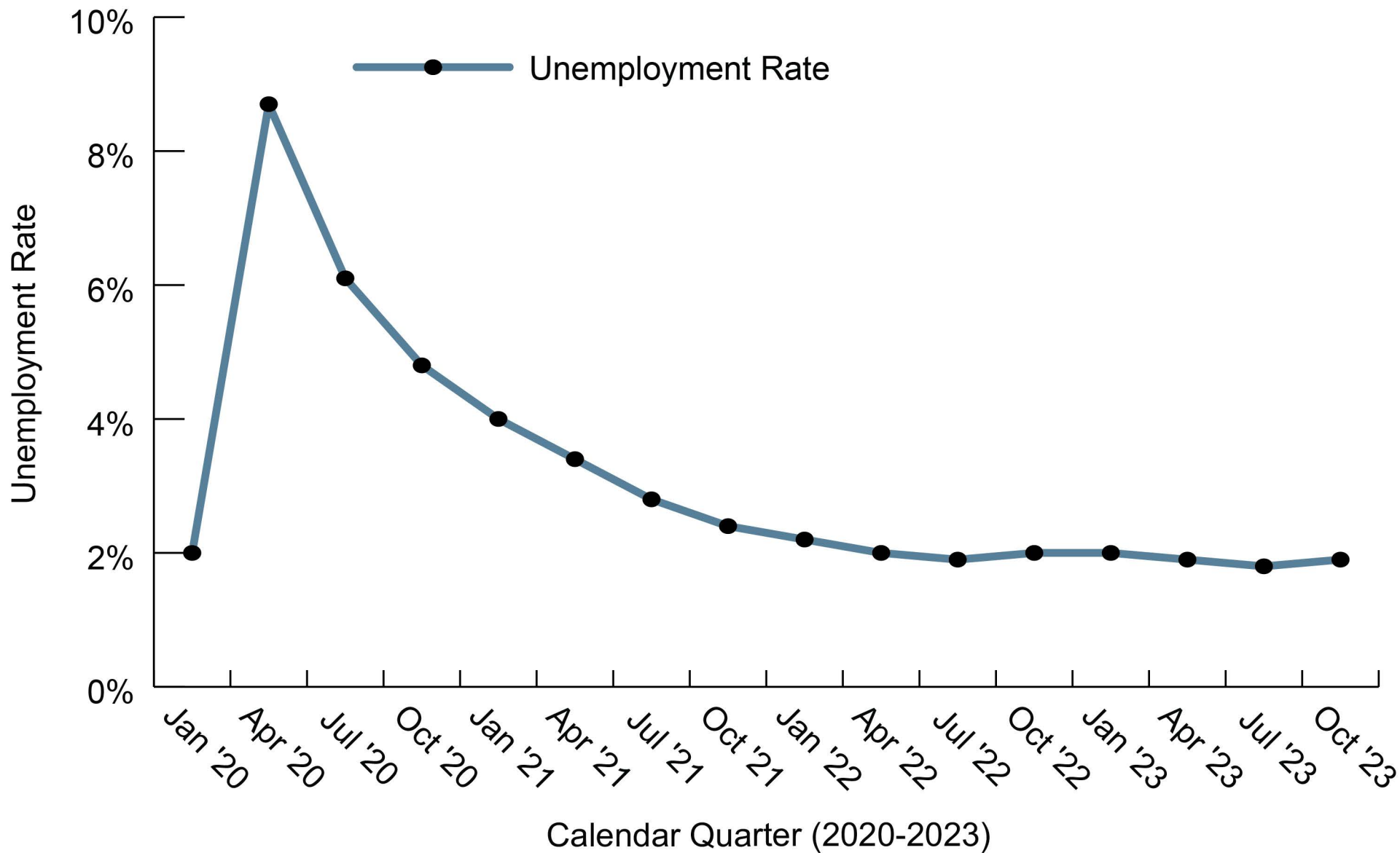


Figure 2.2. North Dakota unemployment rate by calendar quarter 2020-2023.⁴ North Dakota had an increase in the unemployment rate in the spring of 2020 followed by a steady decline and the rate remaining fairly level since April of 2022.

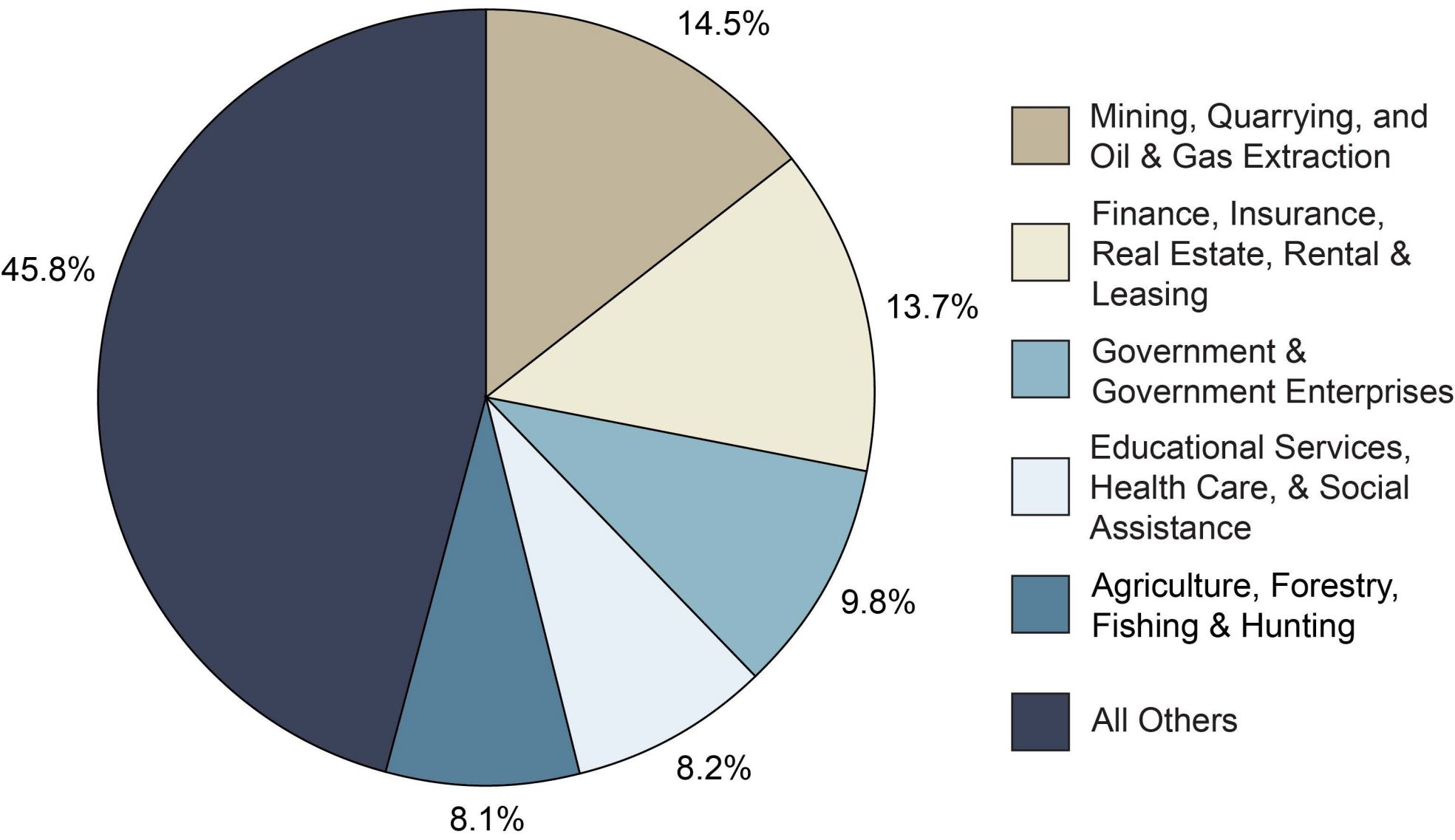


Figure 2.3. Economic sector contributions to North Dakota GDP in 2023.⁷ The ‘All Others’ category includes: entertainment, recreation, accommodation, and food services; professional and business services; retail trade; transportation and warehousing; information; construction; manufacturing; wholesale trade.

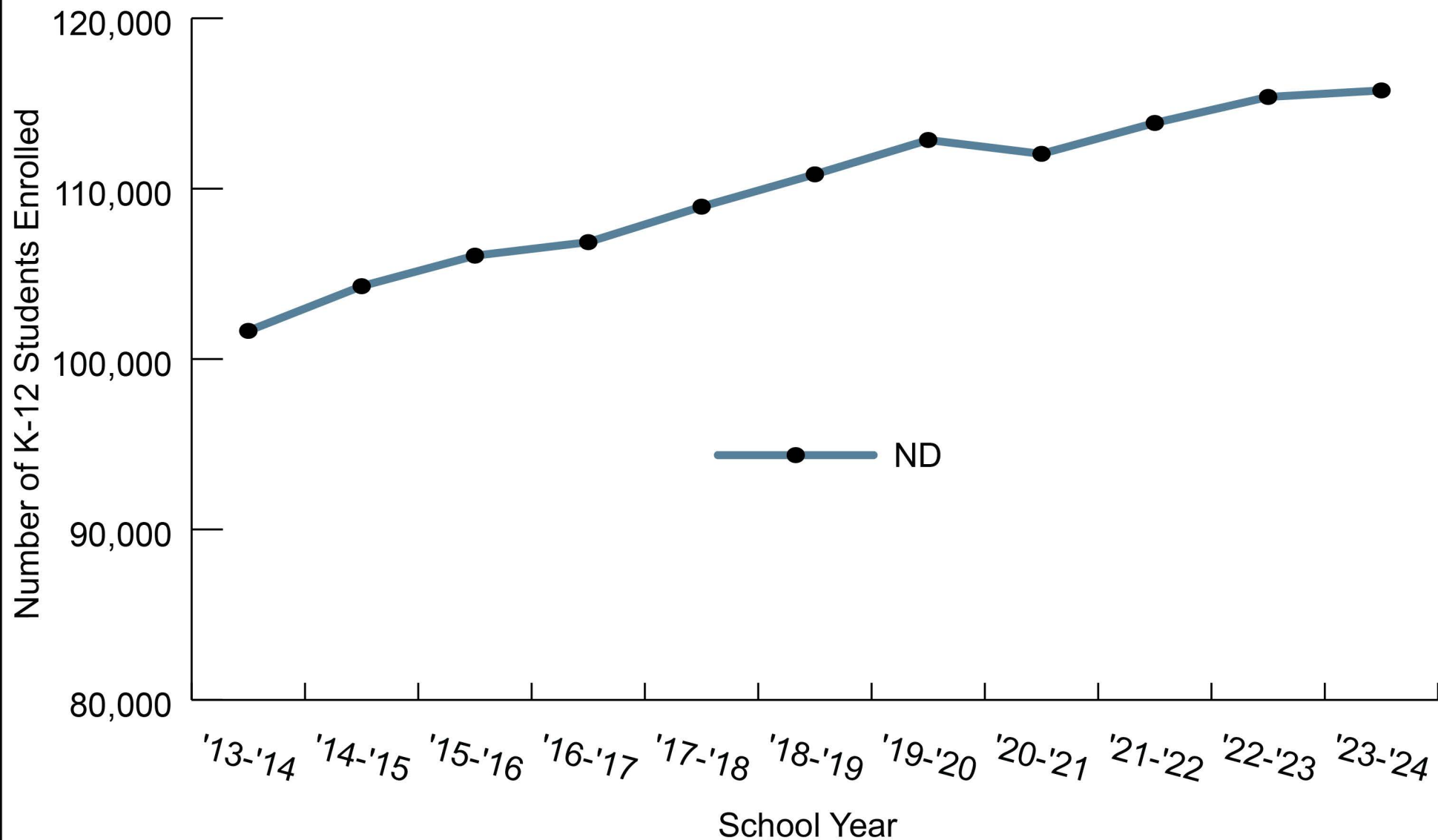


Figure 2.4. Number of K-12 students enrolled in North Dakota public schools, by school year.¹⁵ North Dakota has had a mostly steady increase in public school enrollment between the 2013-2014 school year and the 2023-2024 school year, with a dip in enrollment during the 2020-2021 school year.

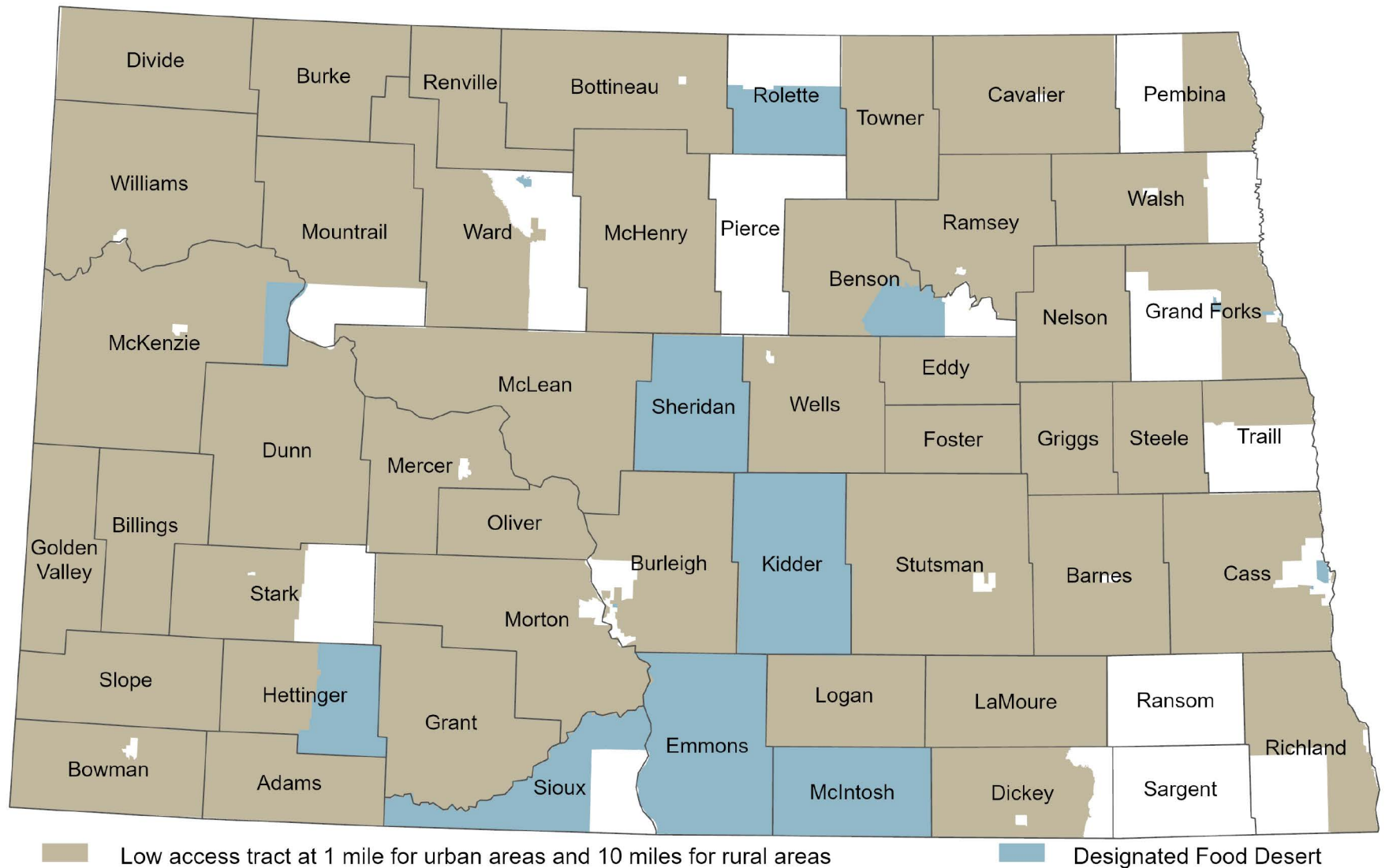


Figure 2.5. Low food access and food desert designated census tracts in North Dakota, 2019.³² Low food access is defined as 500 people and/or 33% of the population of a census tract living more than one mile from a grocery store in urban areas and more than 10 miles from a grocery store in rural areas. Food deserts are census tracts designated as low access and low income.

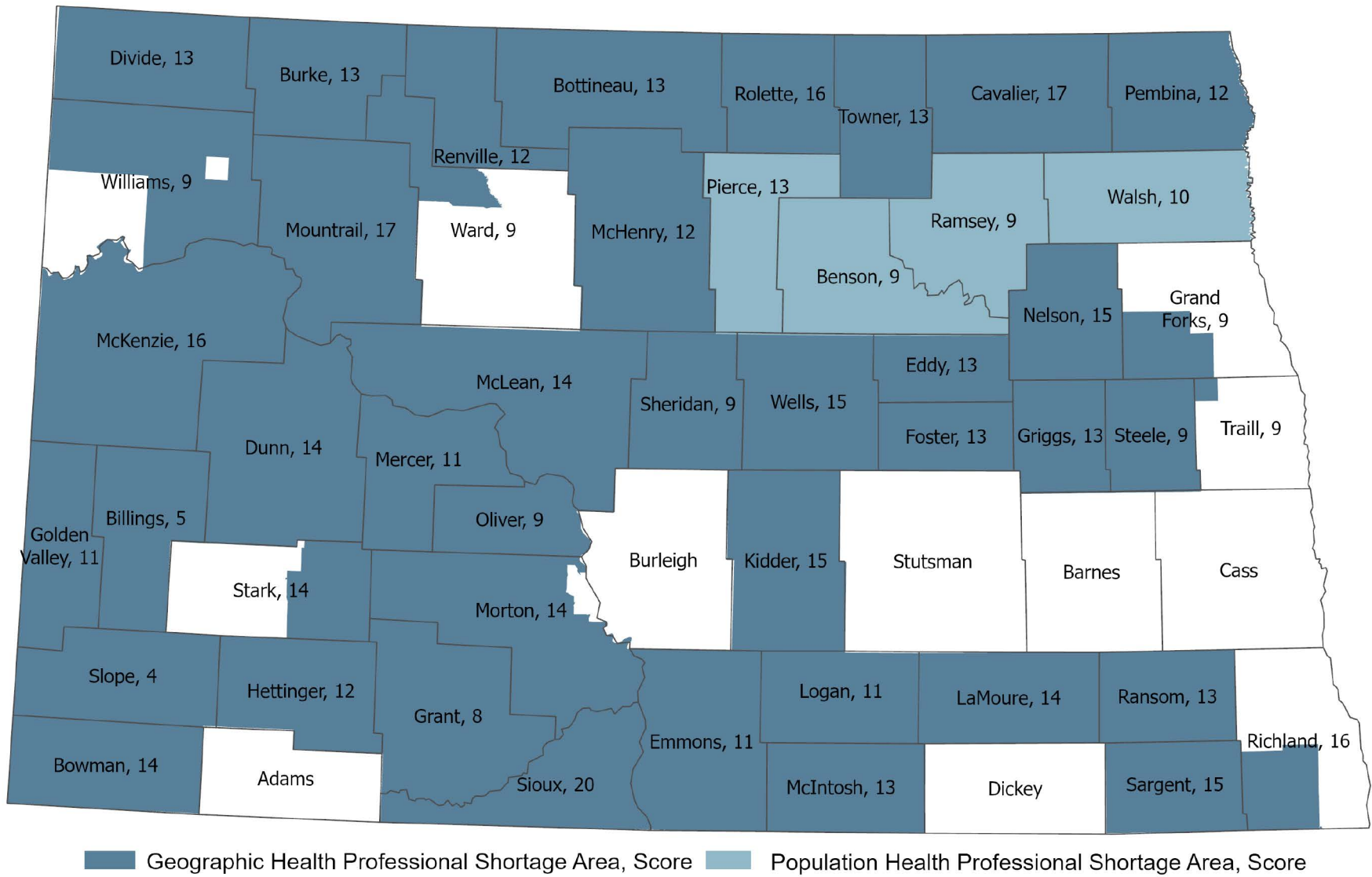


Figure 2.6. Primary care health professional shortage areas (HPSAs) in North Dakota, 2024.⁵⁷ The numbers associated with the counties are the HPSA scores for the respective county. A higher score indicates a greater shortage of primary care providers.

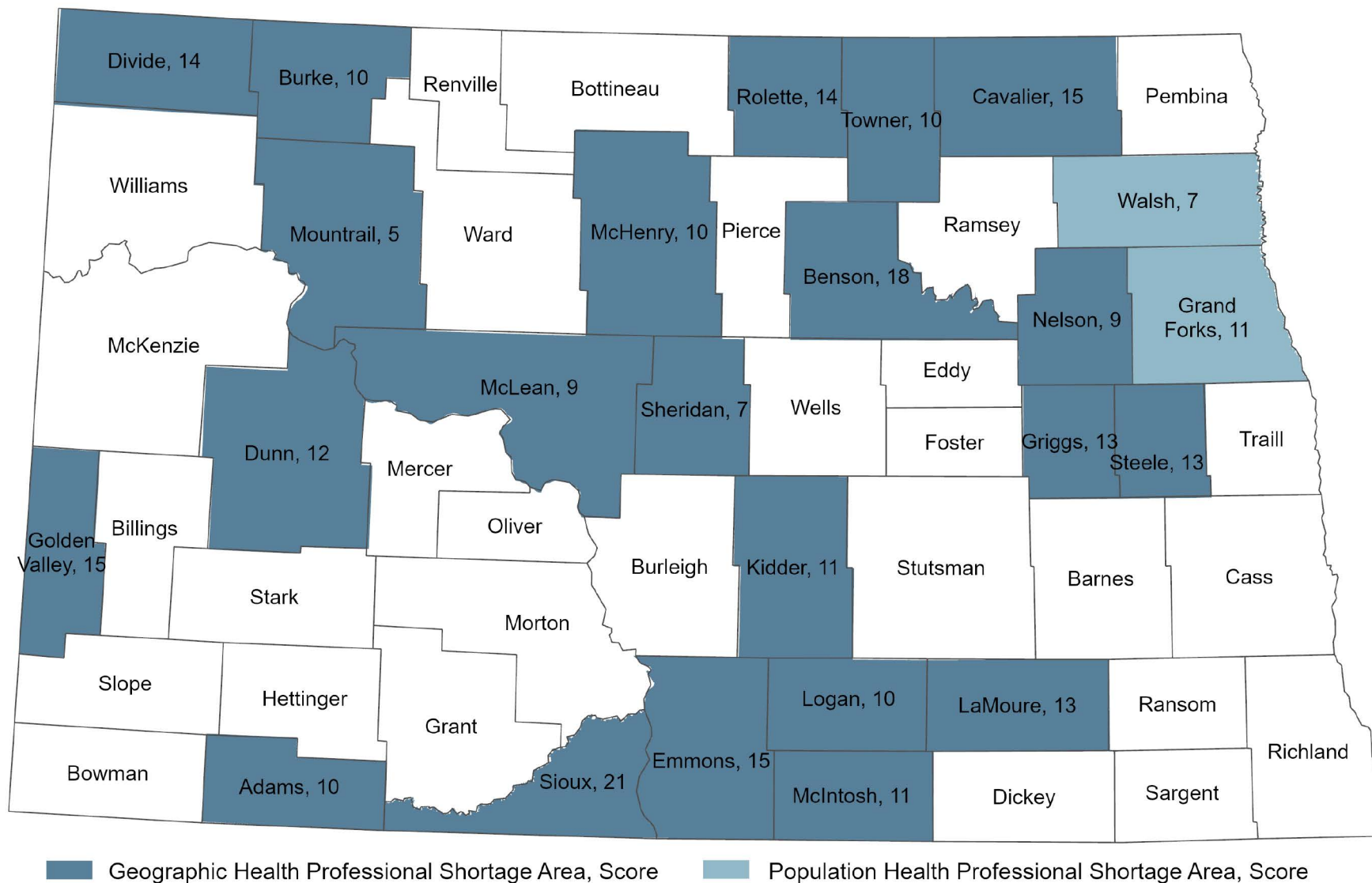


Figure 2.7. Dental health professional shortage areas (HPSAs) in North Dakota, 2024.⁵⁷ The numbers associated with the counties are the HPSA scores for the respective county. A higher score indicates a greater shortage of dental health providers.

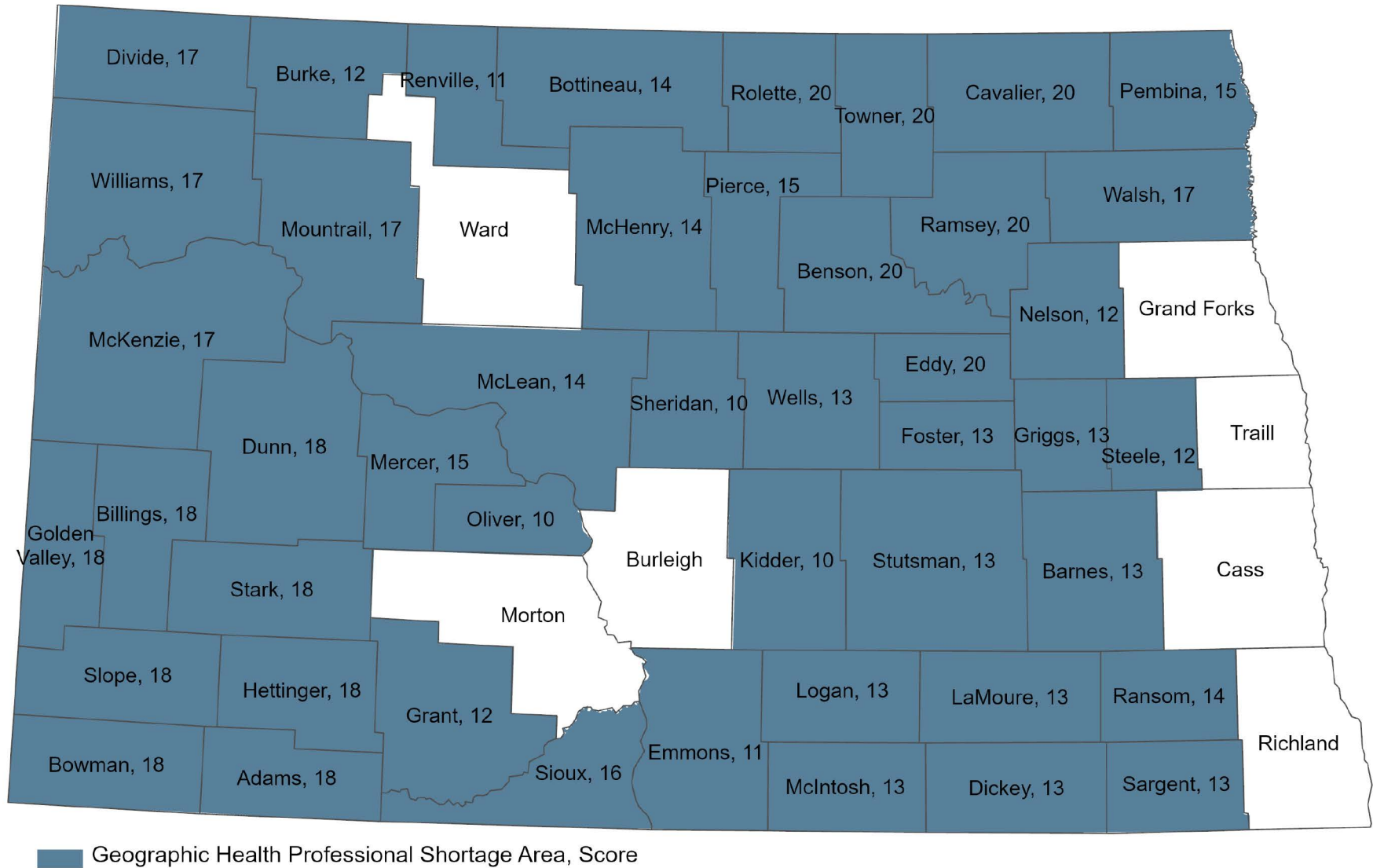


Figure 2.8. Mental health professional shortage areas (HPSAs) in North Dakota, 2024.⁵⁷ The majority of counties in North Dakota are designated as mental health professional shortage areas. The ones that are not designated contain or are adjacent to the cities of Grand Forks, Fargo, Bismarck, and Minot. The numbers associated with the counties are the HPSA scores for the respective county. A higher score indicates a greater shortage of mental health providers.

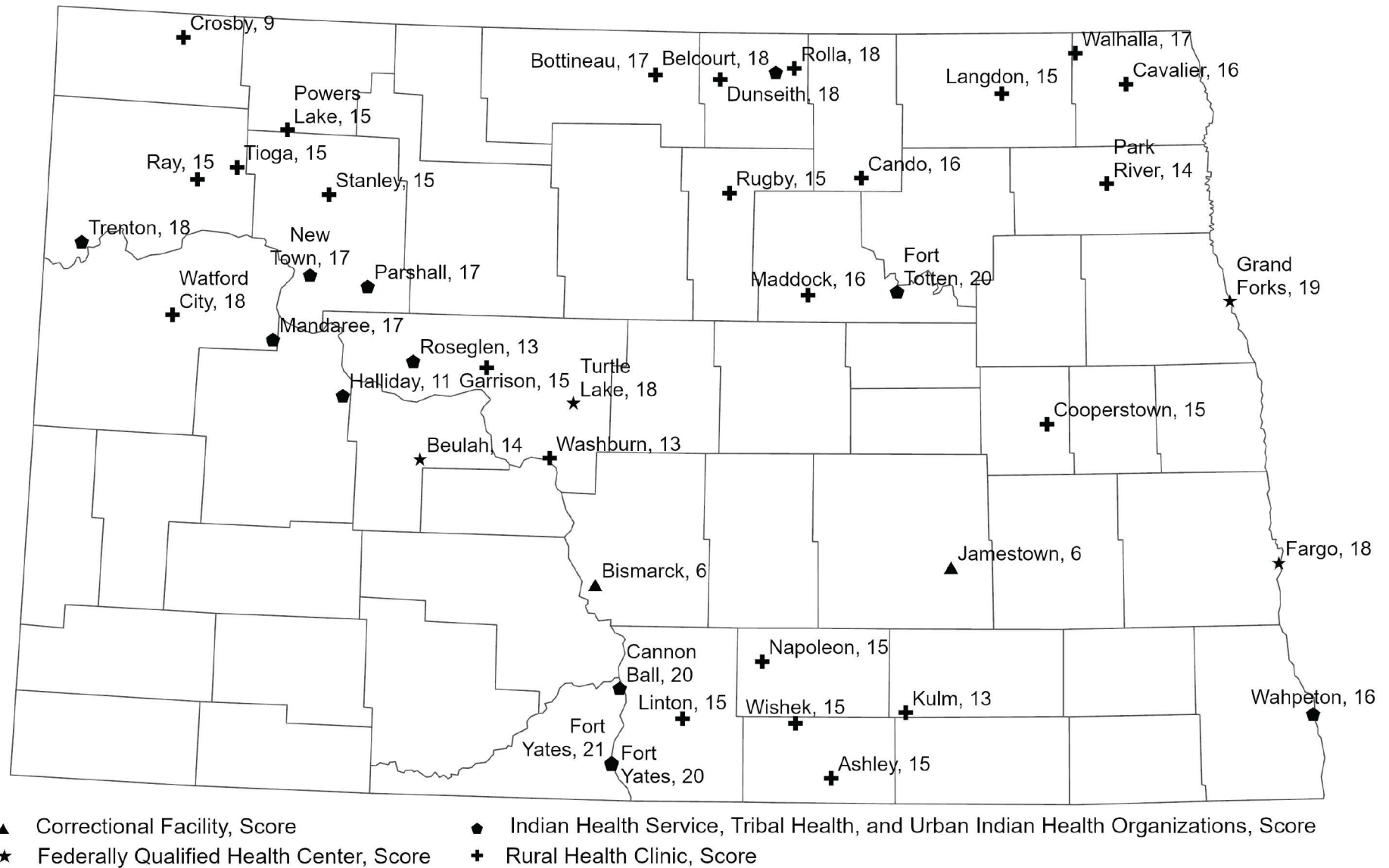


Figure 2.9. Primary care facility health professional shortage area (HPSA) designations in North Dakota, 2024.⁵⁷ The numbers associated with the facilities are the HPSA scores for the respective facility. A higher score indicates a greater shortage of primary care providers.

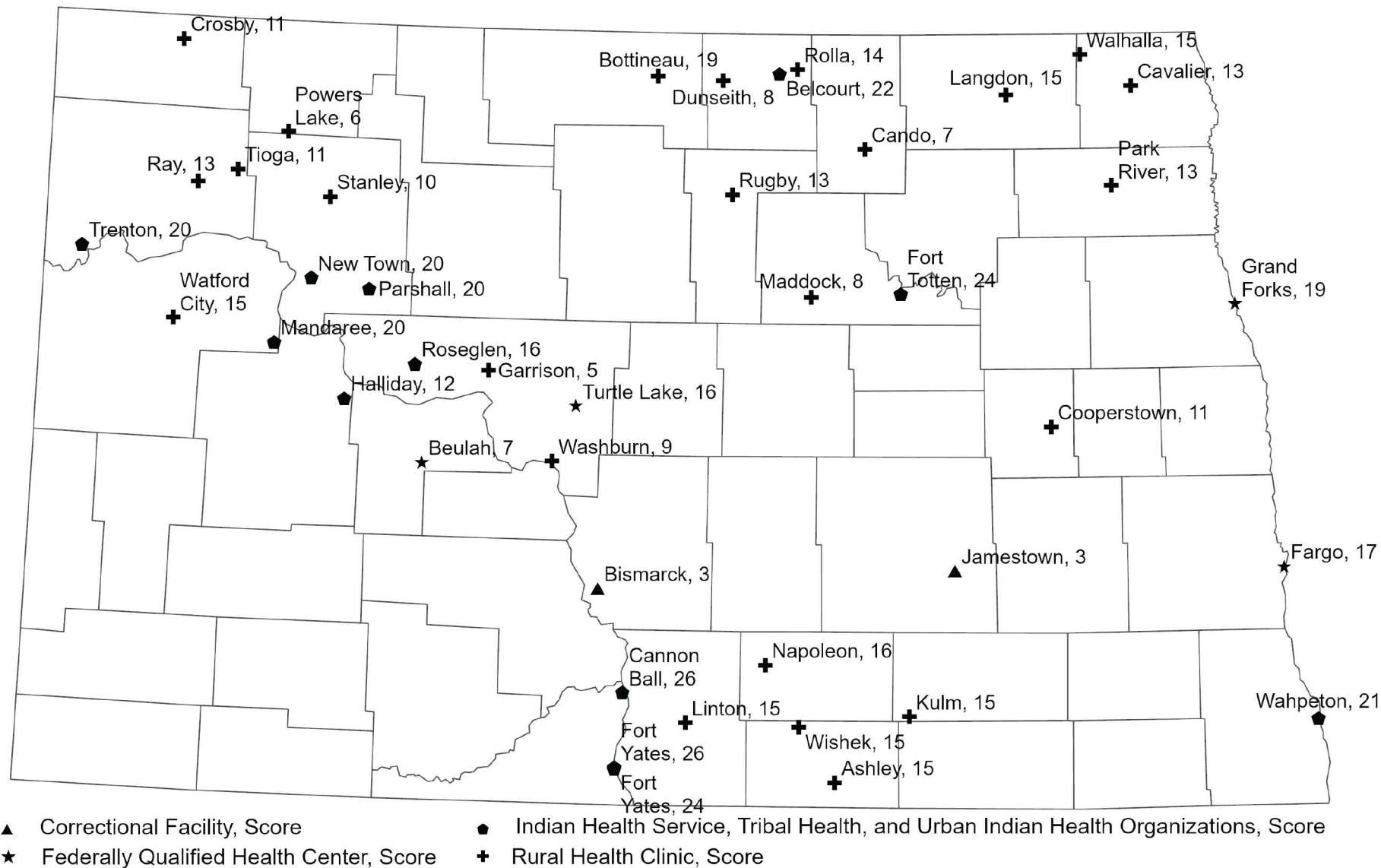


Figure 2.10. Dental health facility health professional shortage area (HPSA) designations in North Dakota, 2024.⁵⁷ The numbers associated with the facilities are the HPSA scores for the respective facility. A higher score indicates a greater shortage of dental health providers.

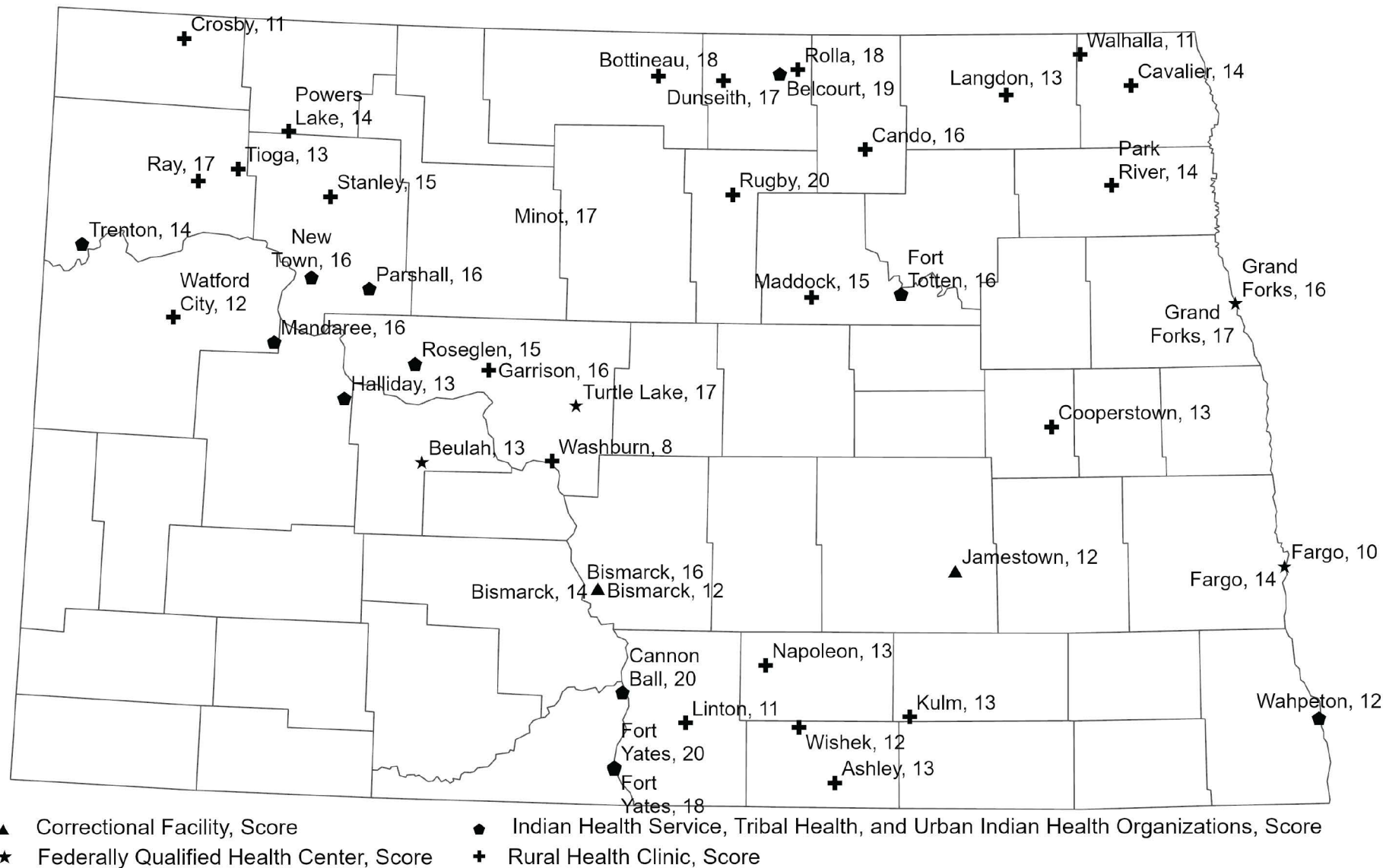


Figure 2.11. Mental health facility health professional shortage area (HPSA) designations in North Dakota, 2024.⁵⁷ The numbers associated with the facilities are the HPSA scores for the respective facility. A higher score indicates a greater shortage of mental health providers.

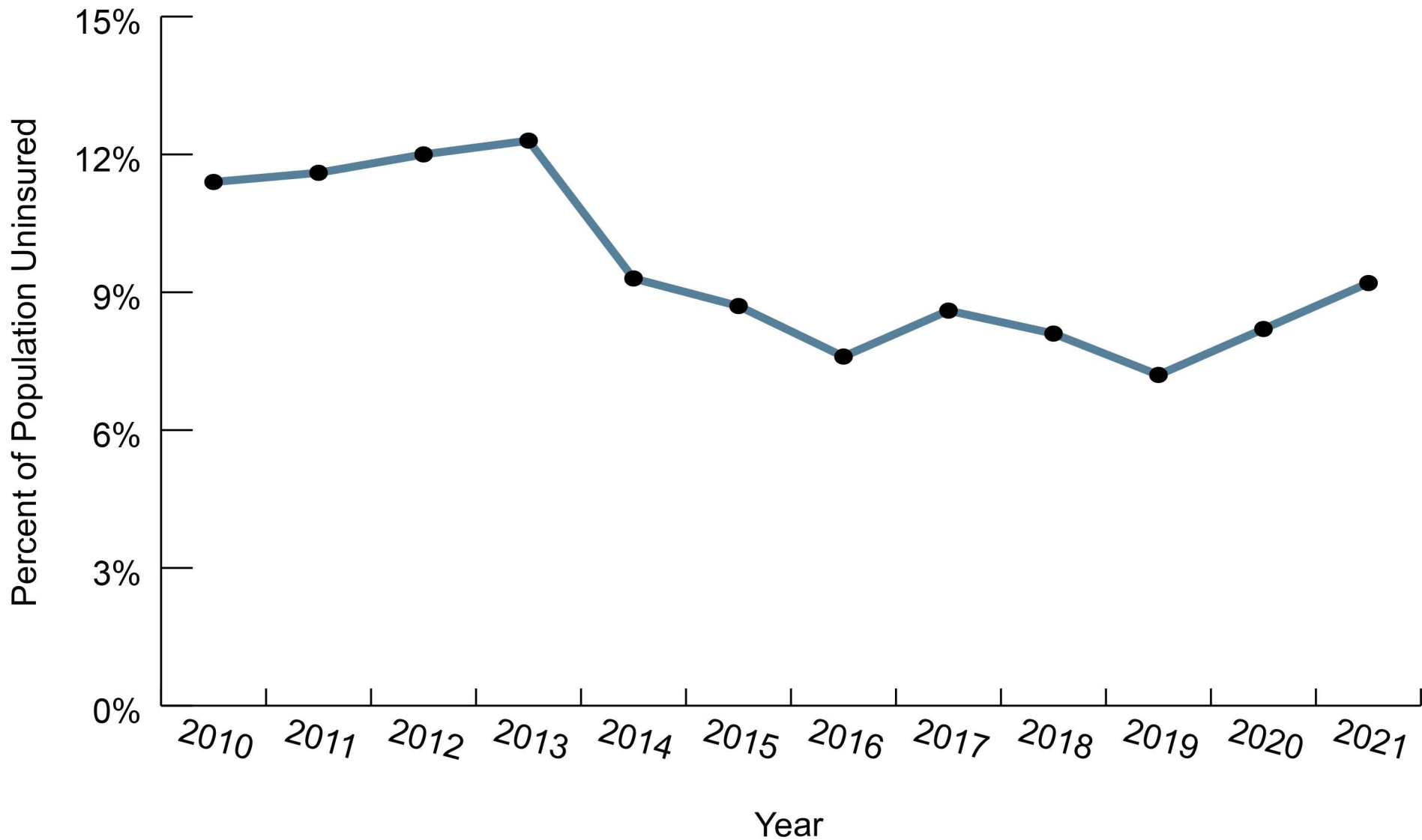


Figure 2.12. Percent of population with no health insurance coverage in North Dakota from 2010-2021.⁶⁰ Between 2013 and 2016 North Dakota had a notable drop in the percent of the population without health insurance, and since 2014 the percent uninsured has remained below 10%.

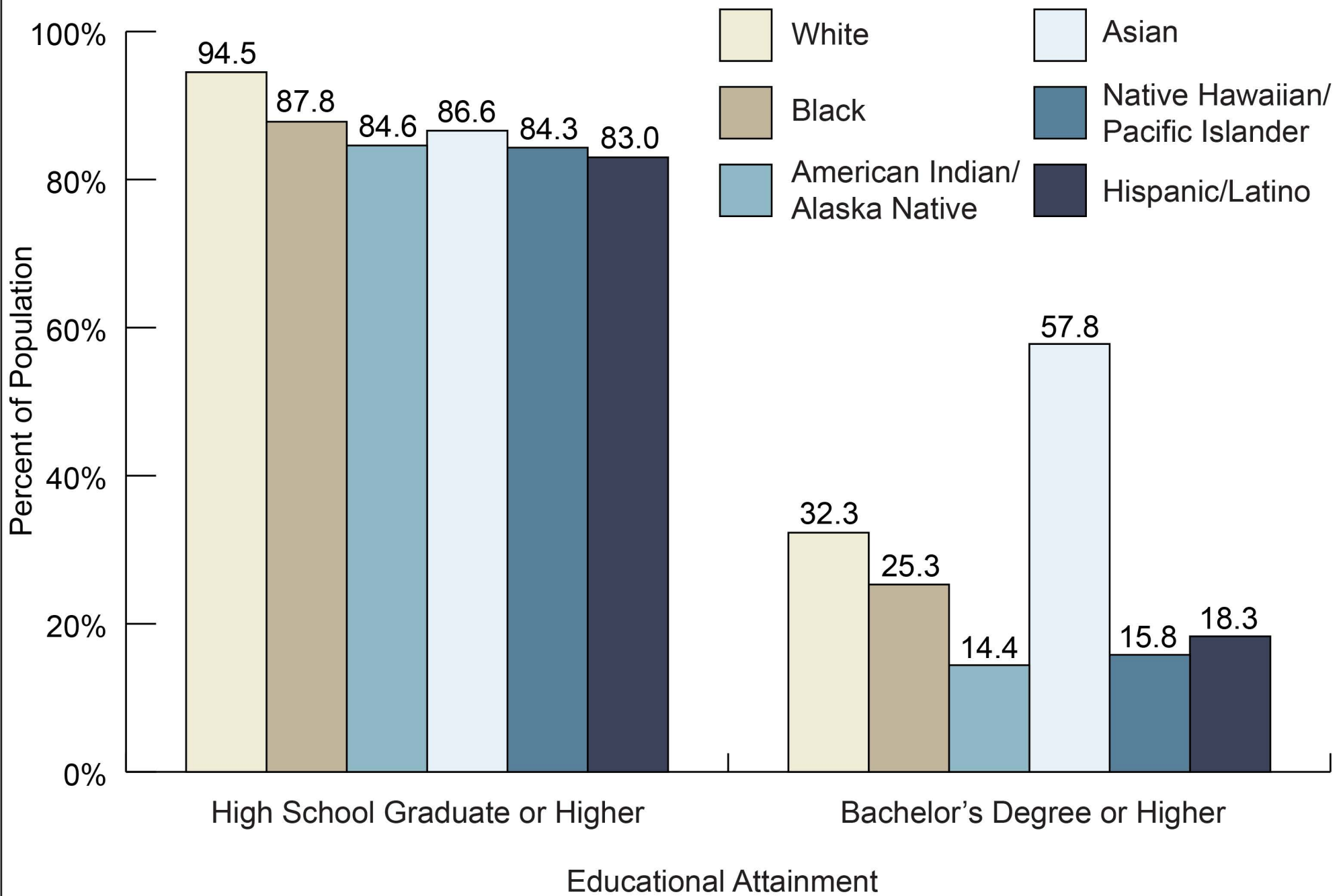


Figure 2.13. Educational attainment of people in North Dakota by racial/ethnic group, 2022.⁶²

CHAPTER THREE:

THE HEALTH OF NORTH DAKOTA

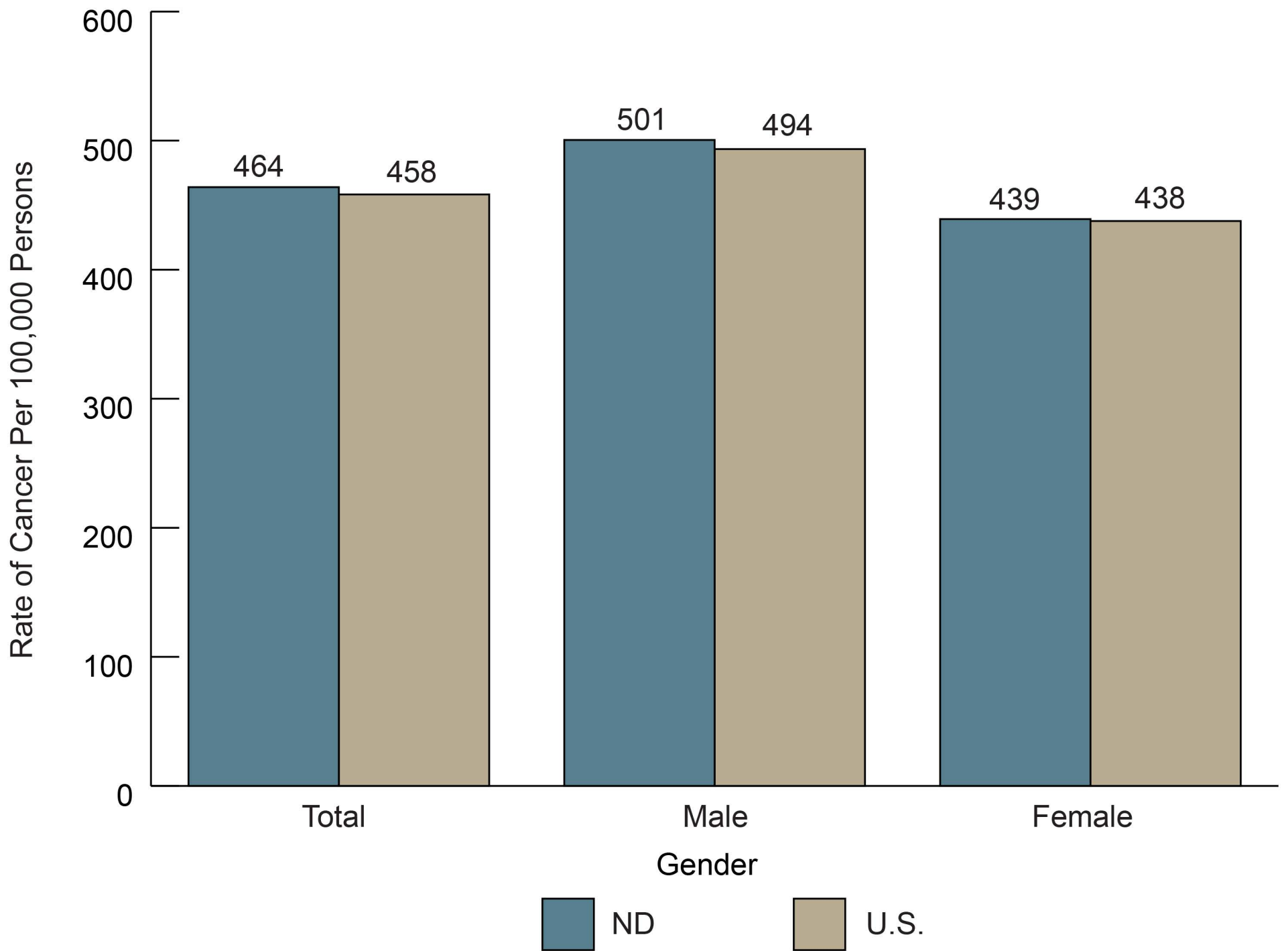


Figure 3.1. Rates of cancer in North Dakota and the U.S. by gender, 2021.^{21, 22, 25}

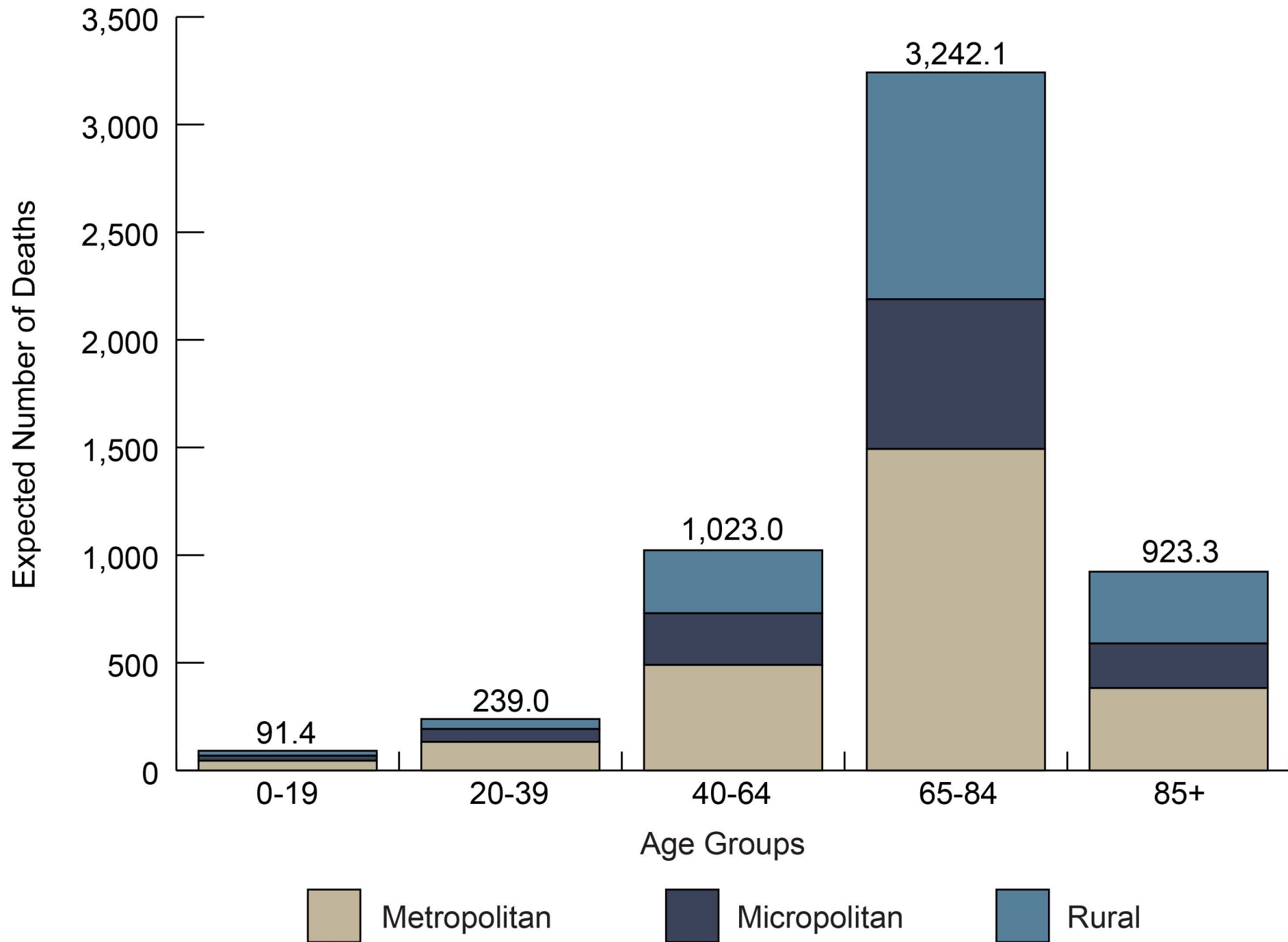


Figure 3.2. Expected number of deaths in North Dakota per age group after adjusting for demographic factors specific to each region, 2022.^{37, 38}

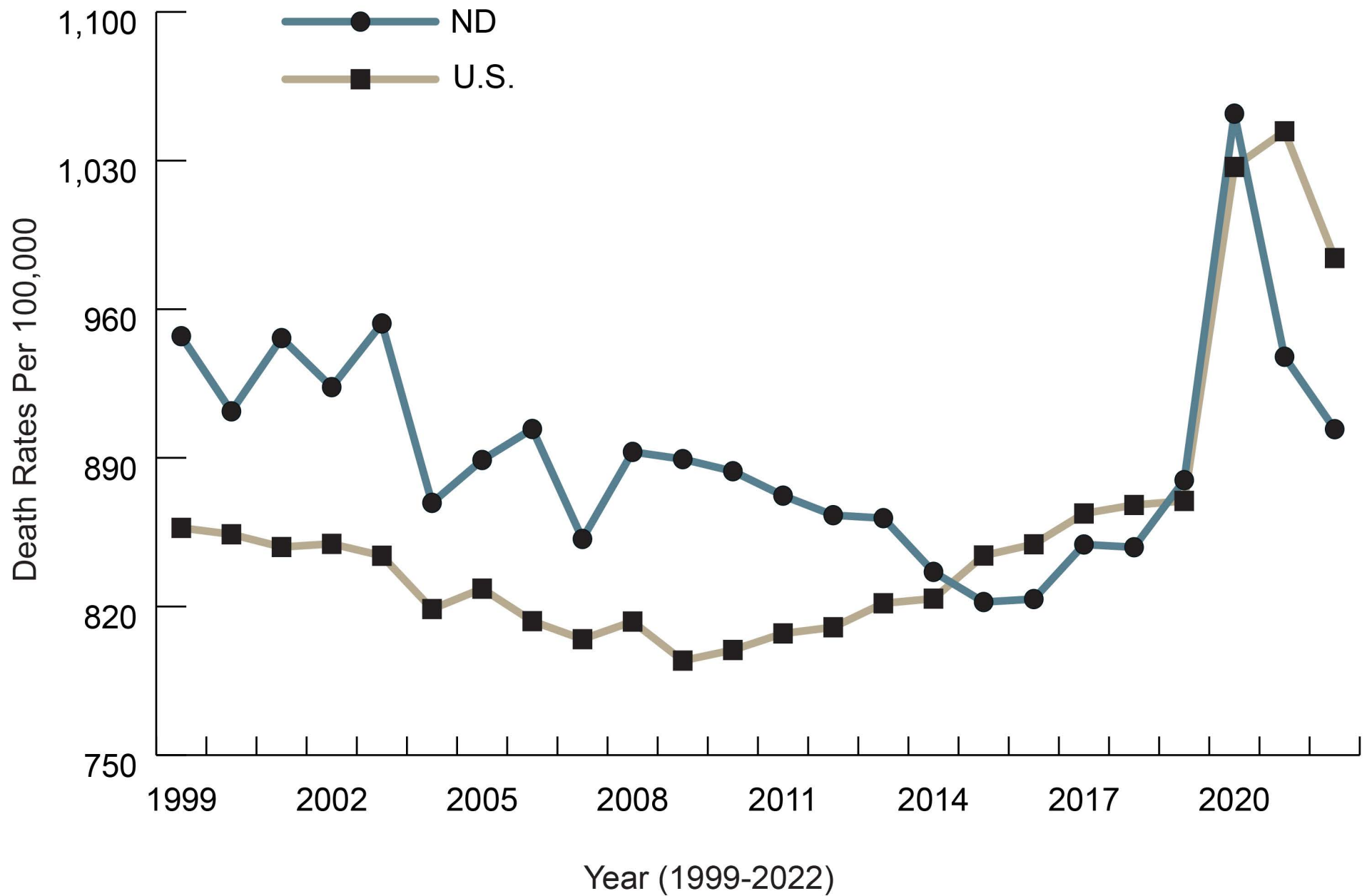


Figure 3.3. Changes in North Dakota mortality rates from 1999 to 2022 compared with the U.S., 2022.³⁹

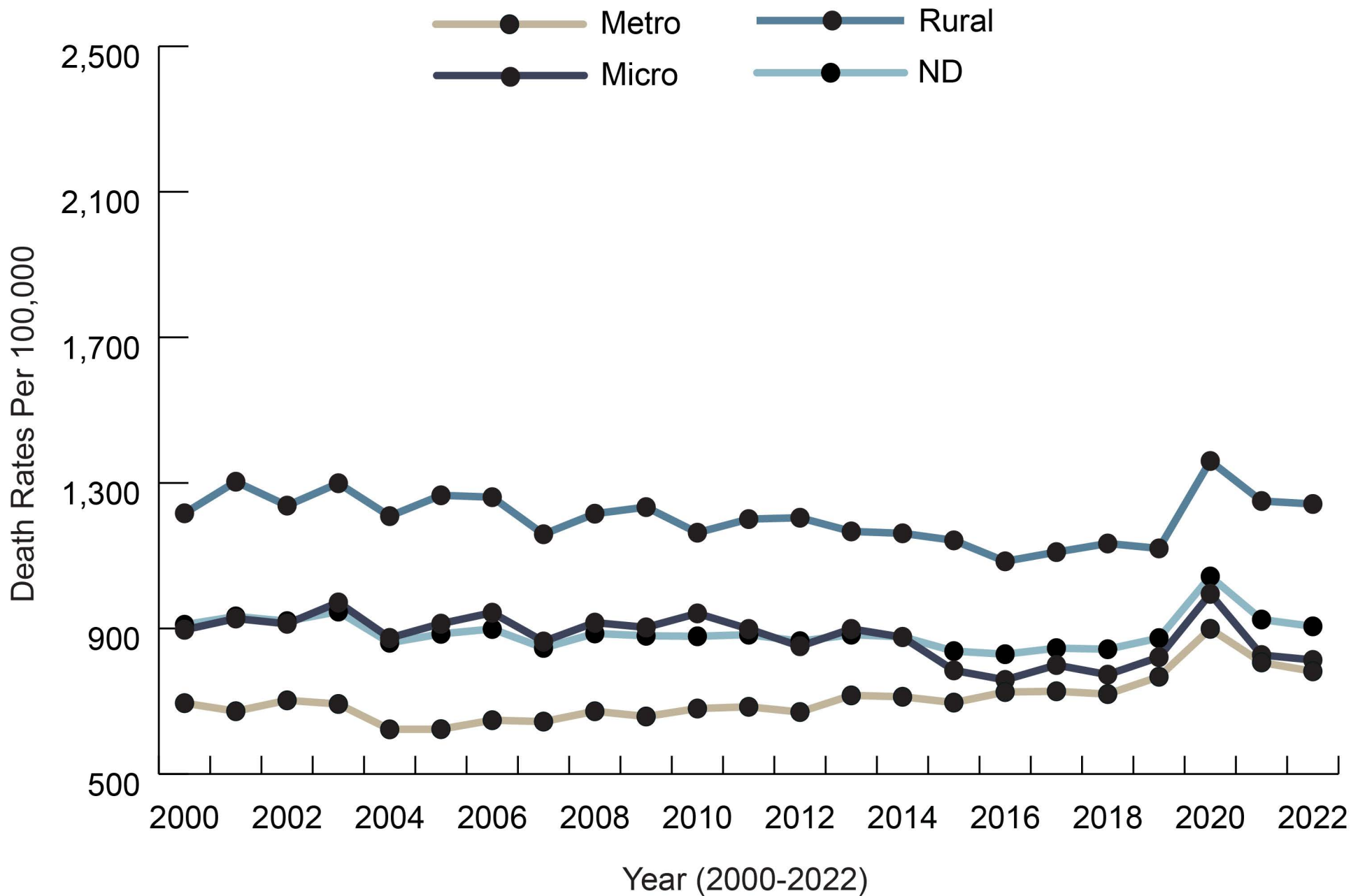


Figure 3.4. Changes in North Dakota mortality rates from 2000 to 2022 for metropolitan, micropolitan, and rural areas, 2022.^{37, 38}

Table 3.1***Percent of adults reporting behaviors, 2022.⁶***

	2018	2019	2020	2021	2022
Smokes	18.6	16.7	16.7	14.4	14.5
Drinks Alcohol	57.6	59.6	56.2	55.2	54.3
Binge Drinks	21.1	21.5	19.7	19.3	21.2
Drinks & Drives	2.7	NA	2.0	NA	NA
Doesn't Always Wear a Seatbelt	27.5	NA	25.1	NA	NA
No Physical Activity/Exercise Other Than Job	22.2	27.4	24.6	25.5	23.9

NA = Not Available

Table 3.2***Percent of youth risk behaviors in North Dakota, 2023.⁸***

	Total	Female	Male
Smokes	5.4	4.1	6.5
Drinks	19.5	21.9	17.2
Drinks & Drives	4.5	4.4	4.5
Doesn't Always Wear a Seat Belt When Driving	25.2	17.3	32.6
Doesn't Always Wear a Seat Belt as Passenger	47.3	43.0	51.6
Obese	16.3	11.9	20.5
Overweight	14.7	15.3	14.1

Table 3.3***Percent of adults reporting general health conditions, 2022.⁶***

	2018	2019	2020	2021	2022
Overweight/Obese	65.8	65.6	64.3	63.2	64.5
General Health is Fair or Poor	13.9	13.9	12.1	13.0	14.3
1+ Days Poor Health	20.7	21.5	19.9	21.2	23.6
1+ Days Poor Phys. Health	33.1	33.6	26.0	32.1	34.5
1+ Days Poor Mental Health	36.2	34.2	34.7	36.4	39.1

Table 3.4***Percent of adults reporting chronic health conditions, 2022.⁶***

	2018	2019	2020	2021	2022
High Cholesterol	NA	22.9	NA	25.6	NA
High Blood Pressure	NA	29.8	NA	31.0	NA
Arthritis	25.9	25.4	22.5	25.4	27.0
Asthma	13.0	12.3	11.8	12.5	14.8
Cardiovascular Disease	4.2	3.4	4.0	3.4	4.1
Diabetes	9.4	8.9	9.9	9.5	9.5

Table 3.5***Most common cancer rates per 100,000 persons, 2021.²¹***

Type	All North Dakota		Males		Females	
	Rate	Cases	Rate	Cases	Rate	Cases
Breast	66.6	577	NA	NA	132.1	574
Digestive System	74.0	658	86.1	361	63.0	297
Male Genital System	NA	NA	125.2	602	NA	NA
Prostate	NA	NA	118.6	573	NA	NA
Respiratory System	55.9	533	65.4	295	48.1	238
Lung Bronchus	52.3	499	59.5	268	46.5	231
Colon Rectum	40.6	352	44.9	182	35.3	170

Table 3.6***Screening percentages, 2022.⁶***

	2018	2019	2020	2021	2022
Cholesterol	NA	73.4	NA	72.6	NA
PSA	23.5	NA	19.8	NA	NA
Blood Stool	11.6	NA	13.1	NA	NA
Sigmoid/Colonoscopy	29.5	NA	5.3	NA	34.0
Mammogram	59.2	NA	59.2	NA	60.6
Pap	84.2	NA	84.2	NA	NA
Flu	38.6	44.9	48.3	44.5	42.4
Pneumonia	30.3	31.2	28.5	27.6	29.0

CHAPTER FOUR:

WOMEN'S AND CHILDREN'S HEALTH IN NORTH DAKOTA

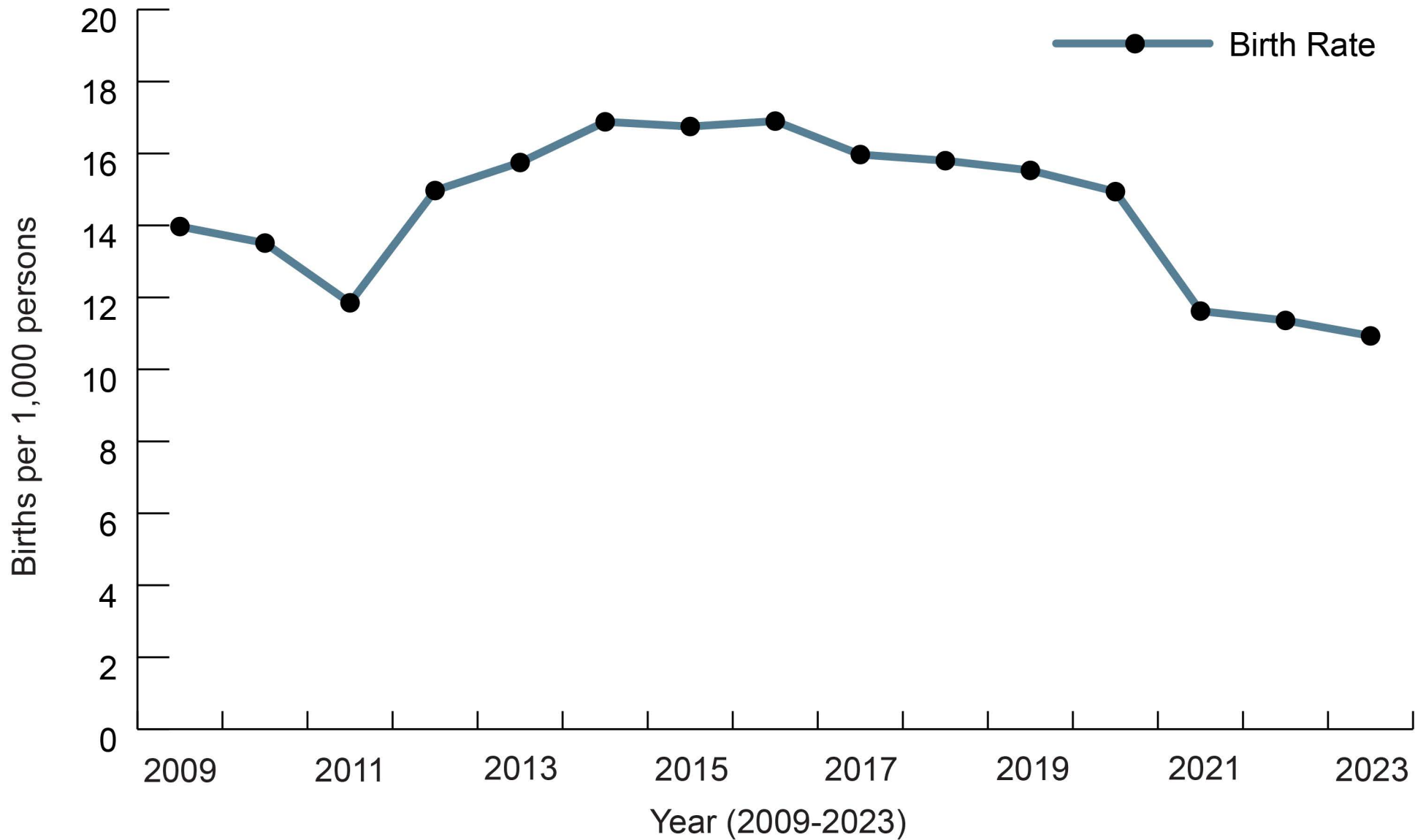


Figure 4.1. Birth rate in North Dakota, 2009-2023.³

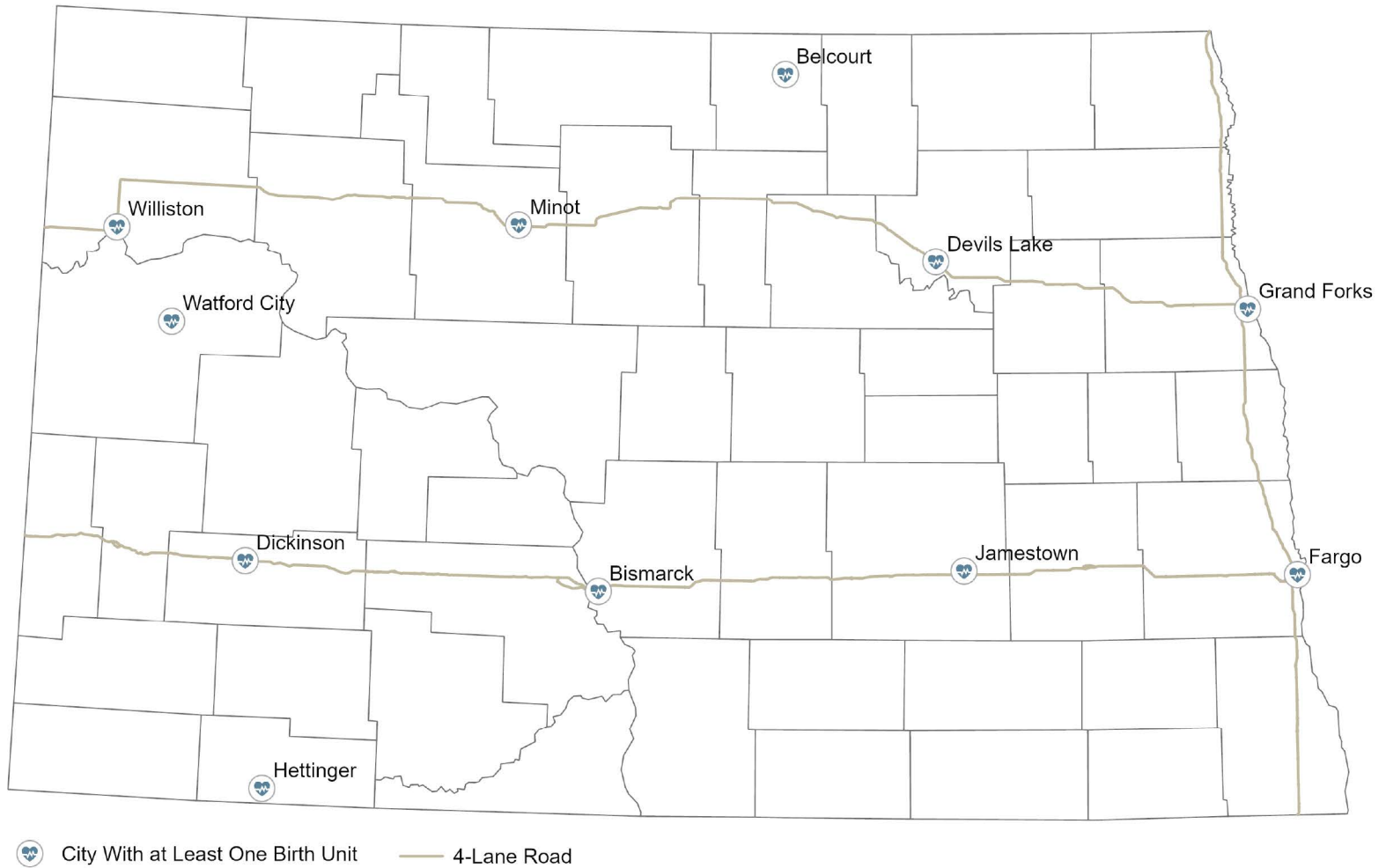


Figure 4.2. Cities with birth units, 2024.⁴²

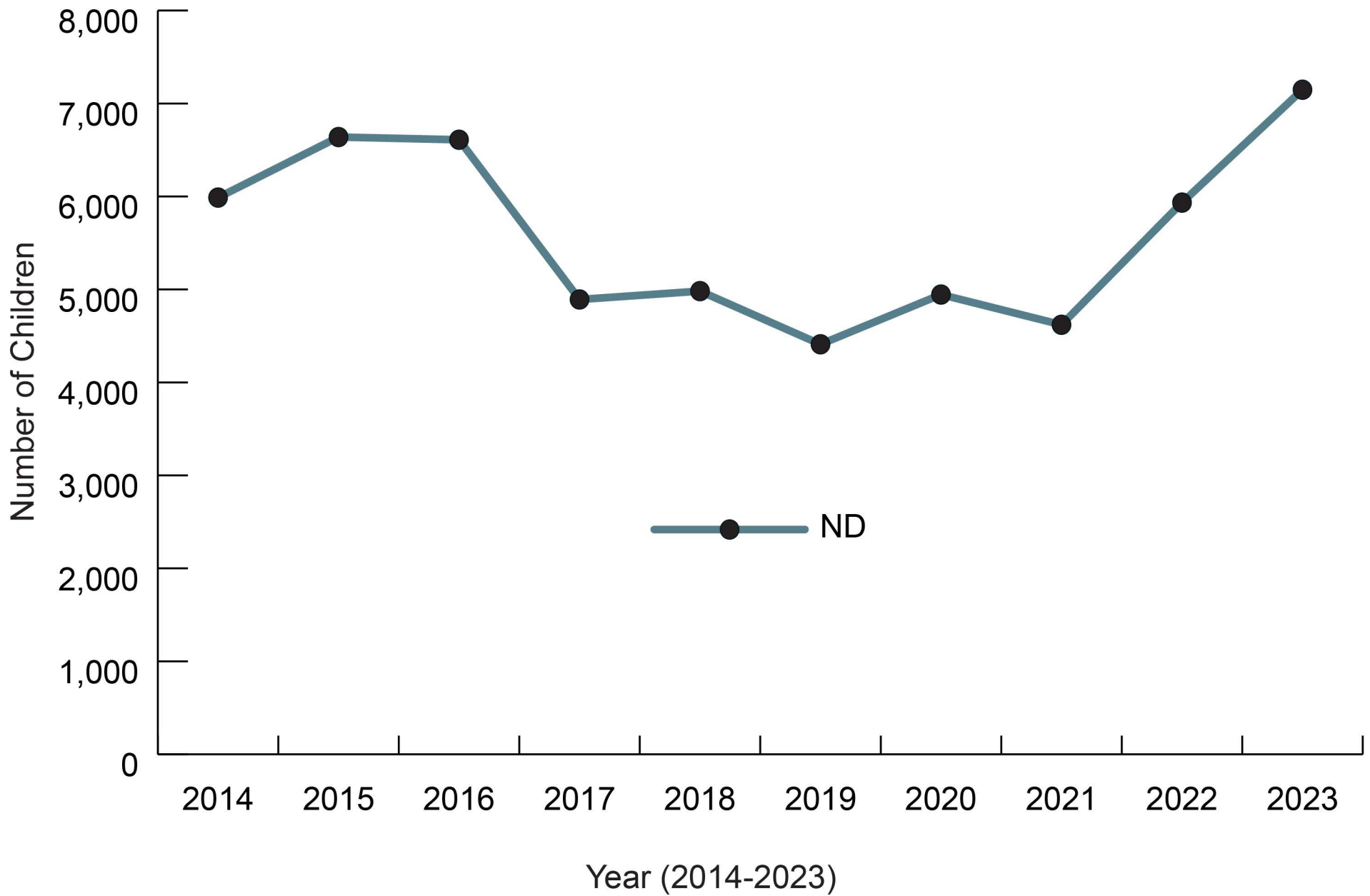


Figure 4.3. Number of children ages 0-13 whose families received North Dakota childcare financial assistance by year from 2014-2023.⁶³

CHAPTER FIVE:

**HEALTH SERVICES, CARE ACCESS, AND HEALTH
OUTCOMES FOR AMERICAN INDIANS IN NORTH DAKOTA**

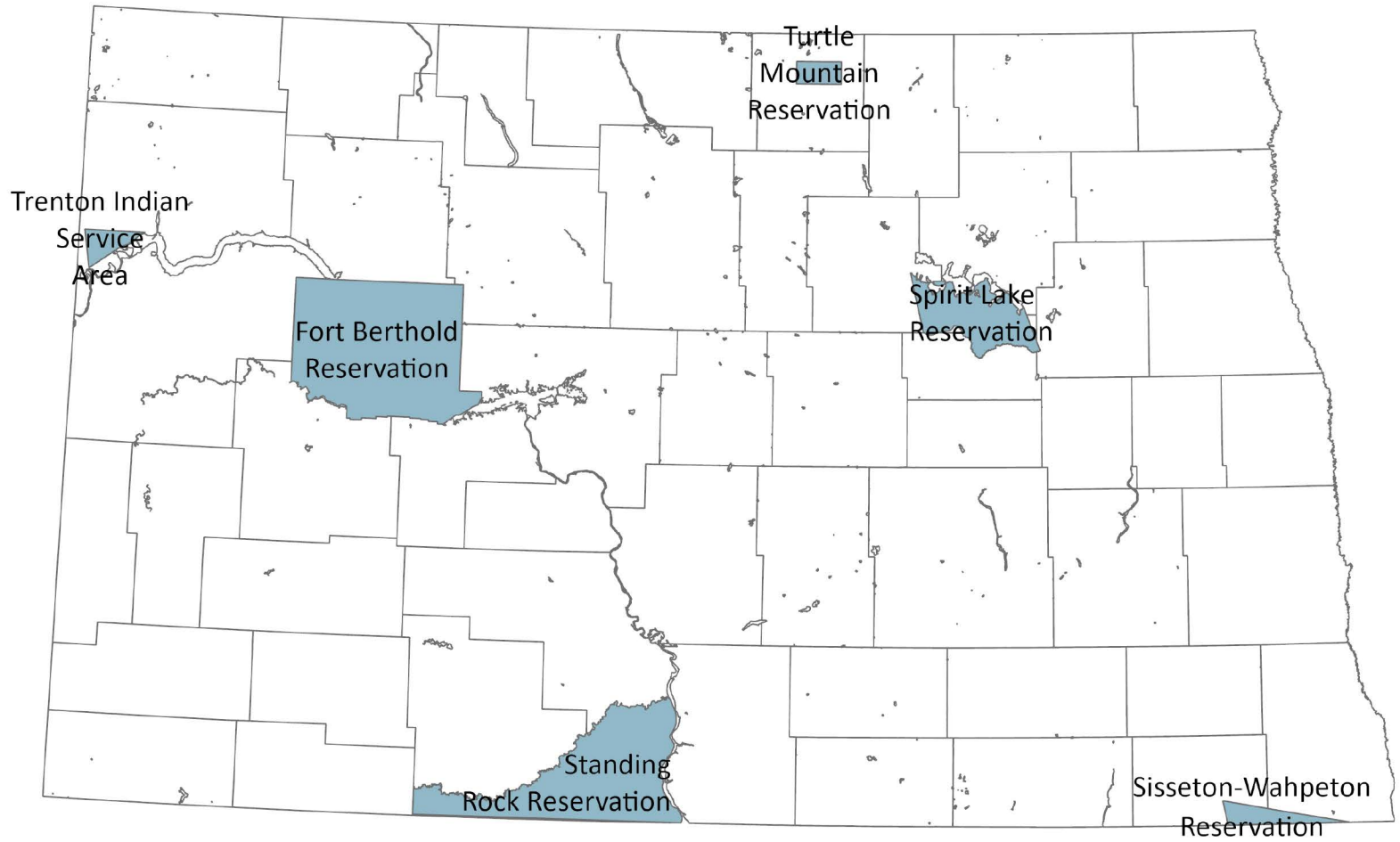


Figure 5.1. American Indian tribal lands within North Dakota, 2024.²

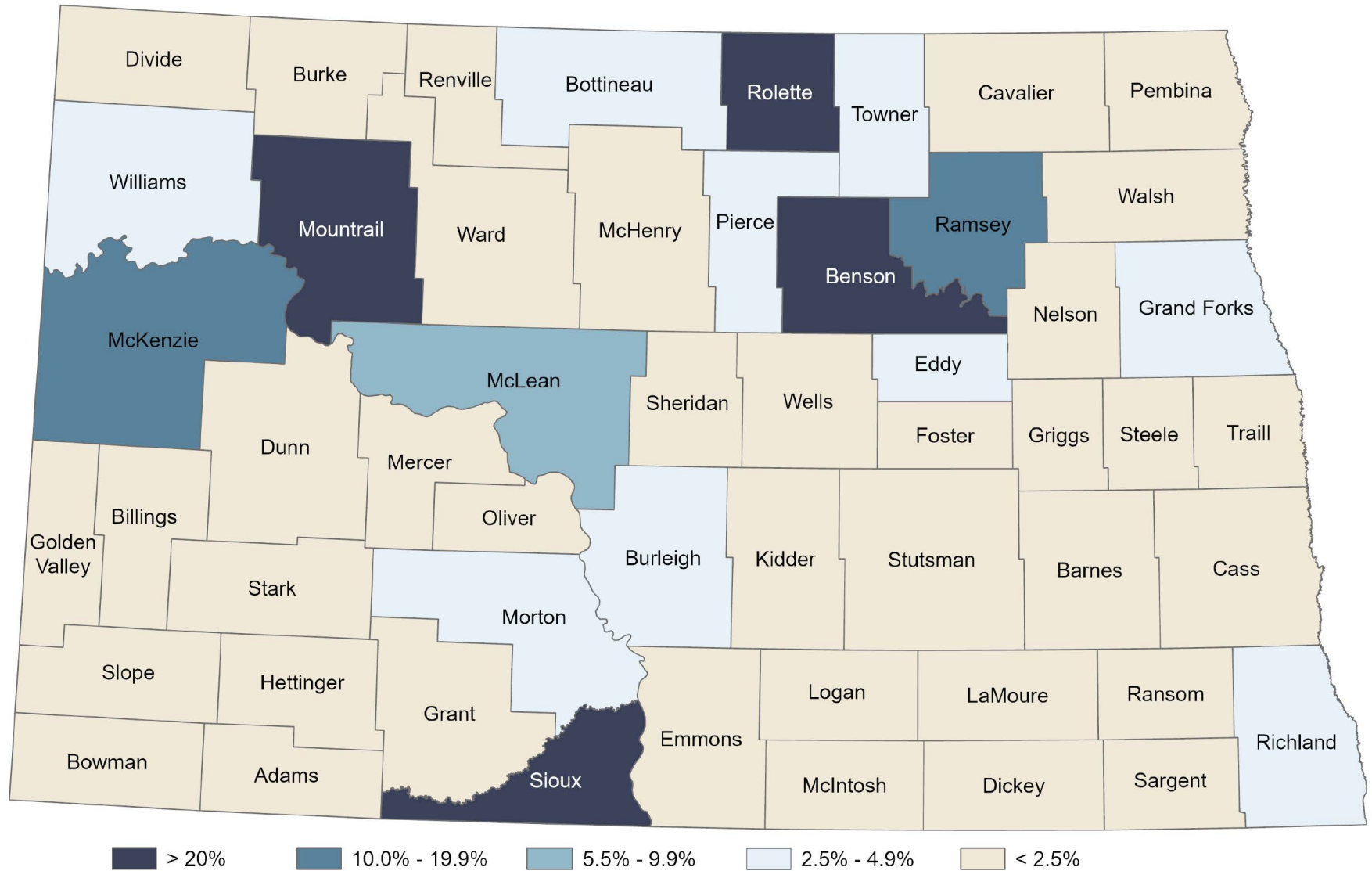


Figure 5.2. Percent of American Indian population by county in North Dakota, 2022.³

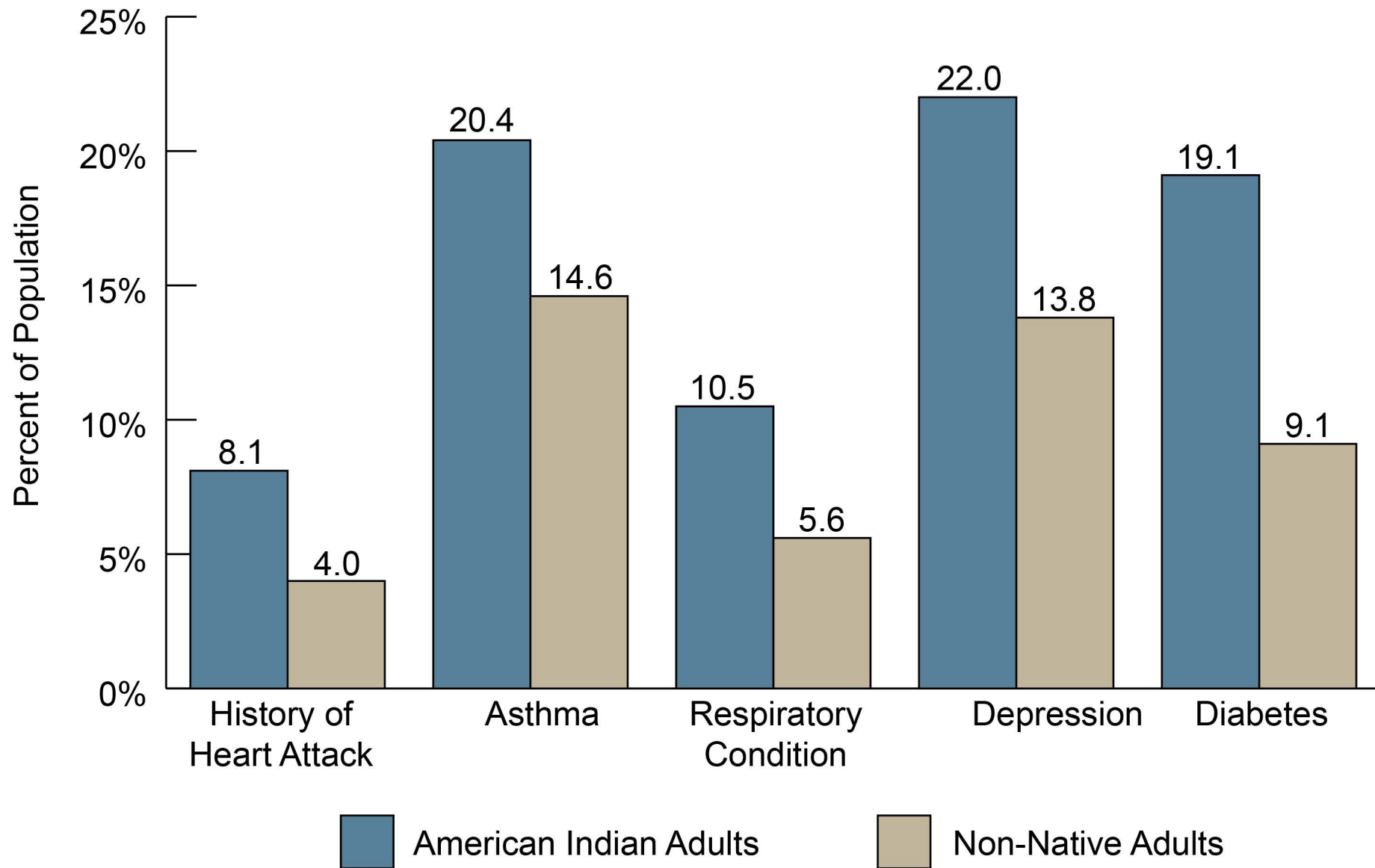


Figure 5.3. Prevalence of chronic diseases among American Indian and non-native adults in North Dakota, 2022.¹⁷

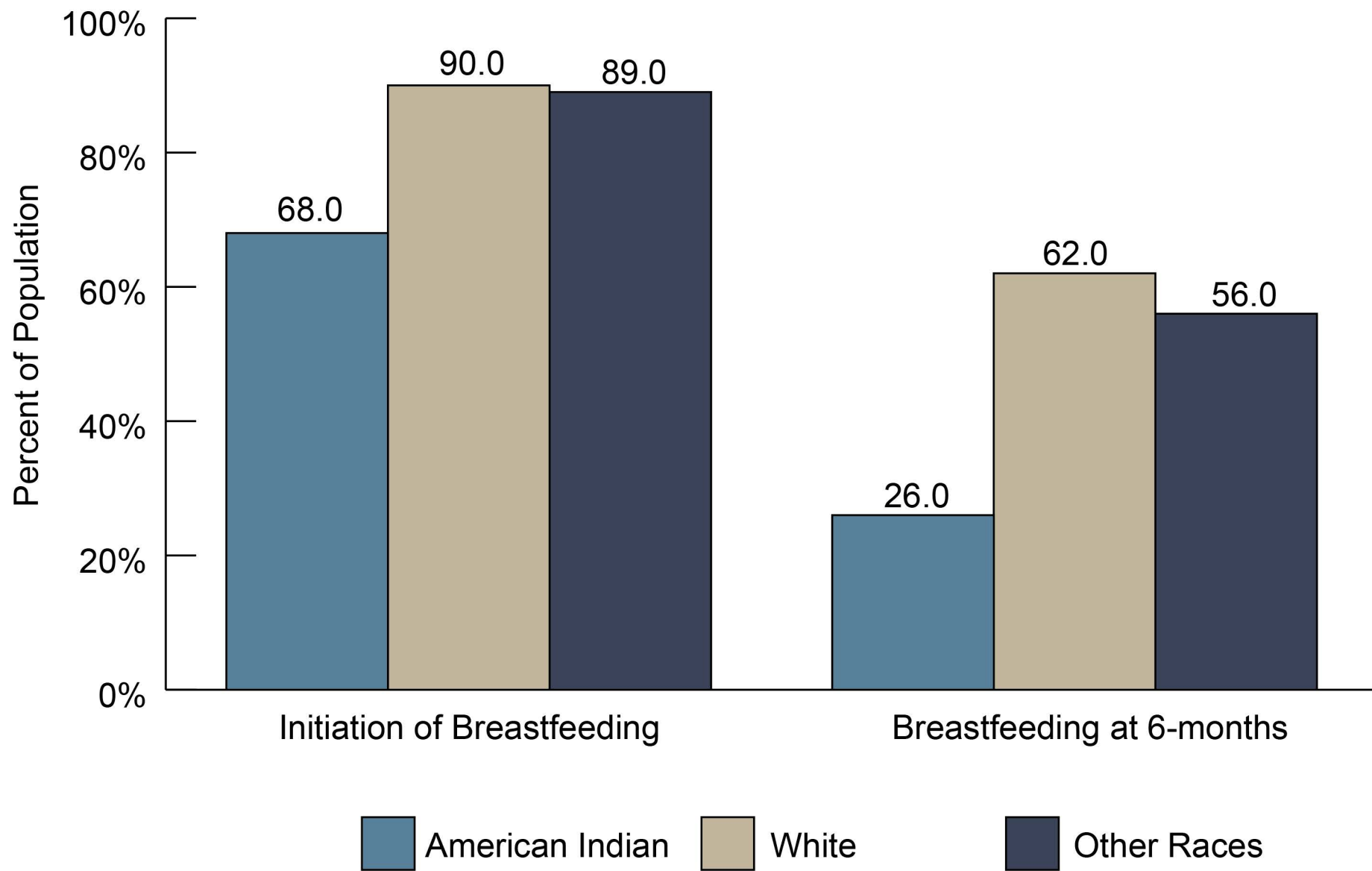


Figure 5.4. Breastfeeding rates by race/ethnicity in North Dakota, 2017-2021.²¹

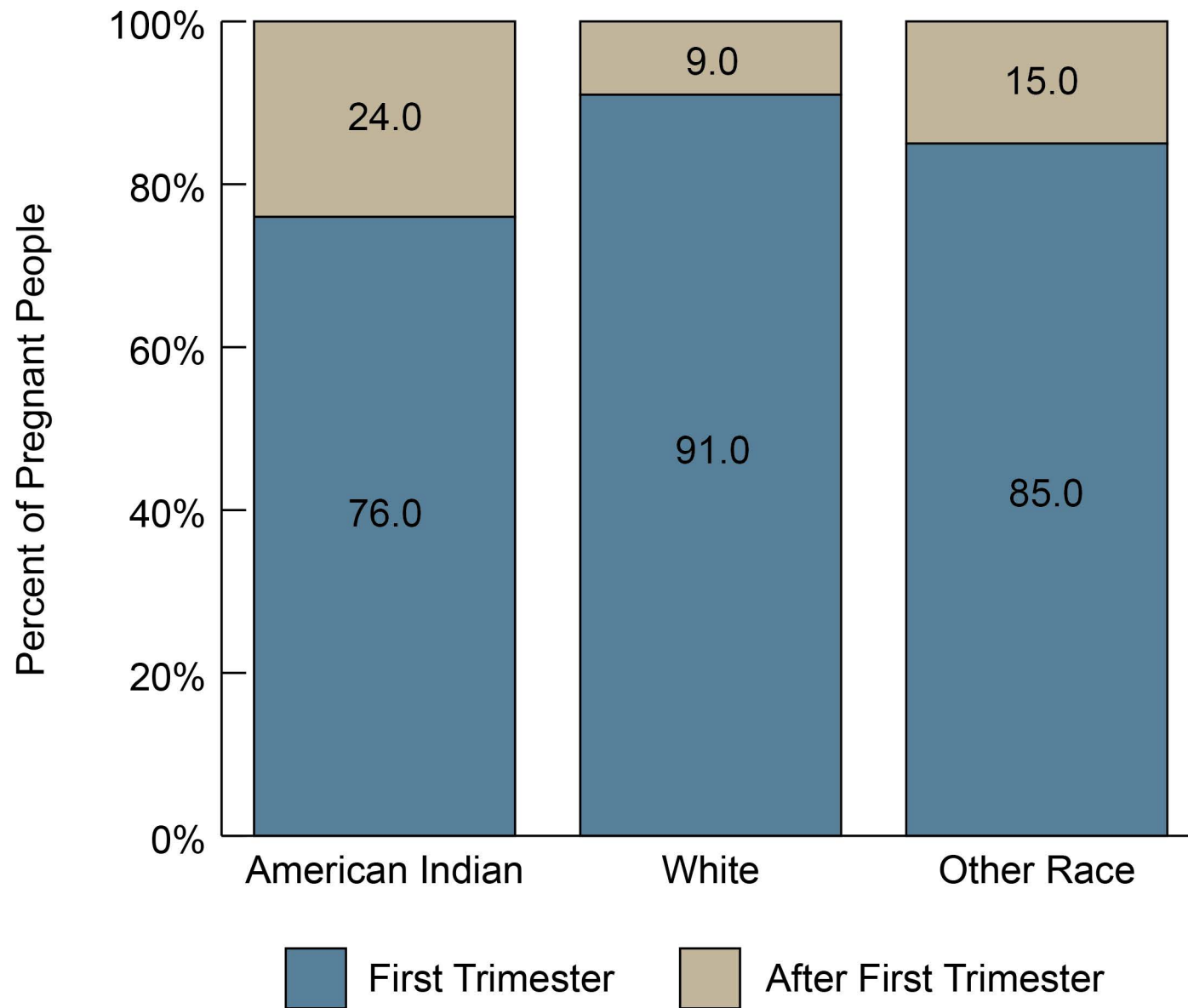


Figure 5.5. Initiation of prenatal care by race/ethnicity in North Dakota, 2017-2021.²²

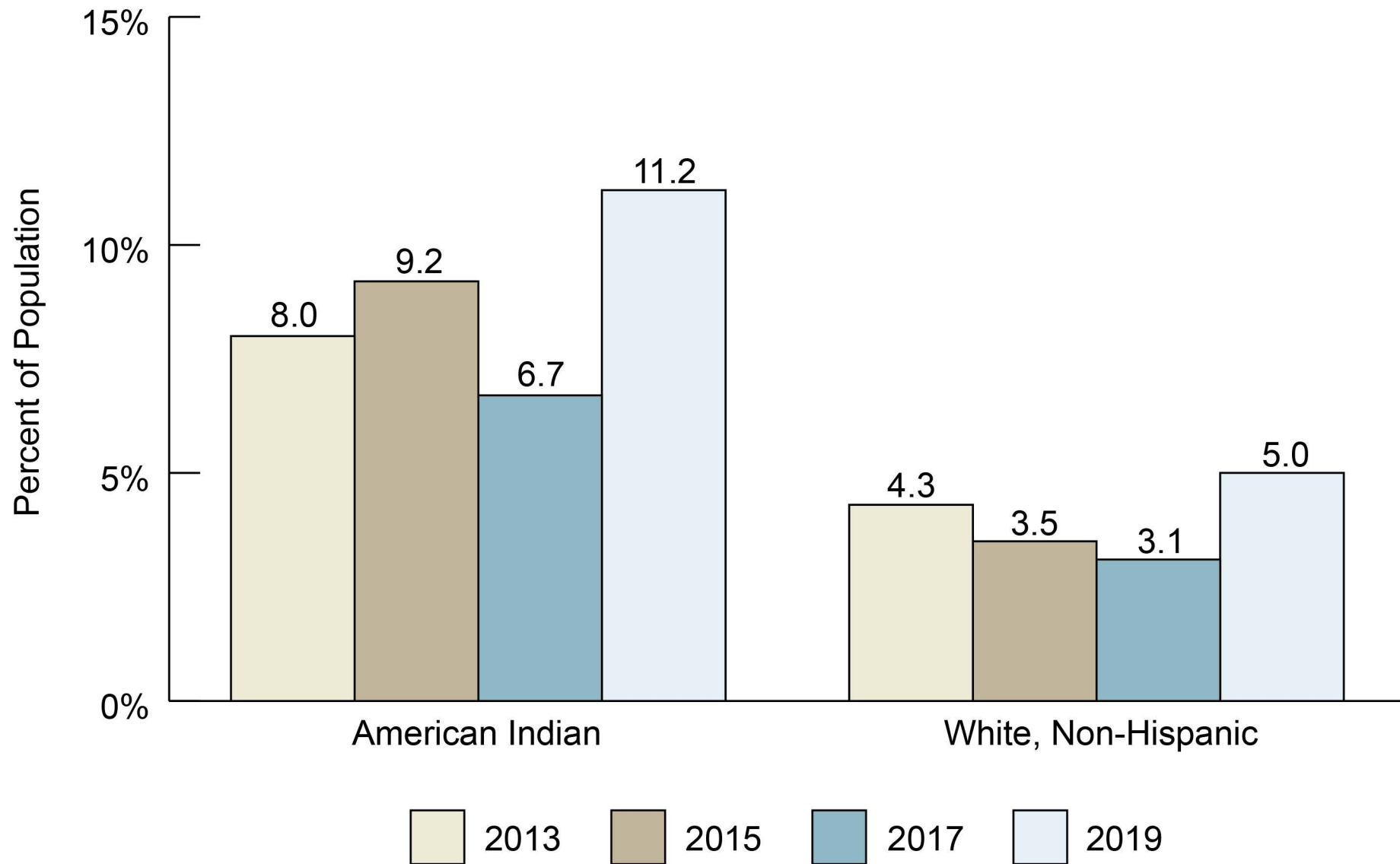


Figure 5.6. Percent of middle school students in North Dakota with any nonmedical use of prescription drugs in their lifetime by race/ethnicity and by year, 2013-2019.²⁹

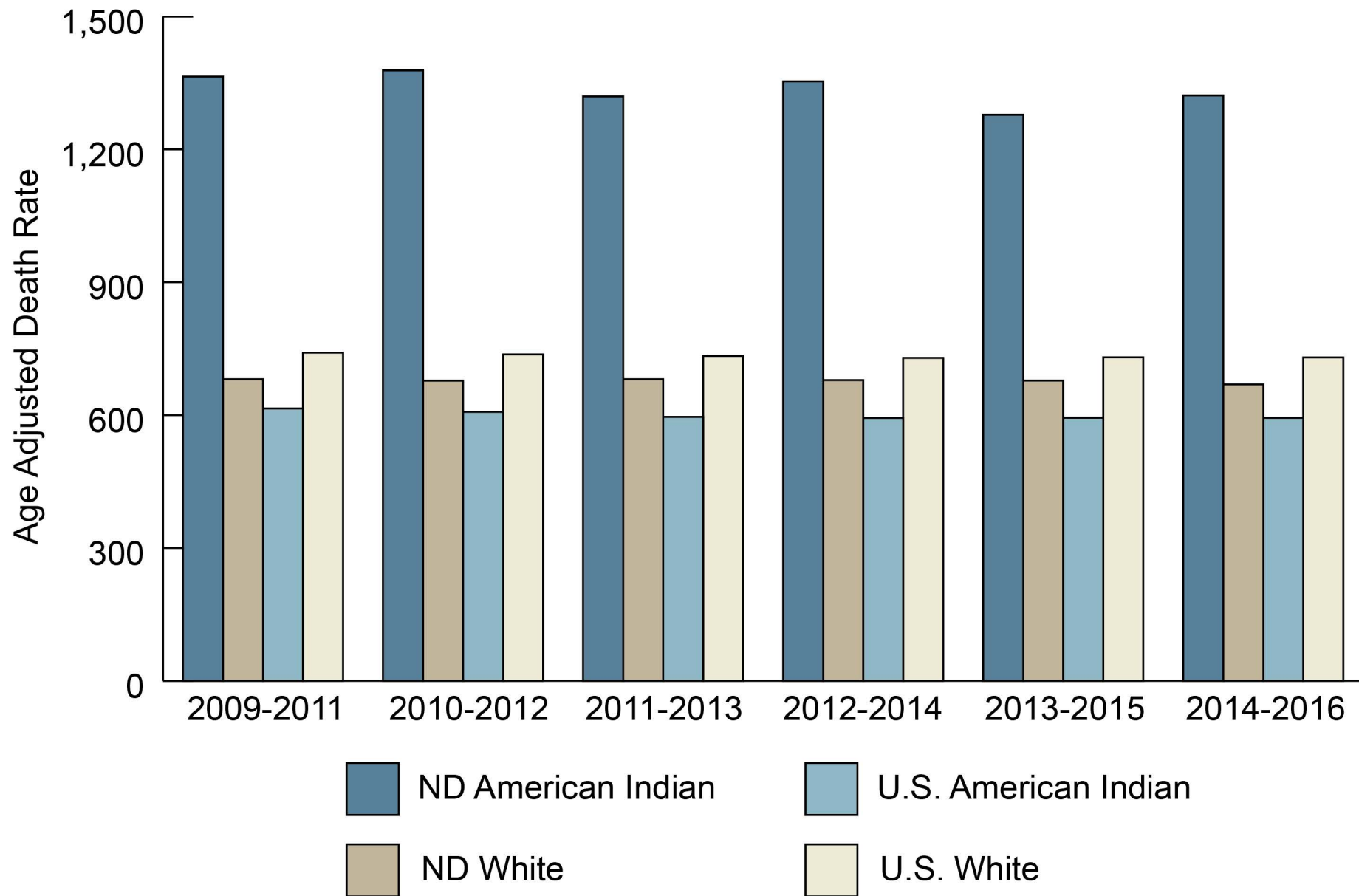


Figure 5.7. Age-adjusted death rates by race for North Dakota and the U.S., 2009-2016.¹

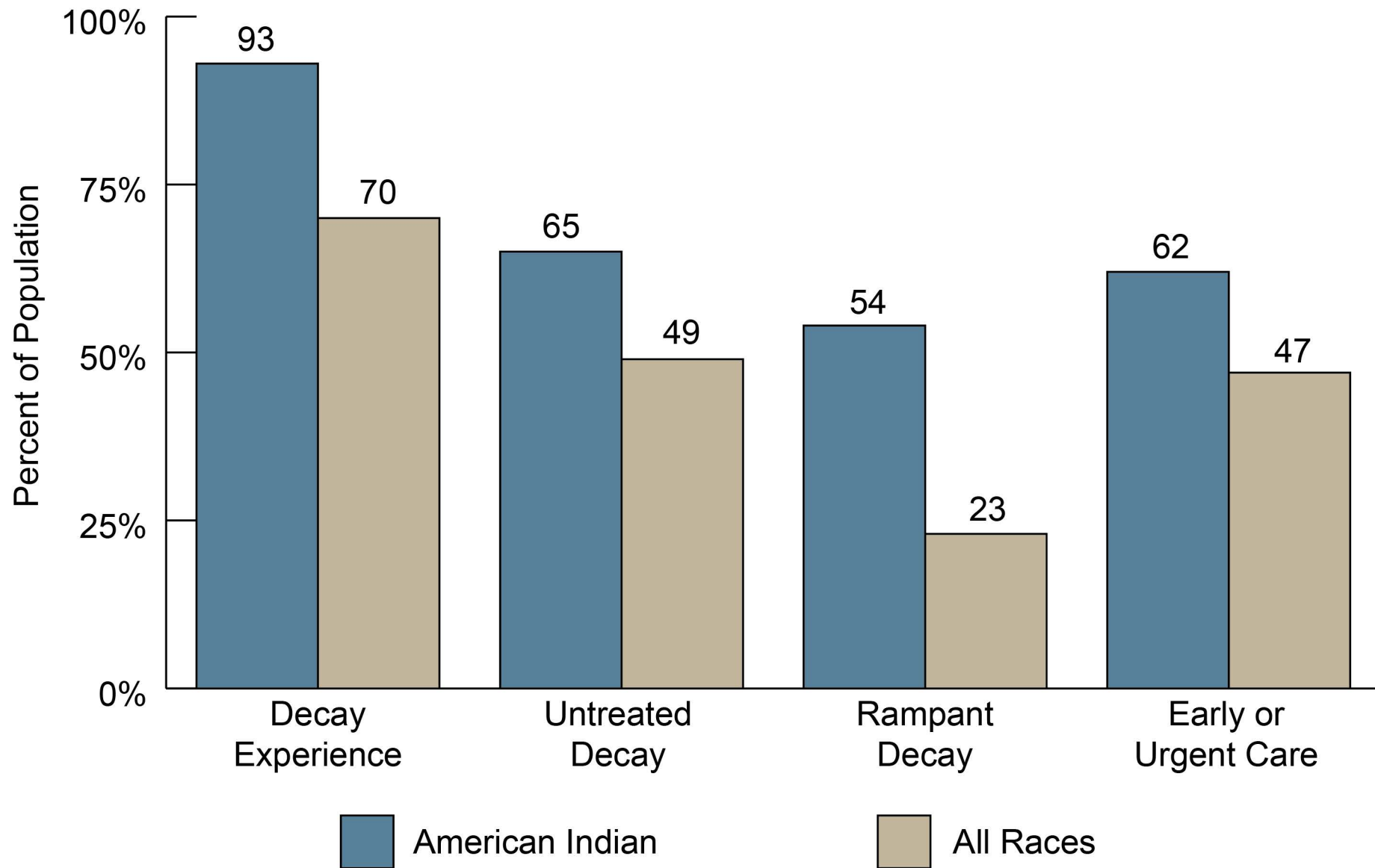


Figure 5.8. Experience of oral health concerns among North Dakota kindergartners by race, 2022.³⁵

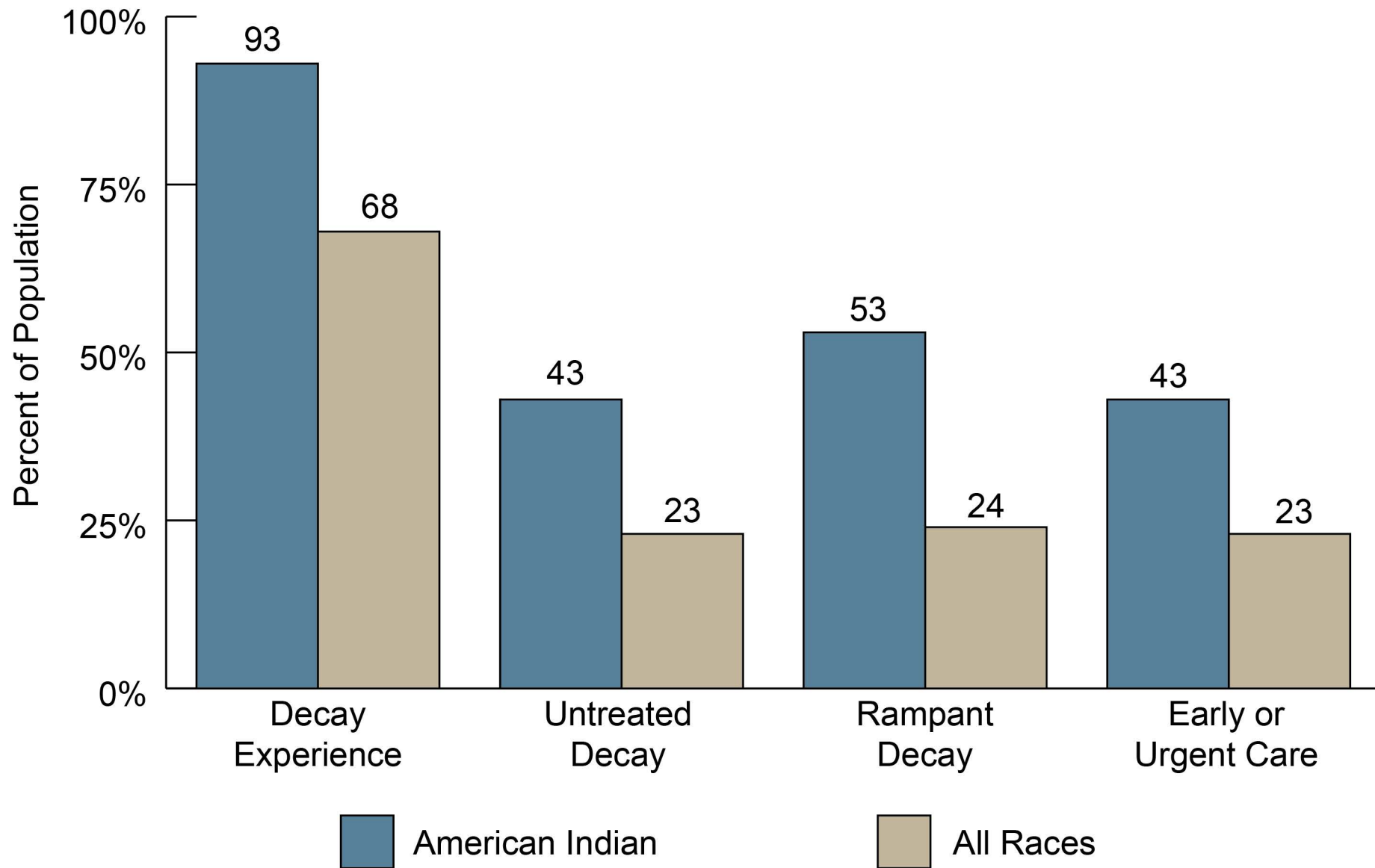


Figure 5.9. Experience of oral health concerns among North Dakota third graders by race, 2022.³⁵

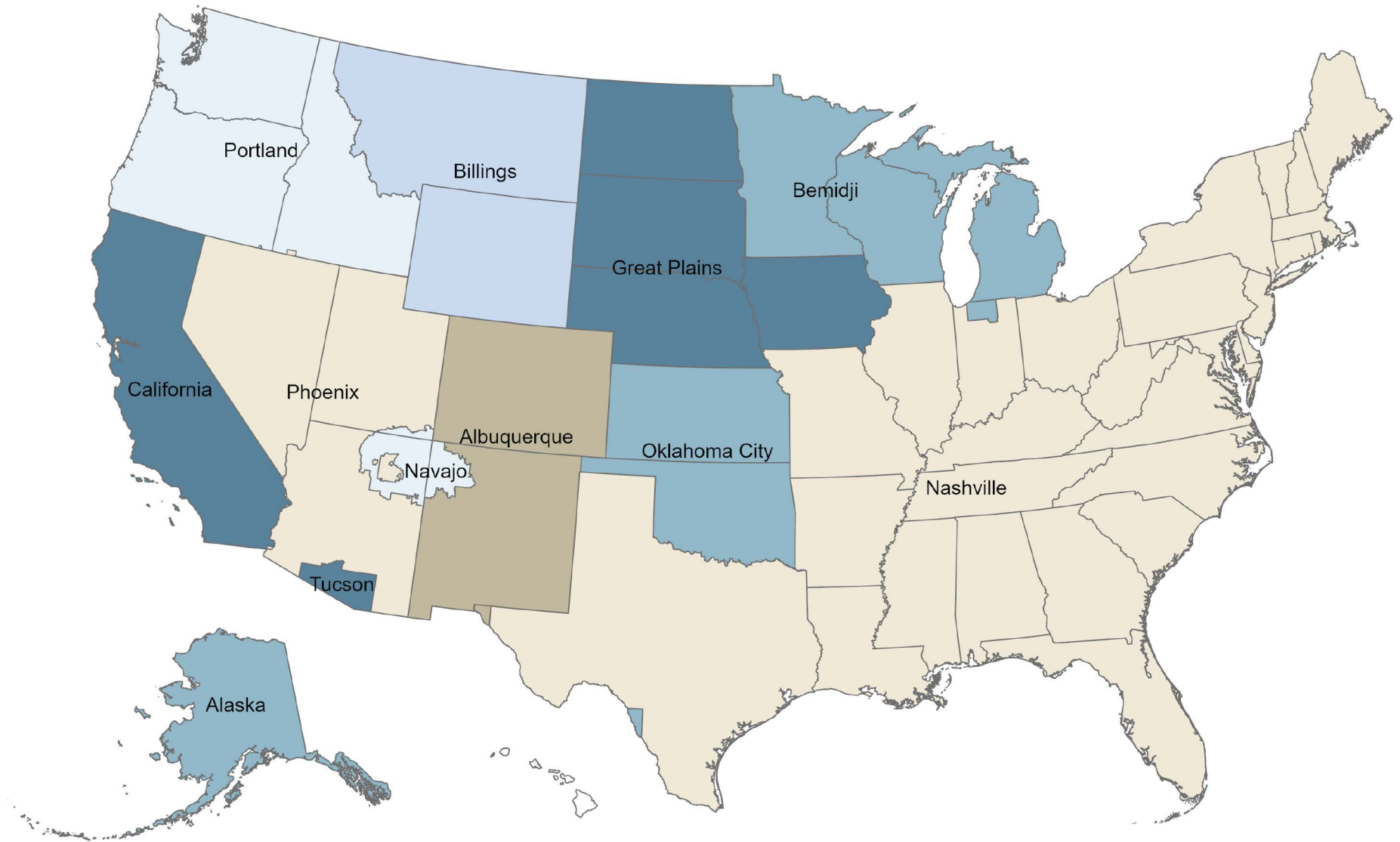


Figure 5.10. Indian Health Service twelve service areas, 2024.⁴²

Table 5.1***Membership, population, and land area of Tribal Nations in North Dakota, 2024.²***

Tribal Nation	Enrolled Members	Population on the Reservation	Land Area in ND
Turtle Mountain Band of Chippewa	30,722	9,710	72 sq. miles
Three Affiliated - MHA Nation	10,400	5,915	~1 million acres
Standing Rock Sioux Tribe	15,568	15,000	3,625 sq. miles
Spirit Lake Nation	7,256	4,500	405 sq. miles
Sisseton Wahpeton Oyate Nation	13,777	15,000	108,589 acres

Table 5.2***Health disparities as self-reported by North Dakota adults in the Behavioral Risk Factor Surveillance System by race, 2022.¹⁷***

Health Concern	American Indian	Non-Native
Physical health was not good for 8 or more days in the last 30 days	16.2%	13.5%
Mental health was not good for 8 or more days in the last 30 days	27.2%	17.7%
Does not have a personal healthcare provider	28.1%	17.4%
Had a time in the last year when needed to see a doctor but did not because could not afford it	13.0%	8.4%
Less than 7 hours of sleep a night	51.3%	32.5%
Last dental visit was 5 or more years ago	23.2%	9.8%
Ever had a heart attack	8.1%	4.0%
Ever had a stroke	3.3%	2.9%
Ever told you had asthma	20.4%	14.6%
Ever told you had COPD, emphysema, or chronic bronchitis	10.5%	5.6%
Ever told you had a depressive disorder	25.0%	21.6%
Ever told you had diabetes	19.1%	9.0%

CHAPTER SIX:

PHYSICIAN WORKFORCE IN NORTH DAKOTA

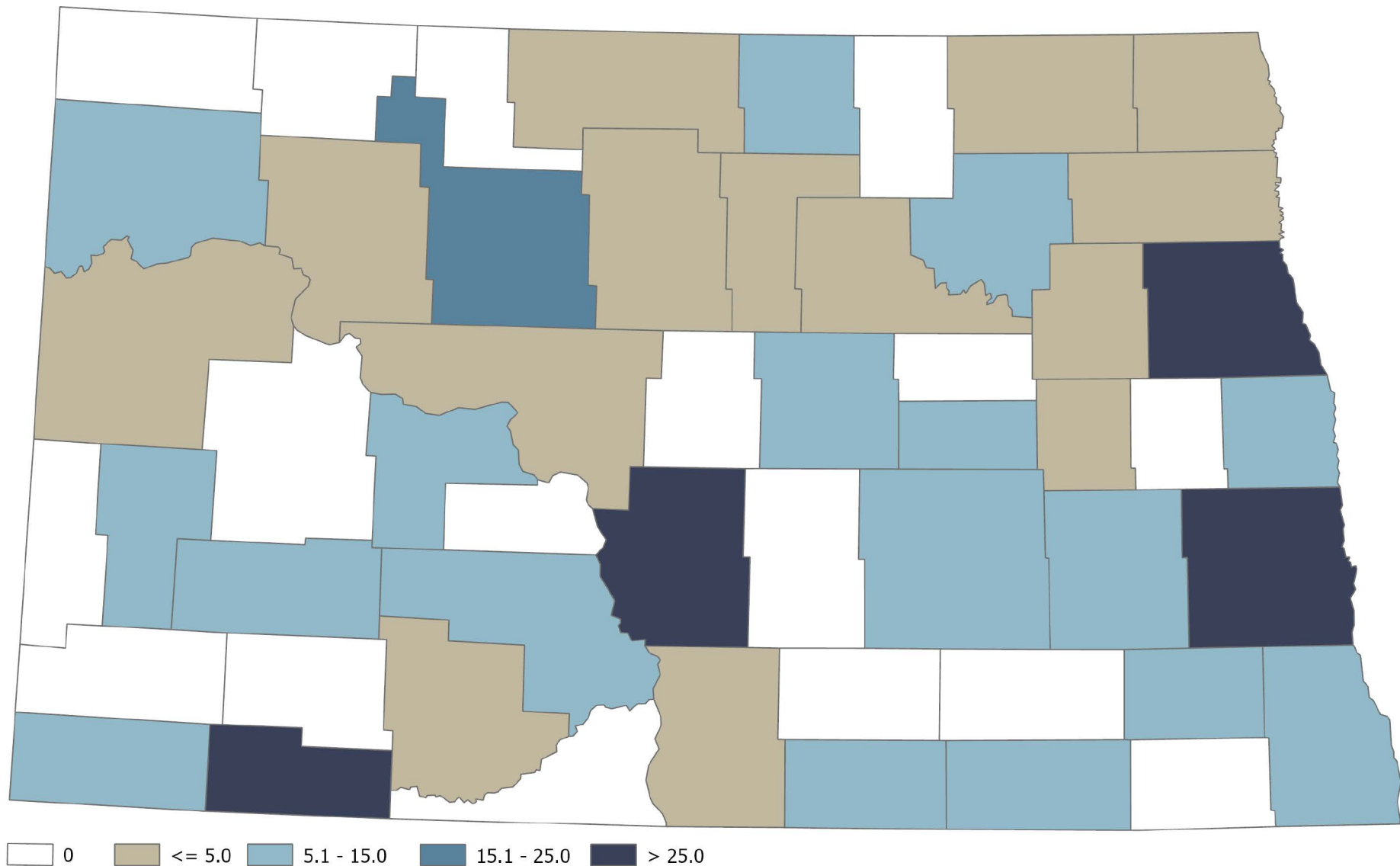


Figure 6.1. County population per patient-care physician for all specialties in North Dakota, 2023.^{1, 2}

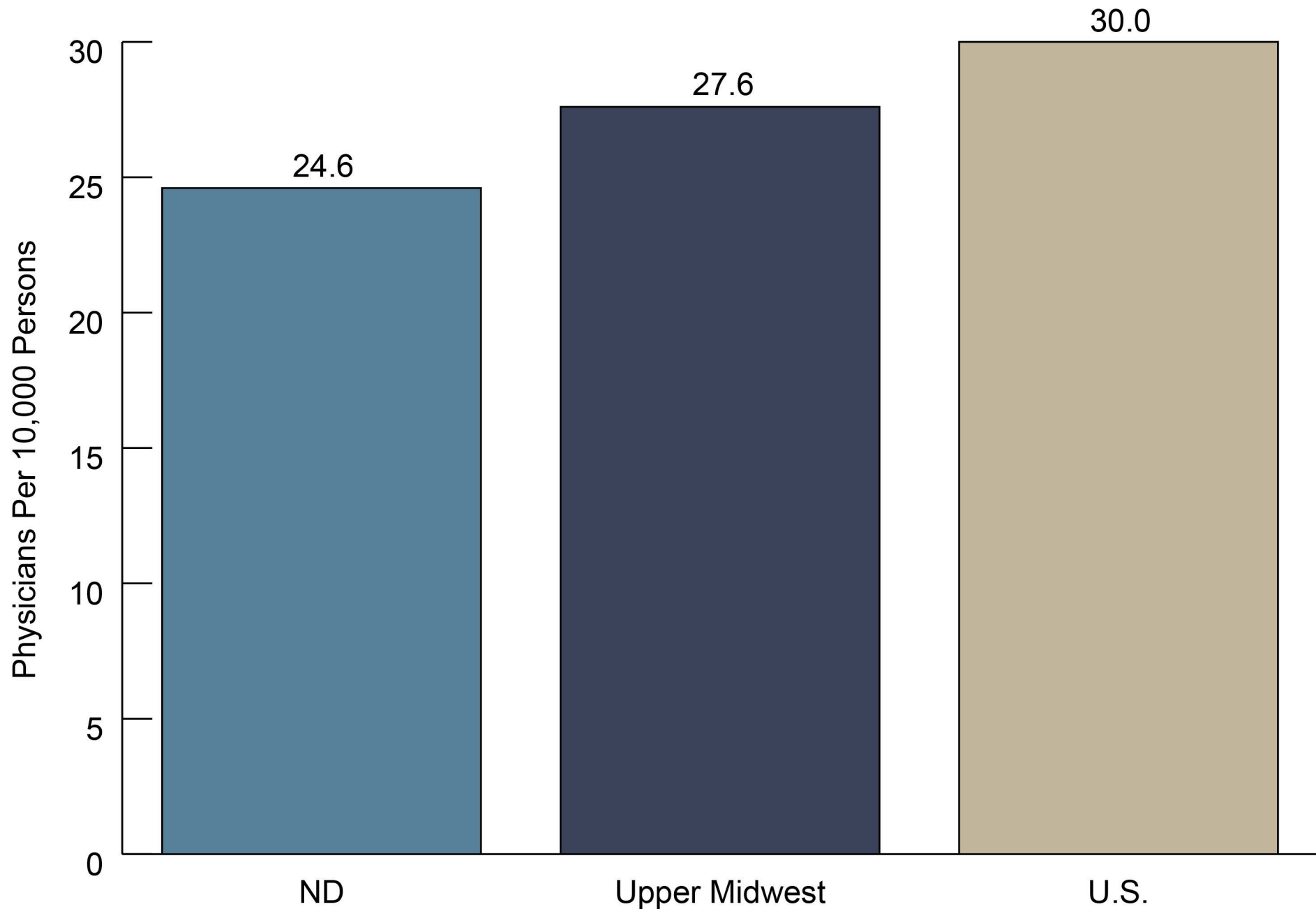


Figure 6.2. Number of physicians per 10,000 persons for North Dakota, the Upper Midwest, and the U.S. (excludes resident physicians), 2021.^{1, 3}

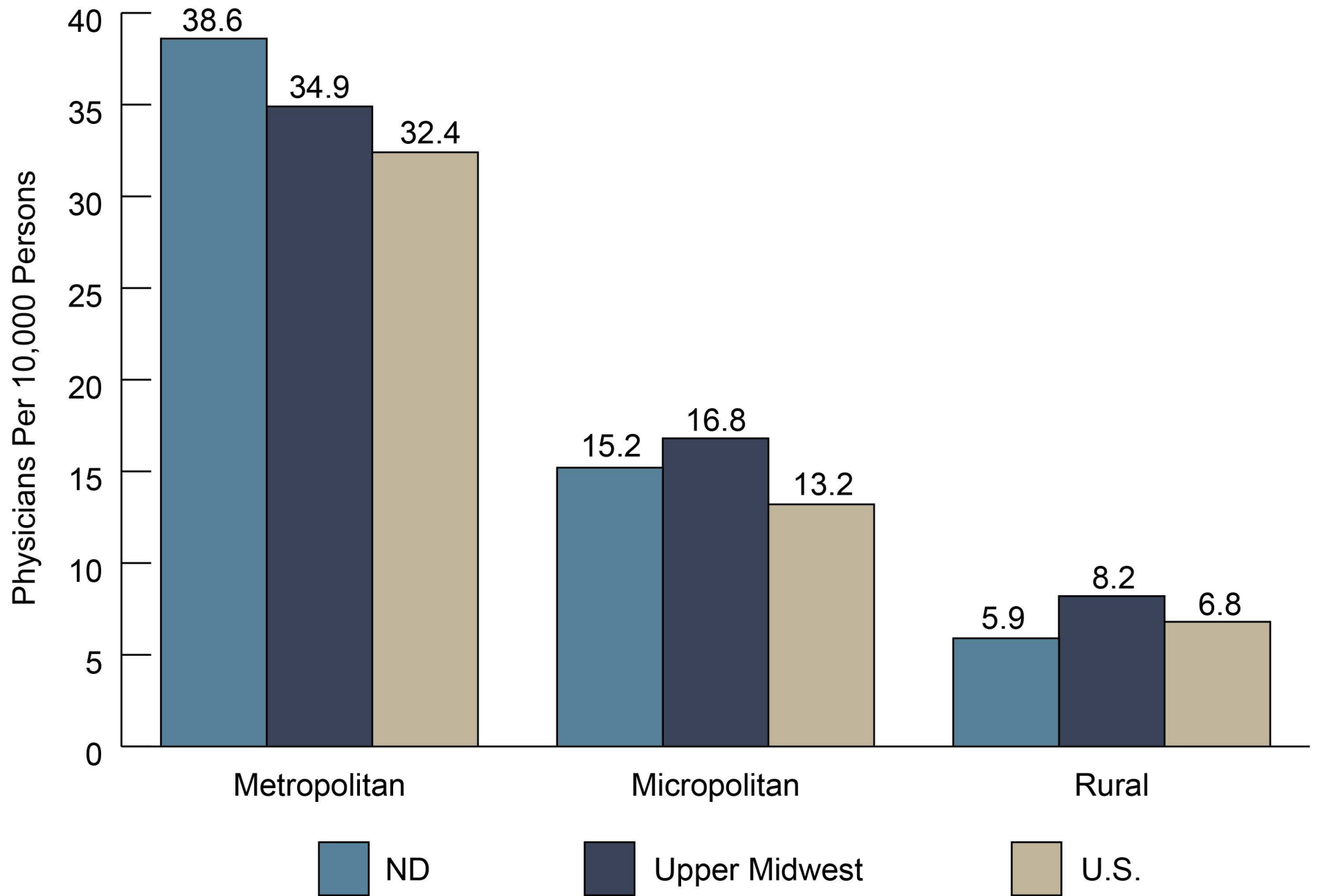


Figure 6.3. Physicians per 10,000 persons for North Dakota with comparisons, 2021.^{1, 3, 5}

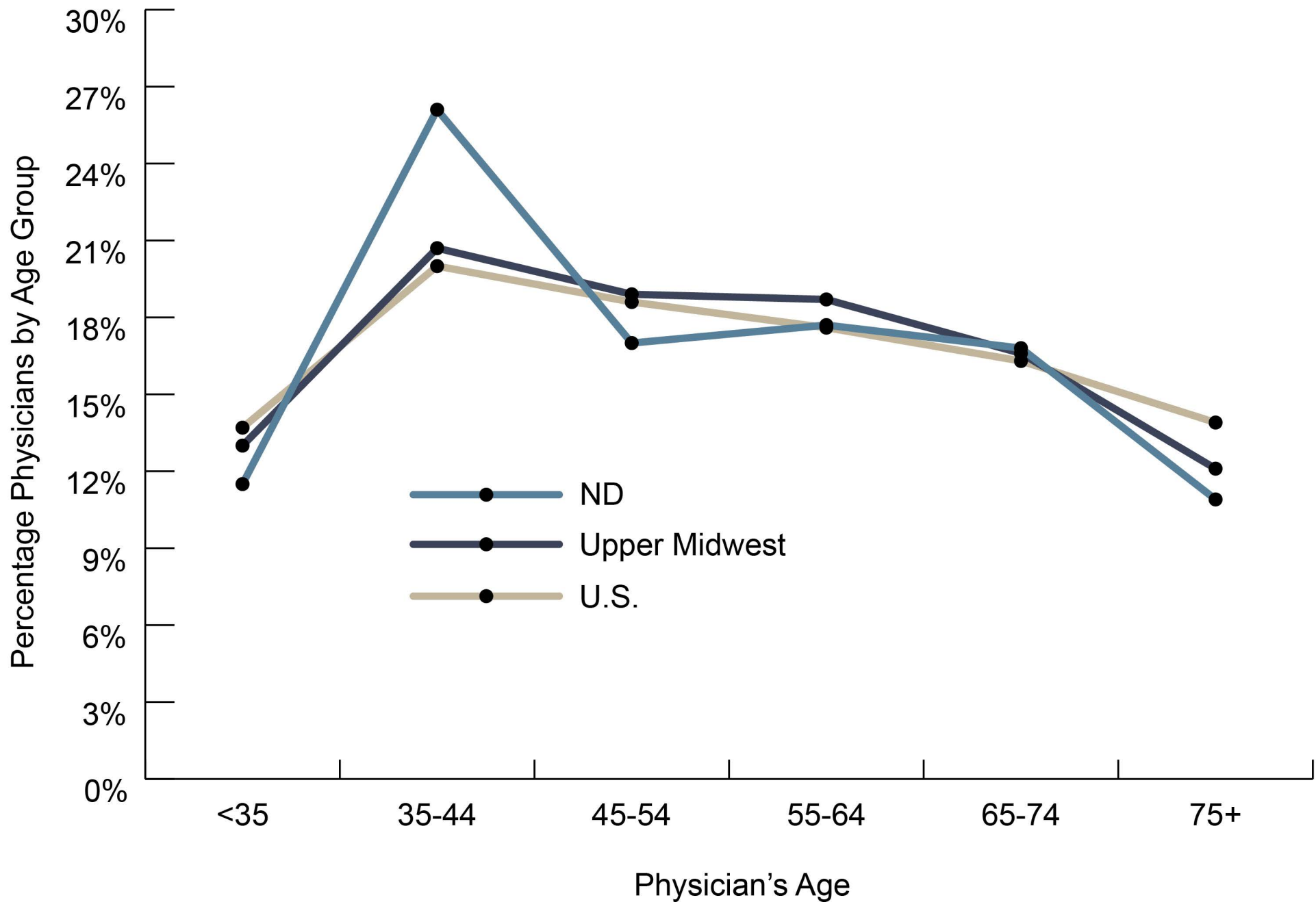


Figure 6.4. Physician percent by age category with comparisons, 2021.³

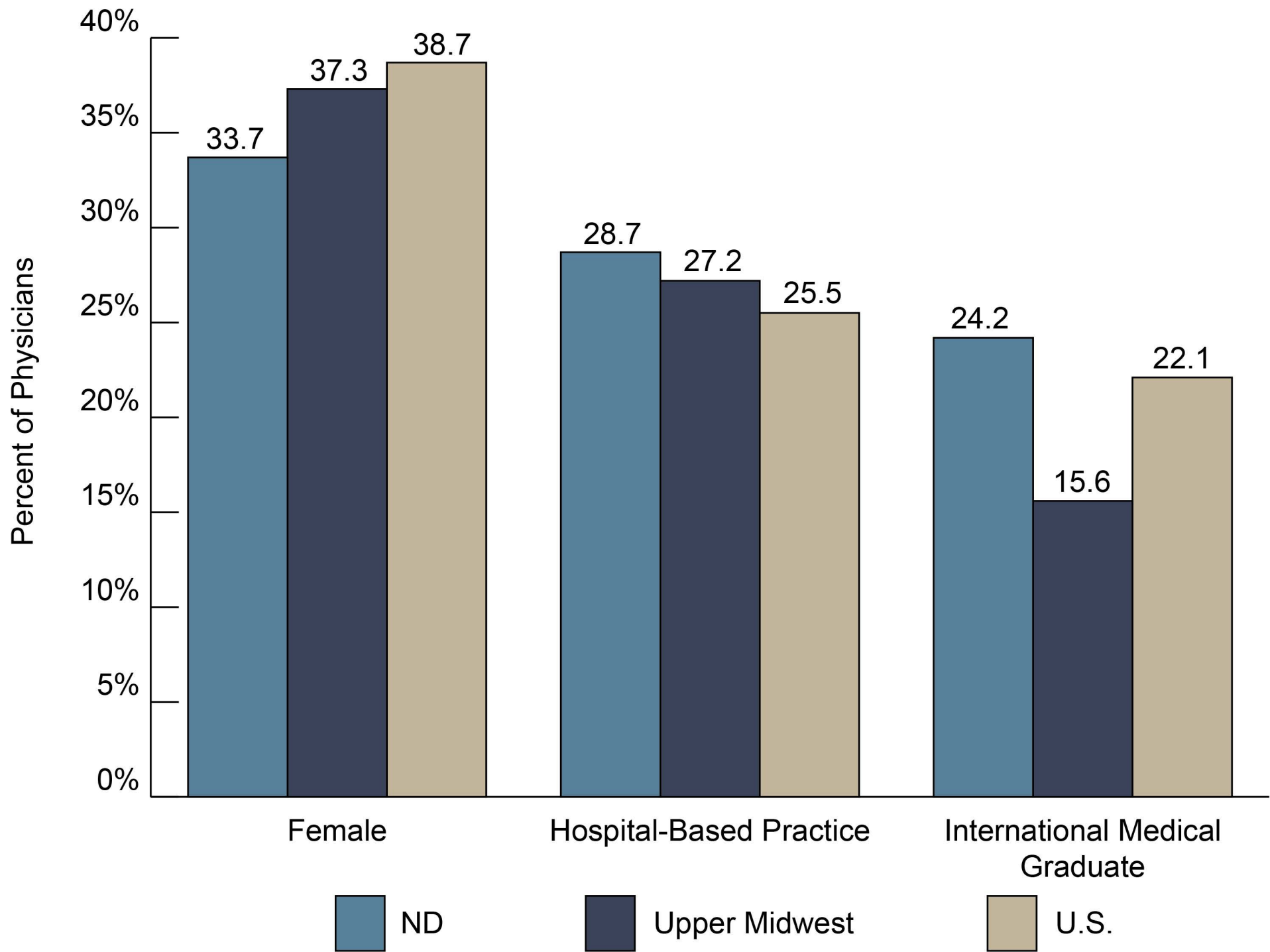


Figure 6.5. Select physician characteristics with comparisons, 2021.³

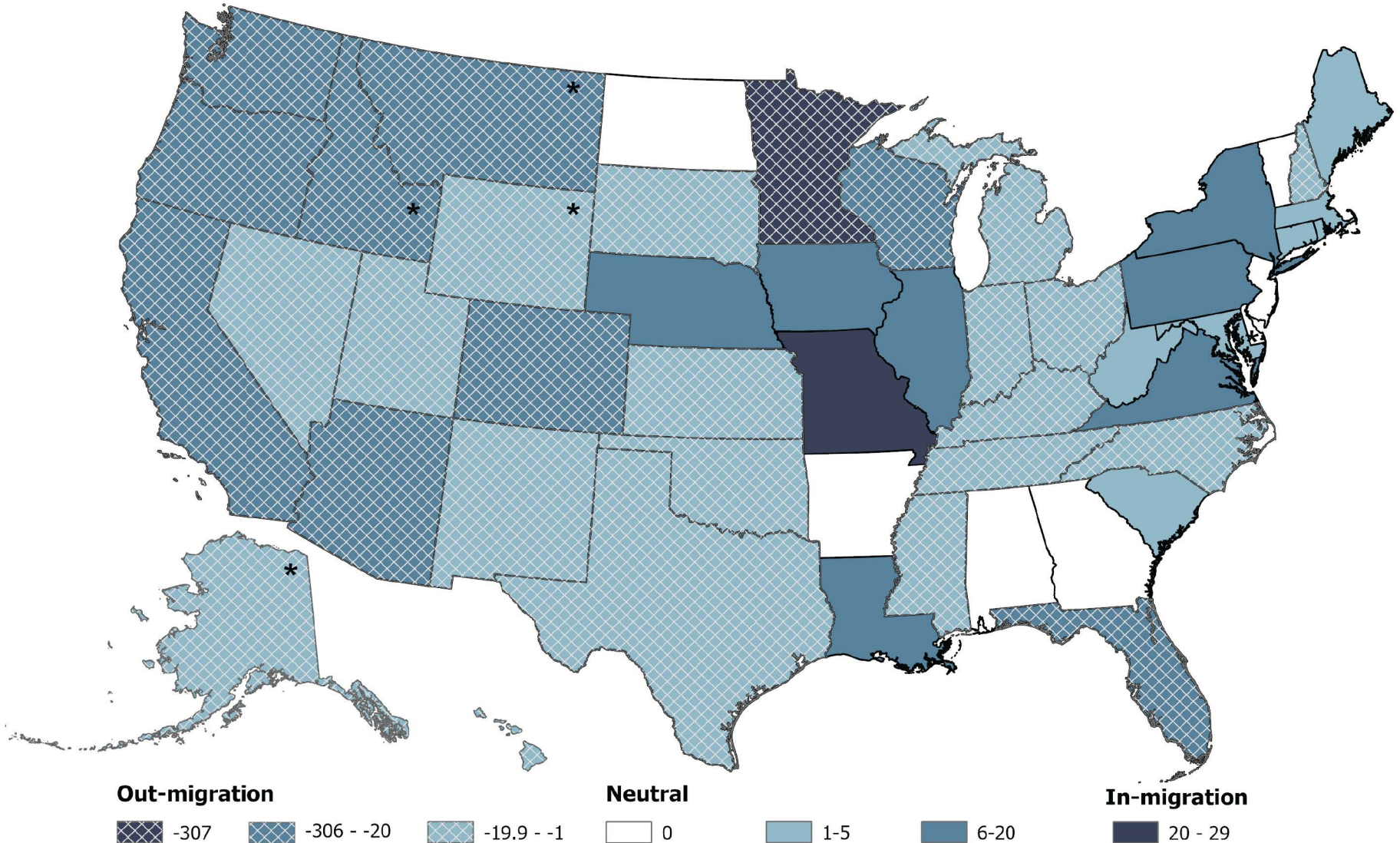


Figure 6.6. Medical school balance of trade, 2023.²

* indicates states without a medical school

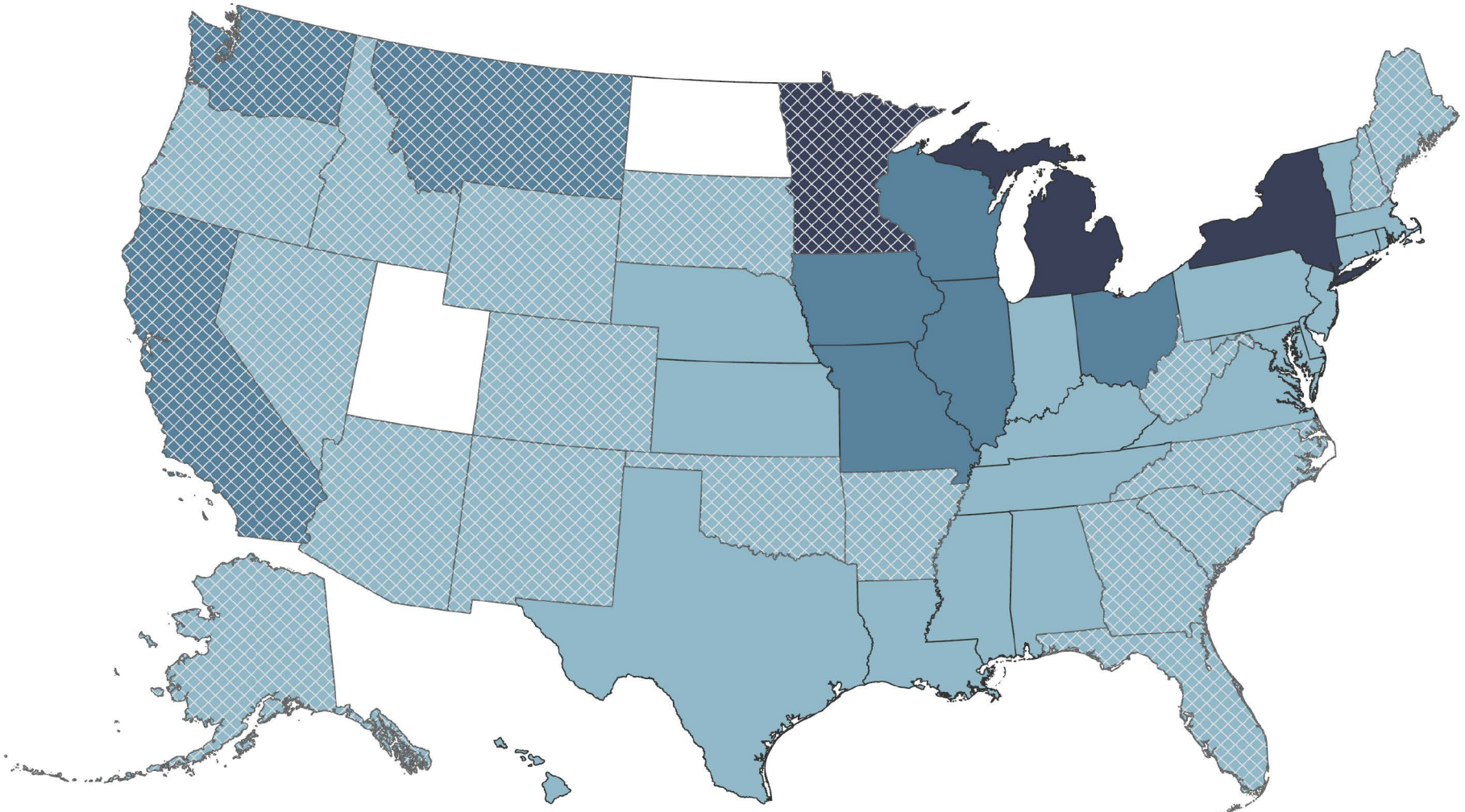


Figure 6.7. Residency balance of trade, 2023.²

Table 6.1***All medical doctors (MDs) per 10,000 persons in North Dakota and the U.S. by year.^{1, 3, 4}***

	ND	U.S.	% ND of U.S.
1990	19.5	24.2	80.6
1995	23.0	27.0	85.2
2000	25.0	28.4	88.0
2017	24.3	29.1	83.5
2019	24.9	29.6	84.1
2021	24.6	29.7	82.8

Table 6.2***Gender of physicians per 10,000 persons in North Dakota with comparisons, 2021.^{1, 3, 5}***

	ND	Upper Midwest	U.S.
Women	8.3	10.3	11.5
Metropolitan	13.1	13.3	12.7
Micropolitan	4.7	5.4	3.9
Rural	2.1	2.7	2.1
Men	16.3	17.3	18.2
Metropolitan	25.5	21.6	19.7
Micropolitan	10.5	11.4	9.3
Rural	3.8	5.5	4.7

Table 6.3

Physician primary practice per 10,000 persons in North Dakota with comparisons, 2021.^{1, 3, 5}

	ND	Upper Midwest	% Difference	U.S.	% Difference
Office	15.6	17.5	-11.5	18.5	-17.0
Metropolitan	23.8	21.4	10.6	20.0	17.4
Micropolitan	10.4	12.3	-16.7	9.7	7.0
Rural	4.4	6.2	-34.0	5.1	-14.7
Hospital	7.1	7.5	-5.5	7.6	-6.8
Metropolitan	11.7	9.9	16.7	8.4	32.8
Micropolitan	3.5	3.6	-2.8	2.8	22.2
Rural	1.3	1.6	-20.7	1.4	-7.4

Negative numbers indicate that the ND rate is below that of the Midwest or U.S. rate. Positive numbers indicate that the ND rate is above the Midwest or U.S. rate.

Table 6.4

Percent of North Dakota specialty physicians who graduated from the UND SMHS and/or completed at least one residency in North Dakota as of 2023.²

Residency	Percent
Family Medicine	79
Internal Medicine	40
Obstetrics & Gynecology	69
Pediatrics	42
Psychiatry	48

Table 6.5***Number of residents/fellows in ACGME-accredited North Dakota residencies/fellowships and number who completed training in 2023-2024.⁶***

Residency/Fellowship	Number in Training 2023 - 2024	Duration in Years	Completed Training in 2023 - 2024
Family Medicine	88	3 Years	28
Geriatrics Fellowship	2	1 Year	2
Hematology & Med Oncology	4	3 Years	NA
Internal Medicine	25	3 Years	9
Neurology	9	4 Years	NA
Orthopedic Surgery	15	5 Years	3
Psychiatry	21	4 Years	3
Sports Medicine Fellowship	2	1 Year	1
Surgery (Preliminary)	2	1 or 2 years	2
Surgery (Categorical)	26	5 Years	5
Transitional Year	5	1 Year	5

NA = Not Applicable

Table 6.6***Rate of IMGs and USMGs per 10,000 persons with comparisons, 2021.^{1, 3, 5}***

	ND	Upper Midwest	U.S.
IMG	5.9	4.3	6.5
Metropolitan	9.2	5.5	7.1
Micropolitan	4.1	2.6	2.6
Rural	1.2	1.0	1.2
USMG	17.6	22.6	21.7
Metropolitan	27.7	27.8	23.4
Micropolitan	10.1	15.2	11.7
Rural	4.8	8.1	6.5

CHAPTER SEVEN:

**PRIMARY CARE AND SPECIALTY PHYSICIAN
WORKFORCE IN NORTH DAKOTA**

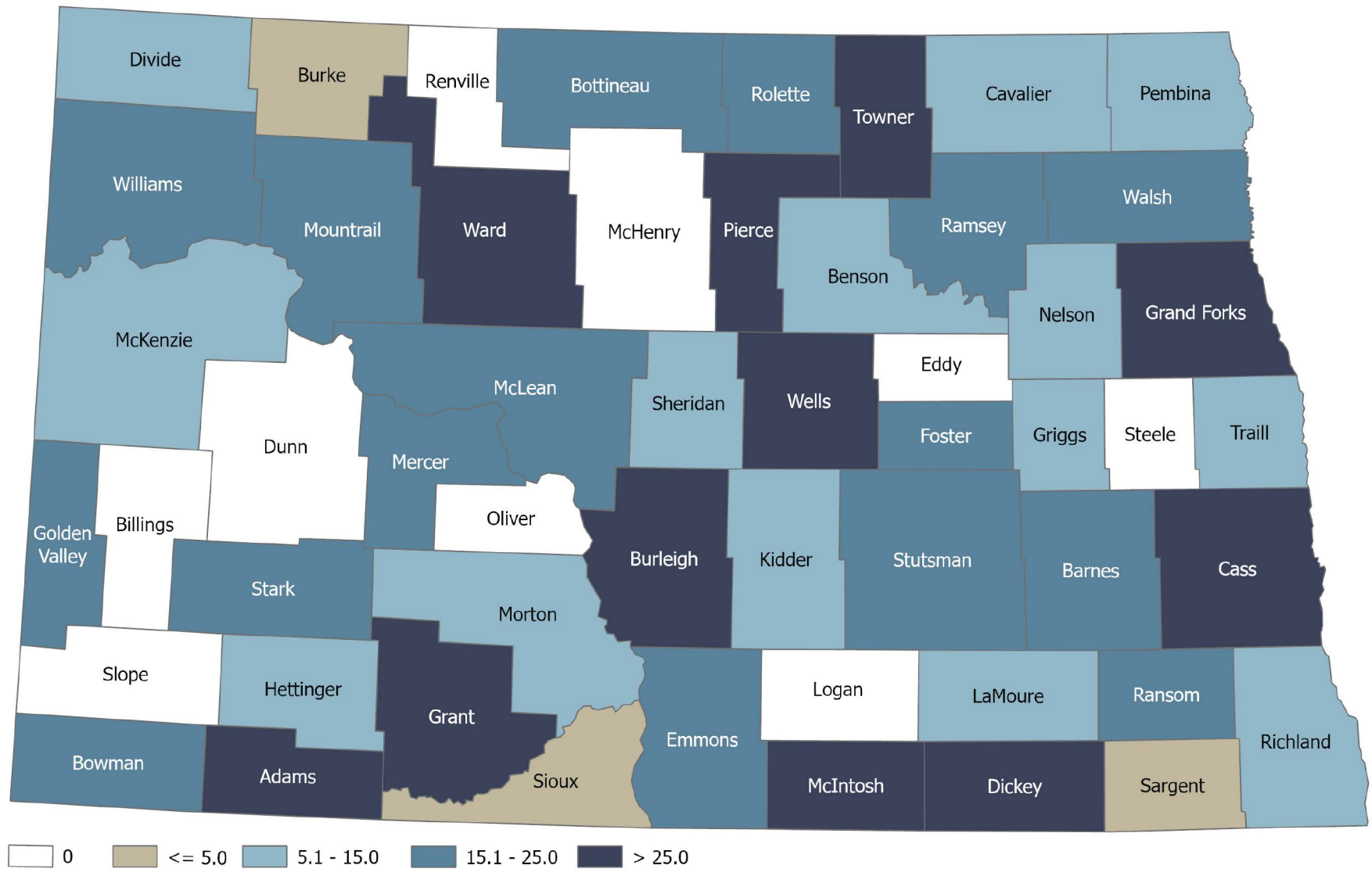


Figure 7.1. Primary care providers per 10,000 North Dakota residents, by county, 2023.^{1, 2}

Physicians Per 10,000 Persons

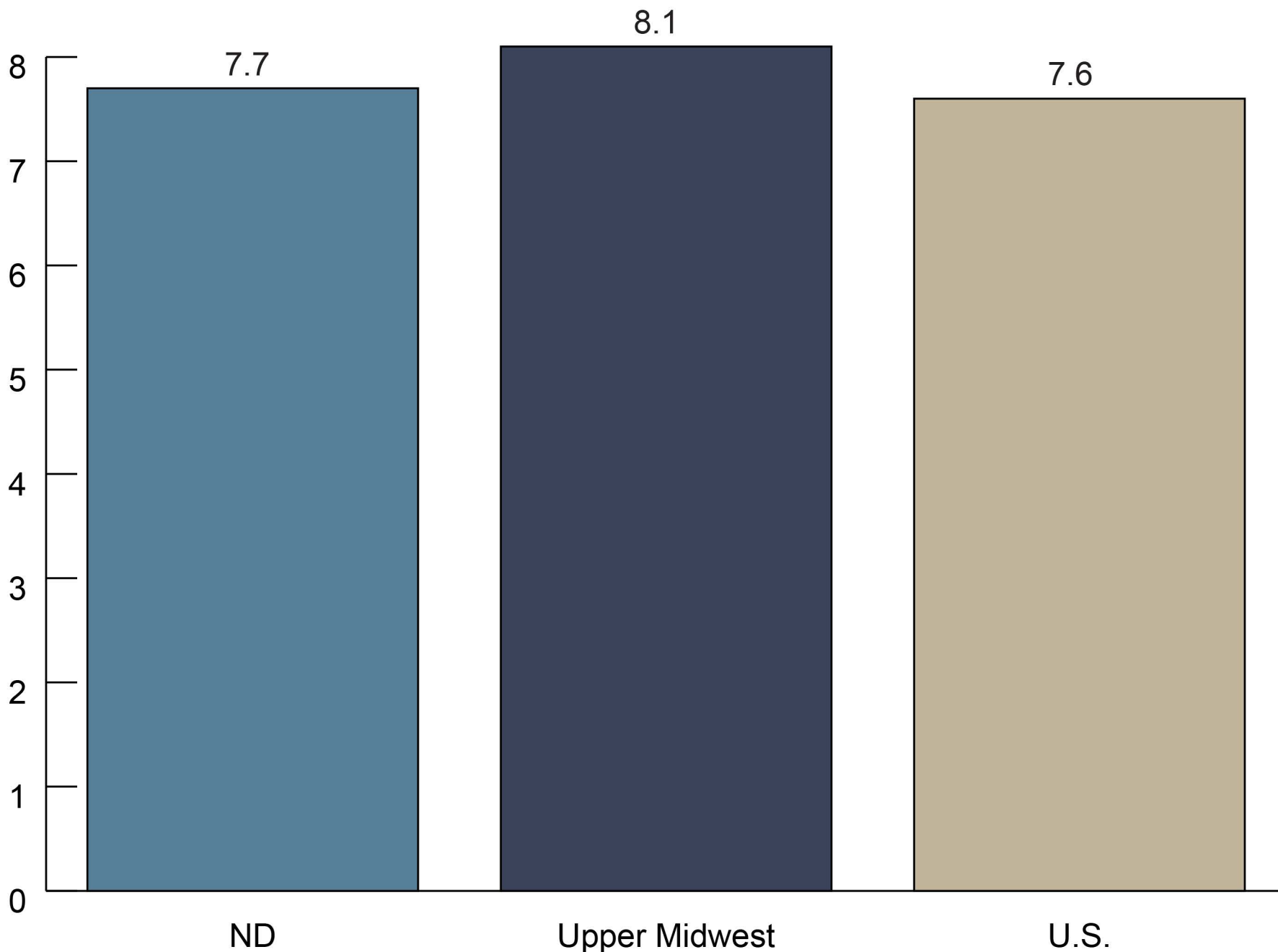


Figure 7.2. Primary care physicians per 10,000 persons in North Dakota, the Upper Midwest, and the U.S., 2021.^{3, 4}

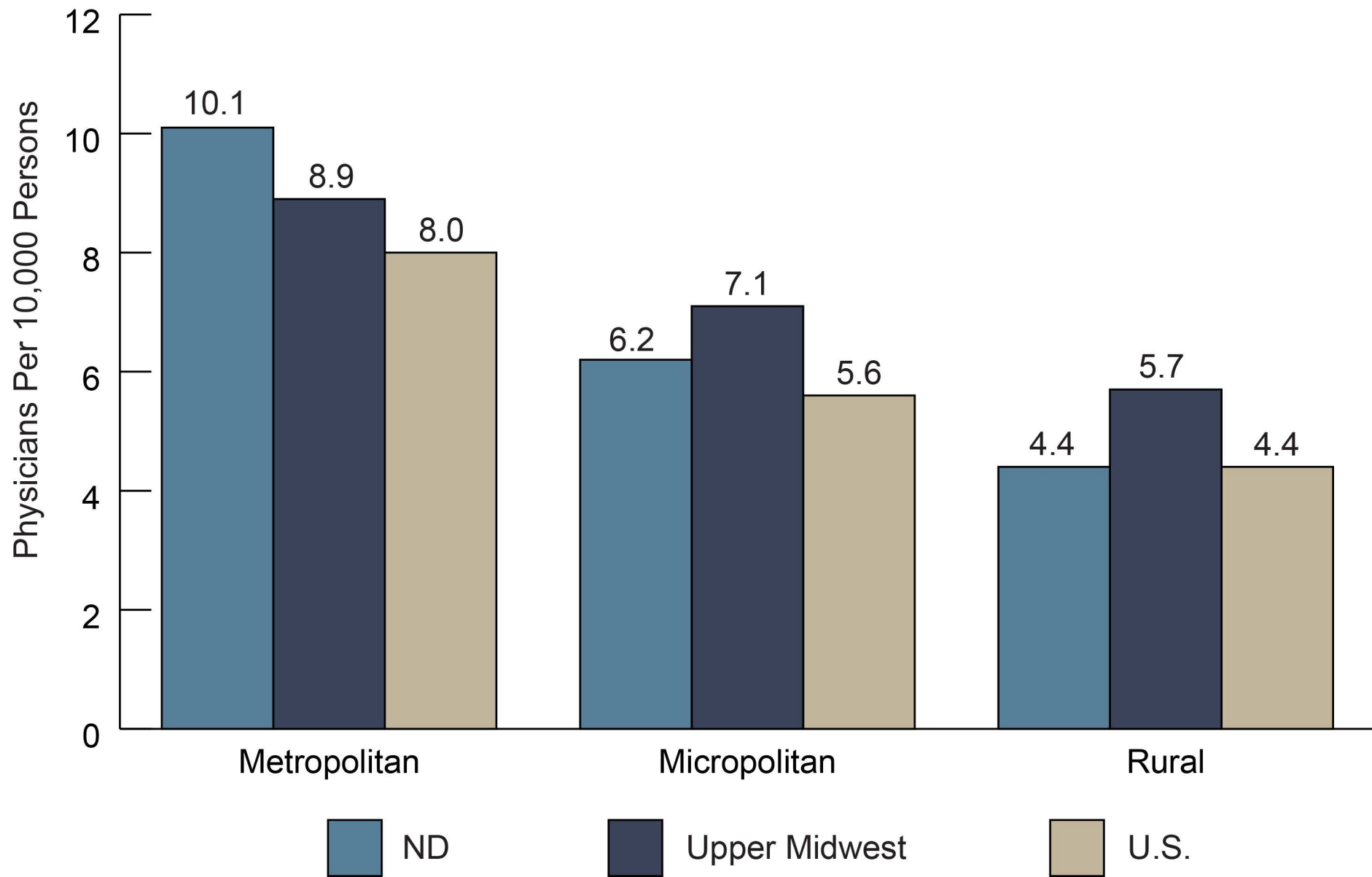


Figure 7.3. Primary care physicians per 10,000 persons in North Dakota with comparisons, 2021.^{2, 3, 4}

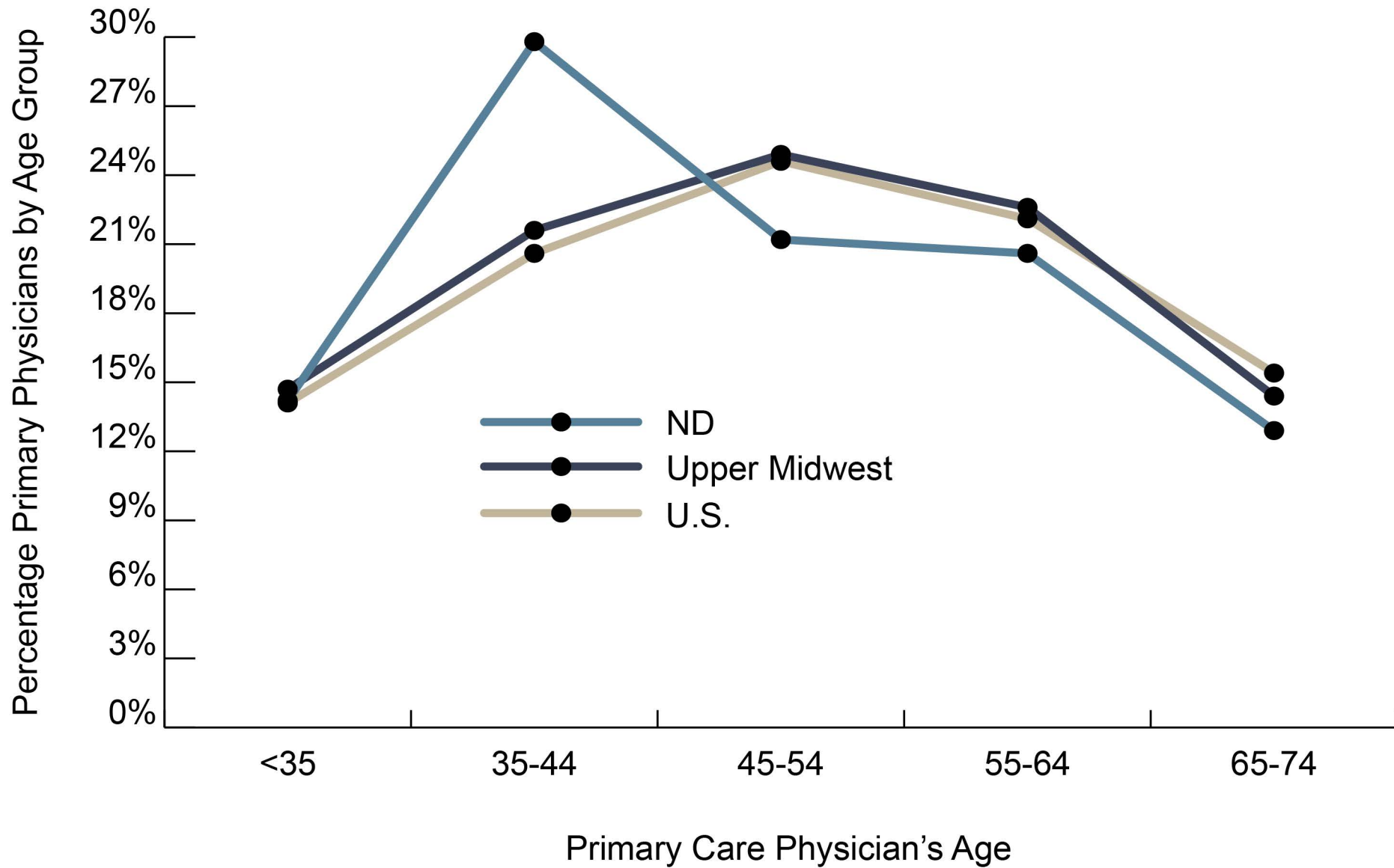


Figure 7.4. Percent of primary care physicians by age for North Dakota with comparisons, 2021.⁴

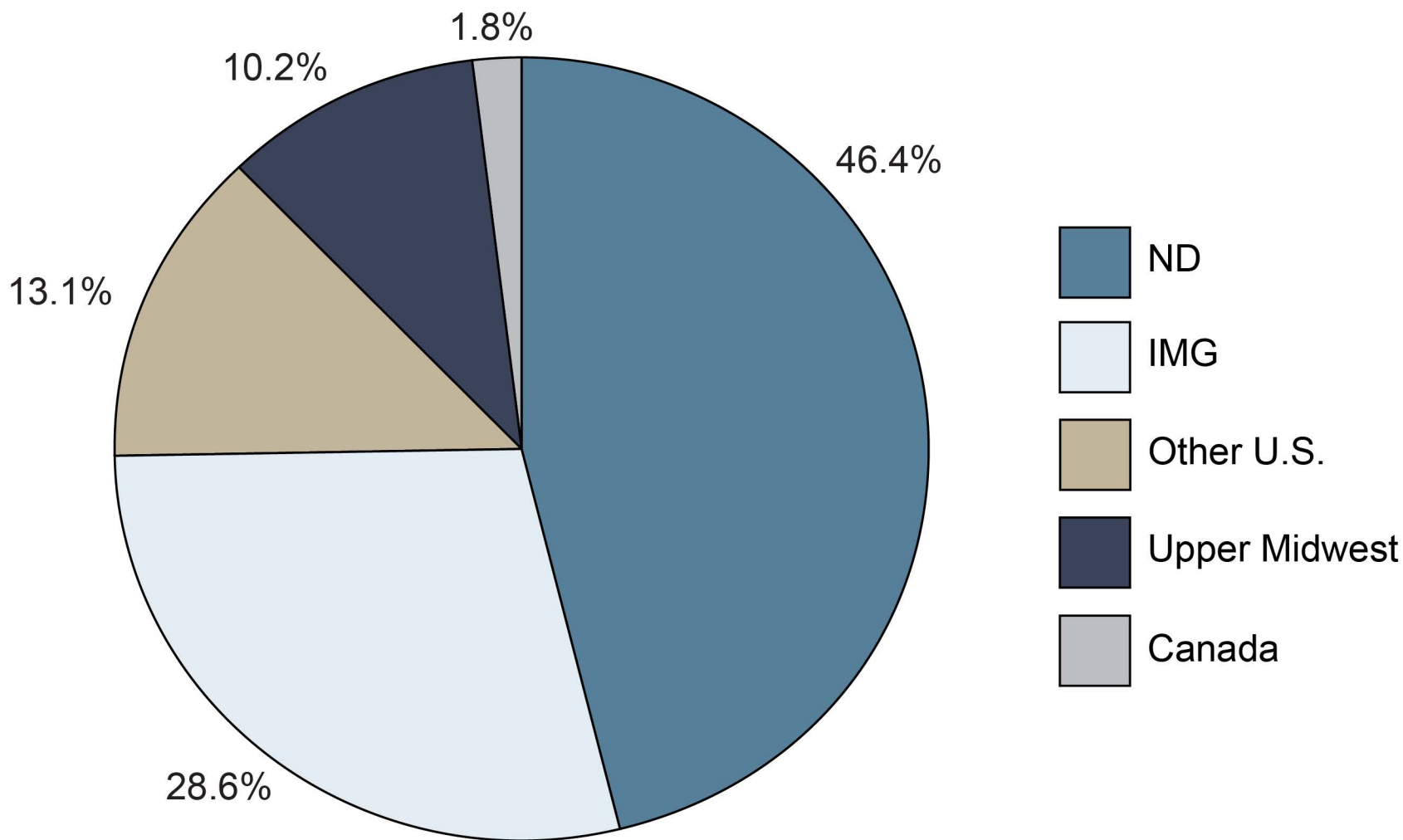


Figure 7.5. Locations where North Dakota primary care physicians graduated from medical school, 2023.¹

North Dakota's primary care physicians graduated from medical schools from all over the U.S. and the world. UND SMHS graduates account for 46.4% of practicing primary care physicians in North Dakota. International Medical Graduates (IMGs) account for 28.6% and Canadian medical school graduates account for 1.8% of North Dakota's practicing primary care physicians. The rest of the Upper Midwest states account for 10.2% while the rest of the U.S. accounts for 13.1% of North Dakota's primary care physicians.

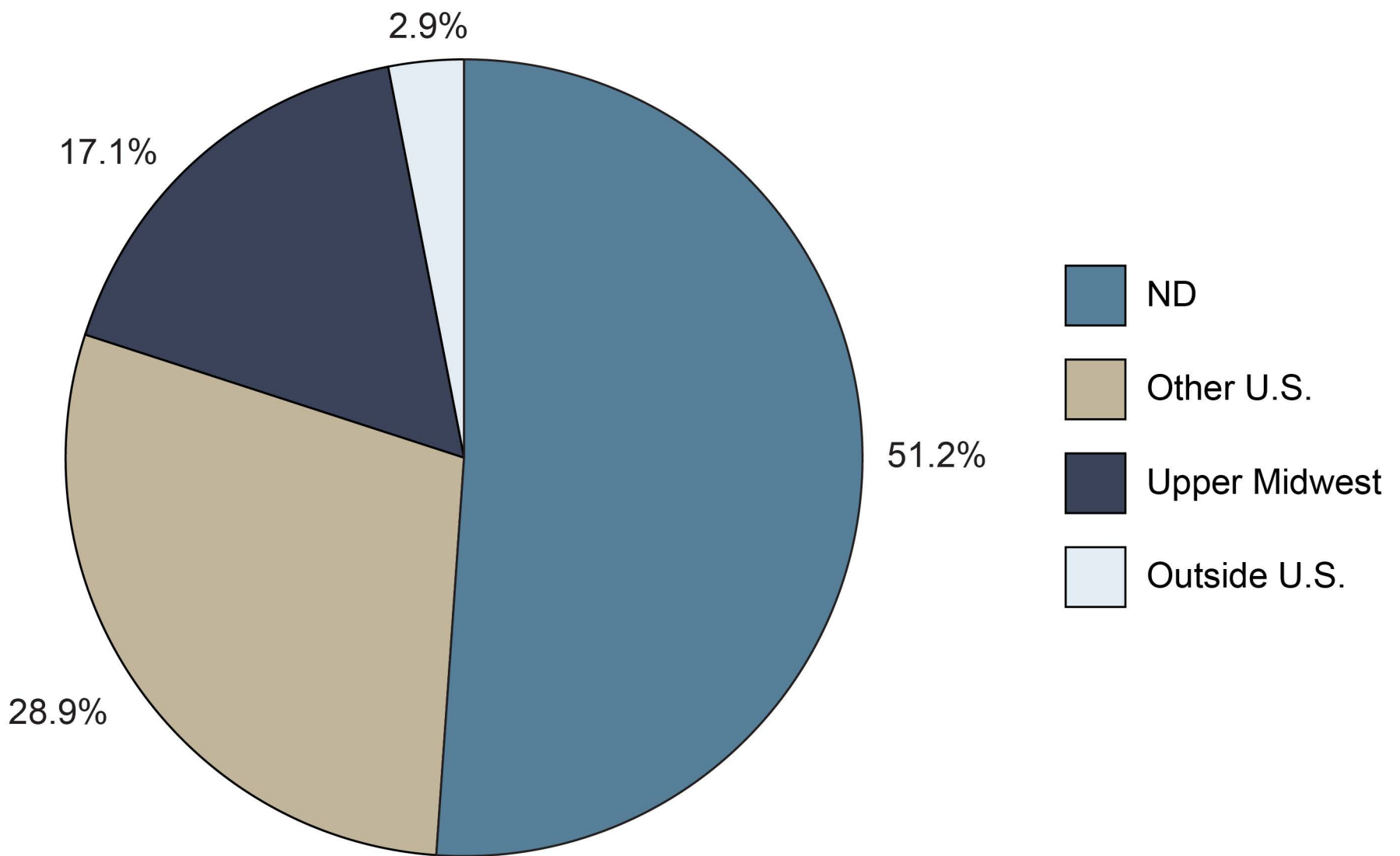


Figure 7.6. Locations where North Dakota primary care physicians completed their residency, 2023.¹

Over half (51.2%) of North Dakota's currently practicing primary care physicians completed their residency training in North Dakota. Primary care physicians who graduated from residency programs outside of North Dakota came from the Midwest (17.1%), other U.S. (28.9%), and Canada and other foreign countries (2.9%).

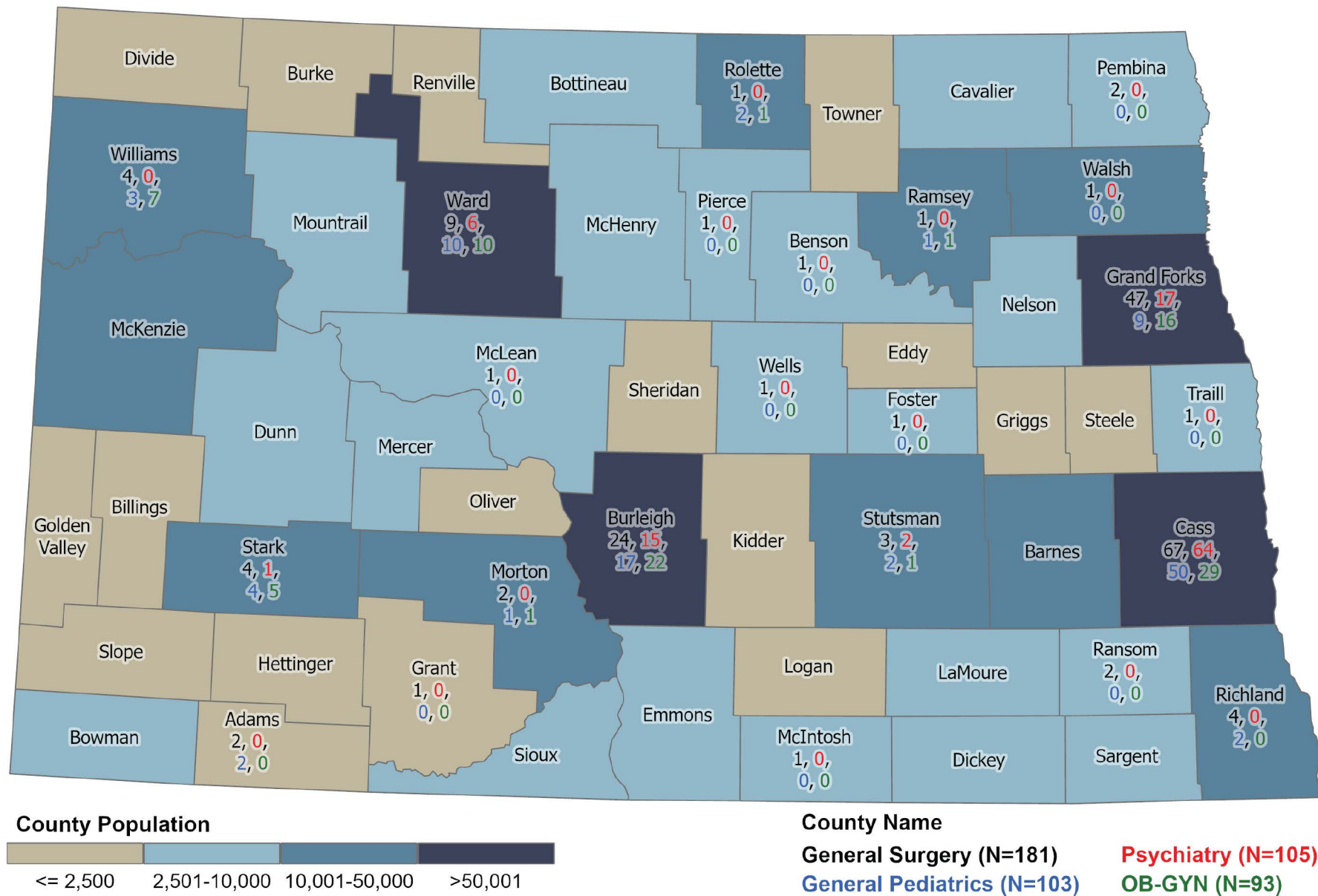


Figure 7.7. Location of specialty physicians in North Dakota, 2023.¹

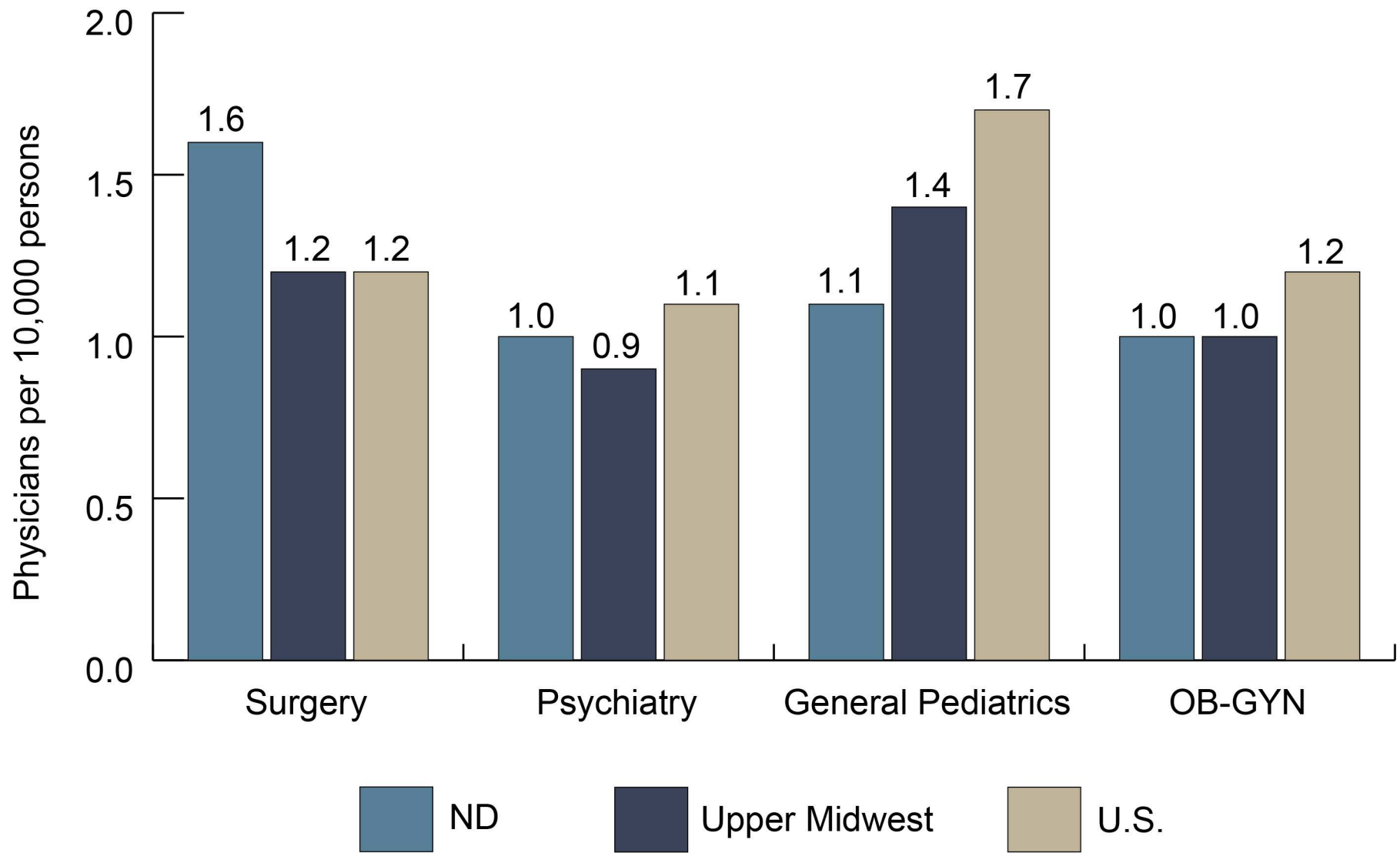


Figure 7.8. Surgeons, psychiatrists, general pediatricians, and OB-GYNs per 10,000 persons in North Dakota with comparisons, 2021.^{3, 4}

Table 7.1

Percent of primary care physicians in North Dakota who are female, have hospital-based practices, and are International Medical Graduates, 2021.^{1, 3}

	N	Area (%)	Female (%)	Hospital-Based (%)	IMG (%)
Metropolitan	437	69.7	43.9	18.3	29.5
Micropolitan	113	18.0	38.9	14.2	33.6
Rural	77	12.3	69.0	18.2	15.6
Total	627		46.1	17.5	28.5

Table 7.2***Percent of primary care physicians in North Dakota by age and area, 2021.^{2, 4}***

	N	<35	35-44	45-54	55-64	65-74	>74
Metropolitan	437	15.5	31.5	22.7	18.8	10.0	1.4
Micropolitan	113	10.2	31.5	16.5	22.8	18.9	0.0
Rural	77	11.3	15.0	17.5	30.0	23.8	2.5
Total	627	14.0	29.5	21.0	20.9	13.3	1.3

Table 7.3

Practice base and area of primary care physicians per 10,000 persons in North Dakota with comparisons, 2021.^{2, 3, 4}

	ND	Upper Midwest	U.S.
Office	11.3	11.0	10.0
Metropolitan	14.7	12.2	10.5
Micropolitan	9.3	9.2	7.2
Rural	6.3	7.8	5.7
Hospital	2.0	1.7	1.4
Metropolitan	2.8	1.9	1.4
Micropolitan	1.3	1.5	1.0
Rural	1.1	1.3	0.9

Table 7.4

Percent of specialist physicians in North Dakota who are female, have hospital-based practices, and are International Medical Graduates, 2023.^{1, 2}

	N	Female (%)	Hospital-Based (%)	IMG (%)
General Surgery	114	16.7	31.6	11.4
Metropolitan	89	18.0	32.6	10.1
Micropolitan	20	15.0	15.0	10.0
Rural	5	0.0	80.0	40.0
Psychiatry	66	42.4	27.3	34.8
Metropolitan	56	44.6	28.6	35.7
Micropolitan	7	28.6	28.6	42.9
Rural	3	33.3	0.0	0.0
General Pediatrics	78	61.5	15.4	16.7
Metropolitan	60	65.0	15.0	15.0
Micropolitan	16	43.8	12.5	25.0
Rural	2	100.0	50.0	0.0
OB-GYN	72	66.7	25.0	4.2
Metropolitan	56	67.9	26.8	1.8
Micropolitan	16	62.5	18.8	12.5
Rural	0	0.0	0.0	0.0

Table 7.5***Percent of specialists in North Dakota by age and area, 2021.^{2, 4}***

	N	<35	35-44	45-54	55-64	65-74
General Surgery	114	1.8	26.3	29.8	23.7	18.4
Metropolitan	89	2.2	24.7	33.7	25.8	13.5
Micropolitan	20	0.0	40.0	15.0	15.0	30.0
Rural	5	0.0	0.0	20.0	20.0	60.0
Psychiatry	66	6.1	31.8	19.7	31.8	10.6
Metropolitan	56	7.1	35.7	14.3	30.4	12.5
Micropolitan	7	0.0	14.3	57.1	28.6	0.0
Rural	3	0.0	0.0	33.3	66.7	0.0
General Pediatrics	78	5.1	33.3	21.8	21.8	17.9
Metropolitan	60	6.7	36.7	26.7	16.7	13.3
Micropolitan	16	0.0	18.8	6.3	43.8	31.3
Rural	2	0.0	50.0	0.0	0.0	50.0
OB-GYN	72	2.8	41.7	27.8	20.8	6.9
Metropolitan	56	3.6	41.1	26.8	19.6	8.9
Micropolitan	16	5.9	43.8	31.3	25.0	0.0
Rural	0	0.0	0.0	0.0	0.0	0.0

Table 7.6***Specialty physicians per 10,000 persons in North Dakota by area with comparisons, 2021.^{2, 4}***

	ND	Upper Midwest	U.S.
Surgery	1.6	1.2	1.2
Metropolitan	2.6	1.0	1.3
Micropolitan	1.0	1.0	0.7
Rural	0.3	0.5	0.4
Psychiatry	1.0	0.9	1.1
Metropolitan	1.7	1.1	1.2
Micropolitan	0.4	0.5	0.4
Rural	0.2	0.2	0.2
General Pediatrics	1.1	1.4	1.7
Metropolitan	1.6	1.8	1.9
Micropolitan	1.0	0.9	0.8
Rural	0.1	0.2	0.4
OB-GYN	1.0	1.0	1.2
Metropolitan	1.4	1.2	1.3
Micropolitan	1.0	0.8	0.7
Rural	0.1	0.3	0.3

CHAPTER EIGHT:

NURSING WORKFORCE IN NORTH DAKOTA

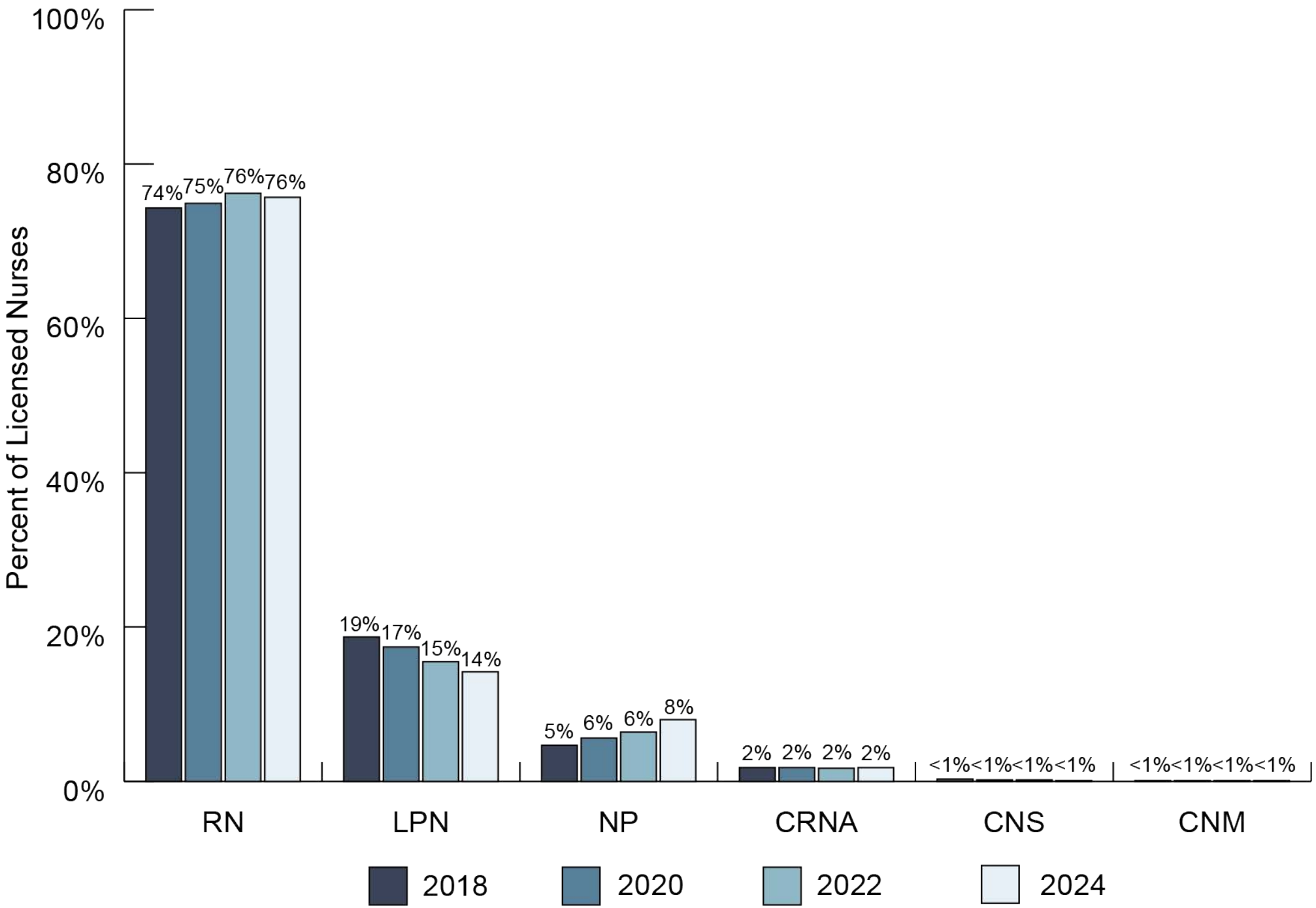


Figure 8.1. Percent of licensed nurses in North Dakota by license type and year, 2024.¹

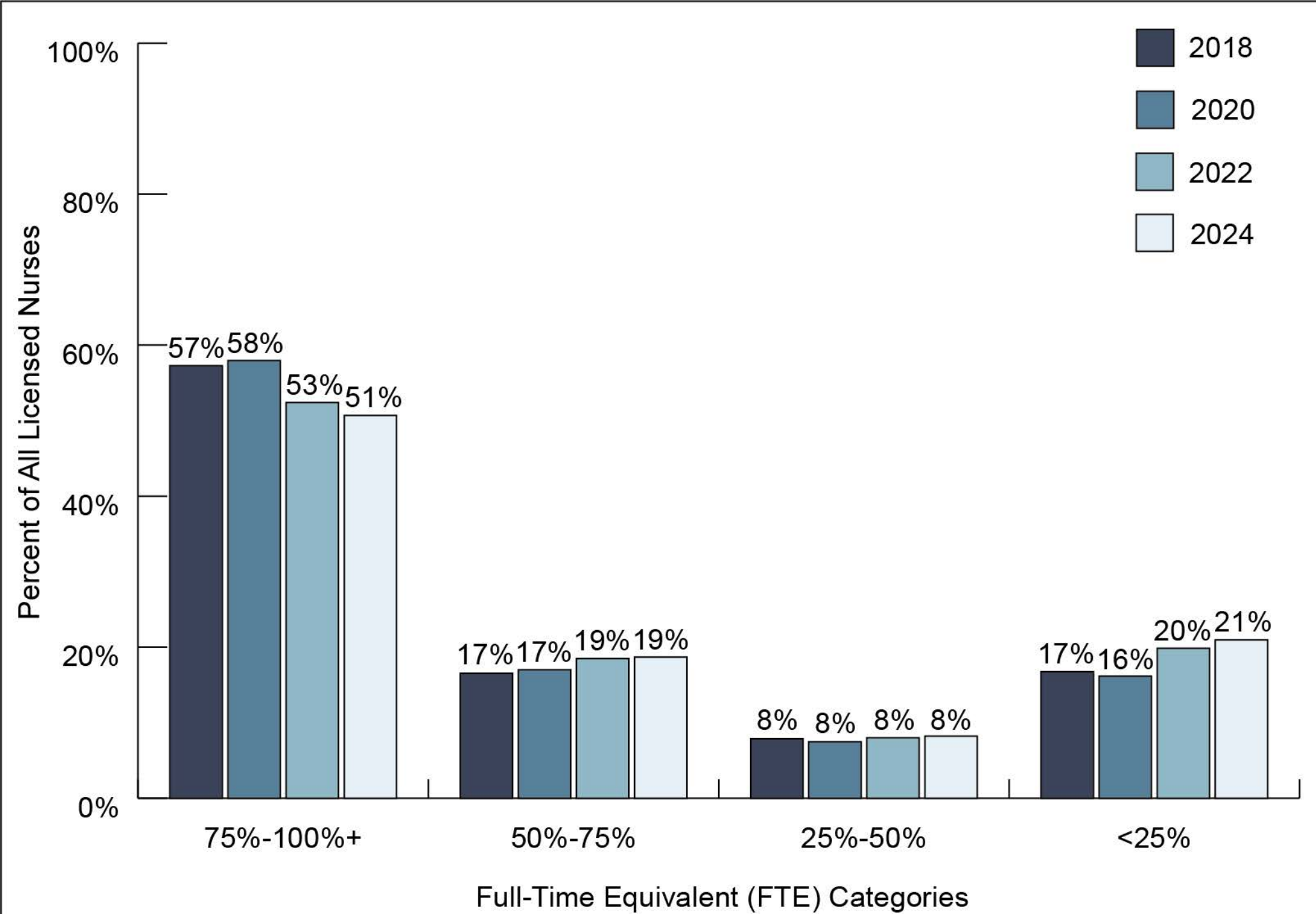


Figure 8.2. Percent of all North Dakota licensed nurses by full-time equivalent (FTE) category and by year, 2018-2024.¹

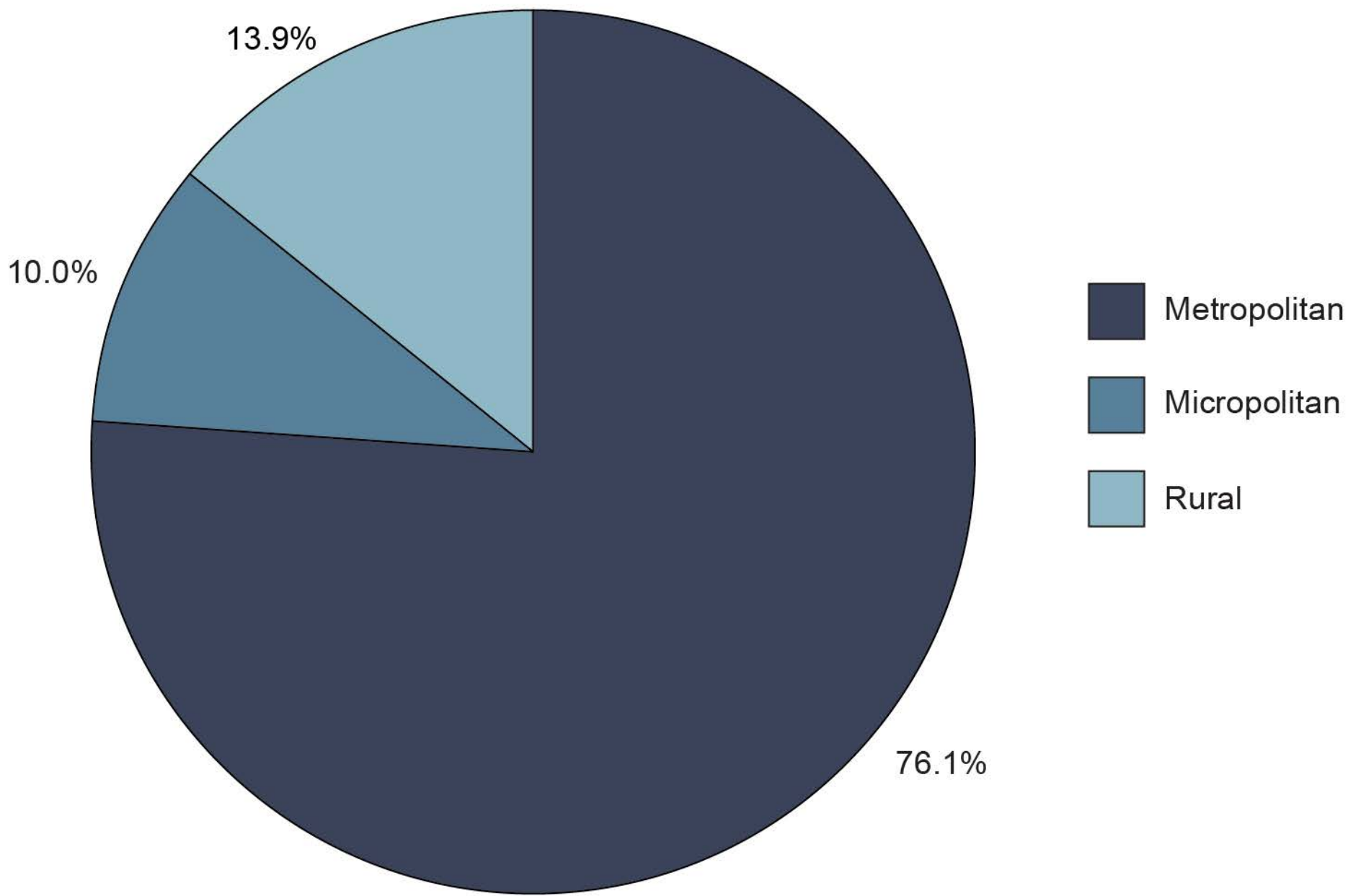


Figure 8.3. Nurse employer location in North Dakota by metropolitan-rural designation, 2024.¹

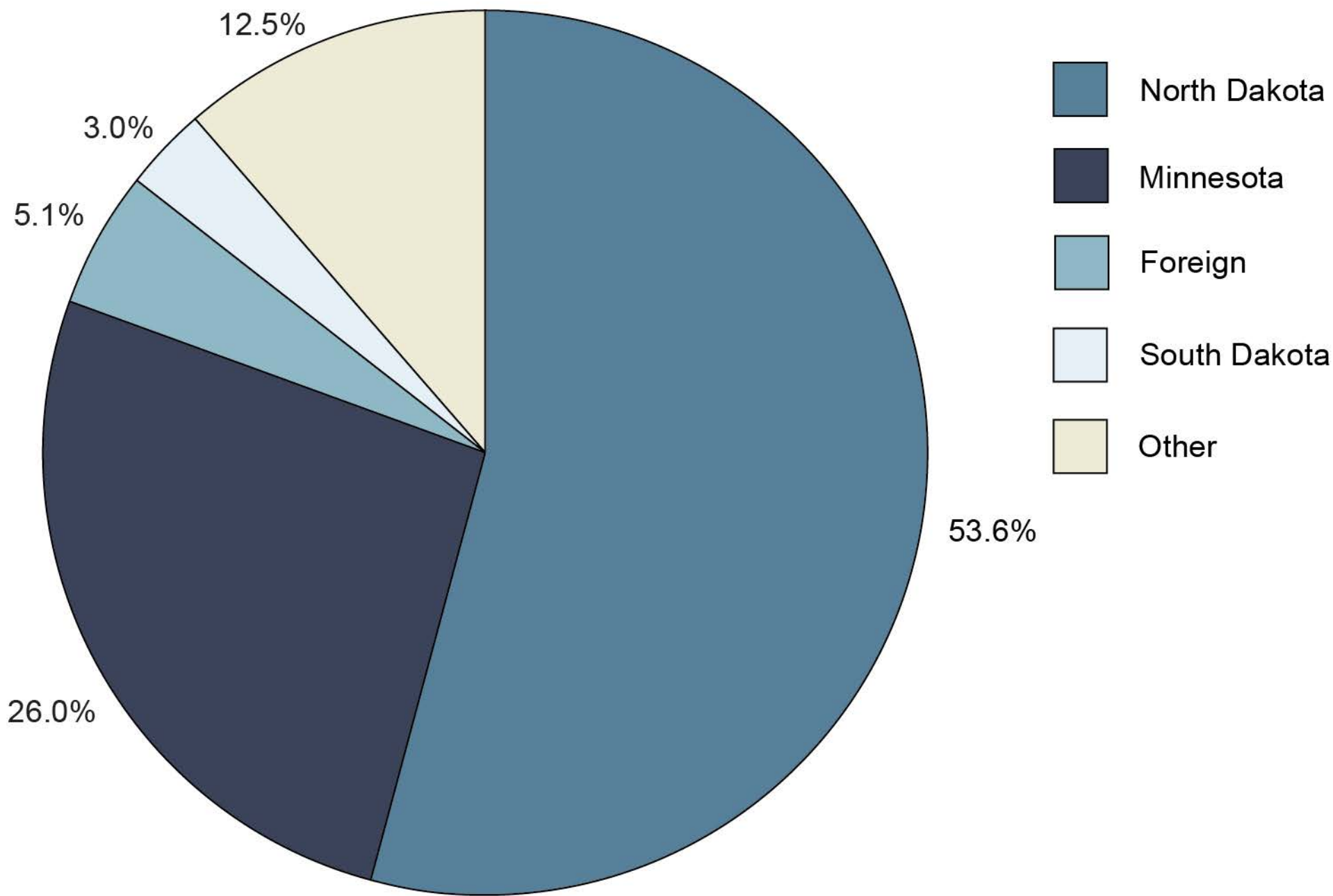


Figure 8.4. Nurses licensed in North Dakota and their state of educational preparation (Other = states with less than 1.5%), 2024.¹

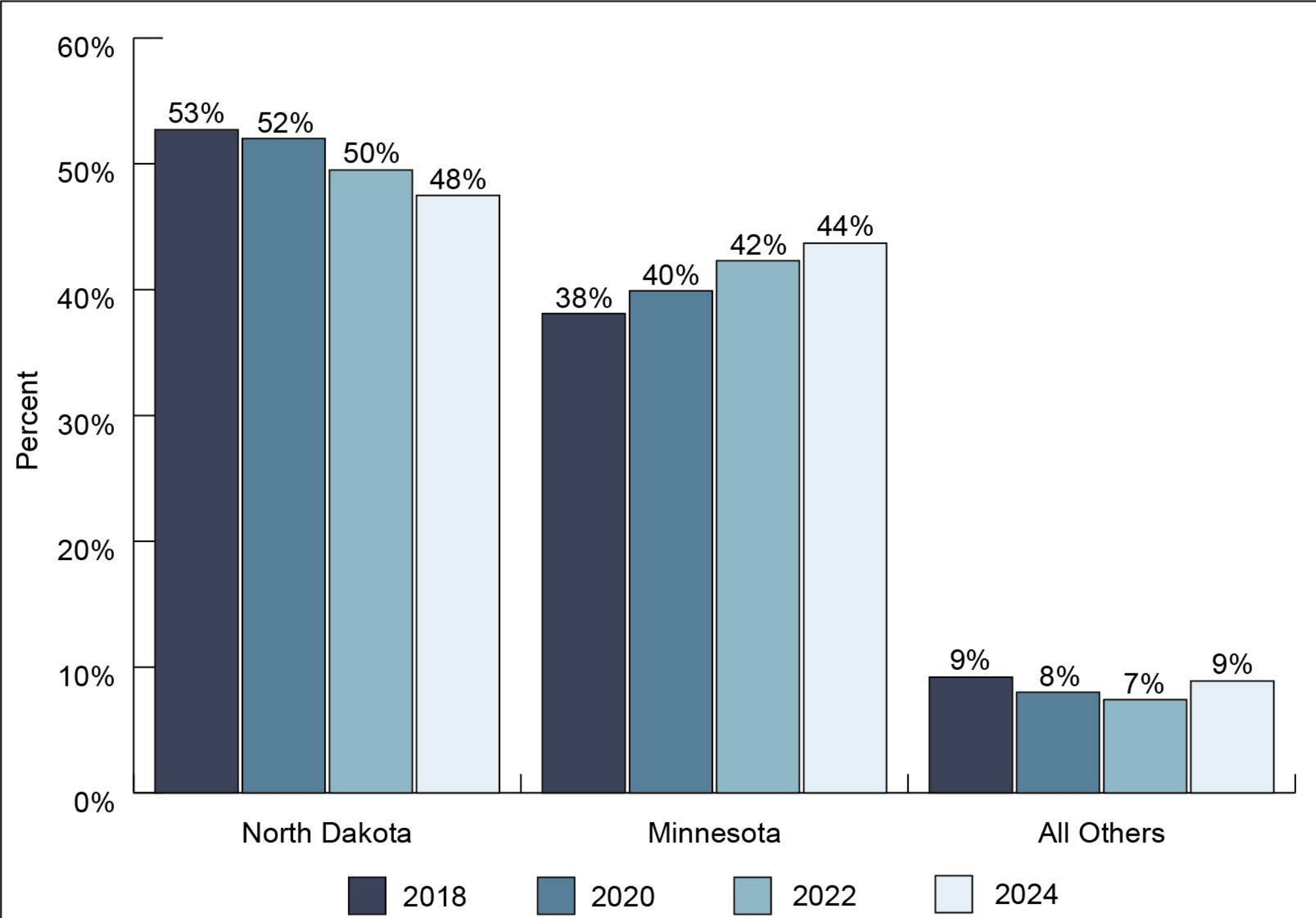


Figure 8.5. North Dakota licensed practical nurses' (LPNs) education state by year, 2018-2024.²

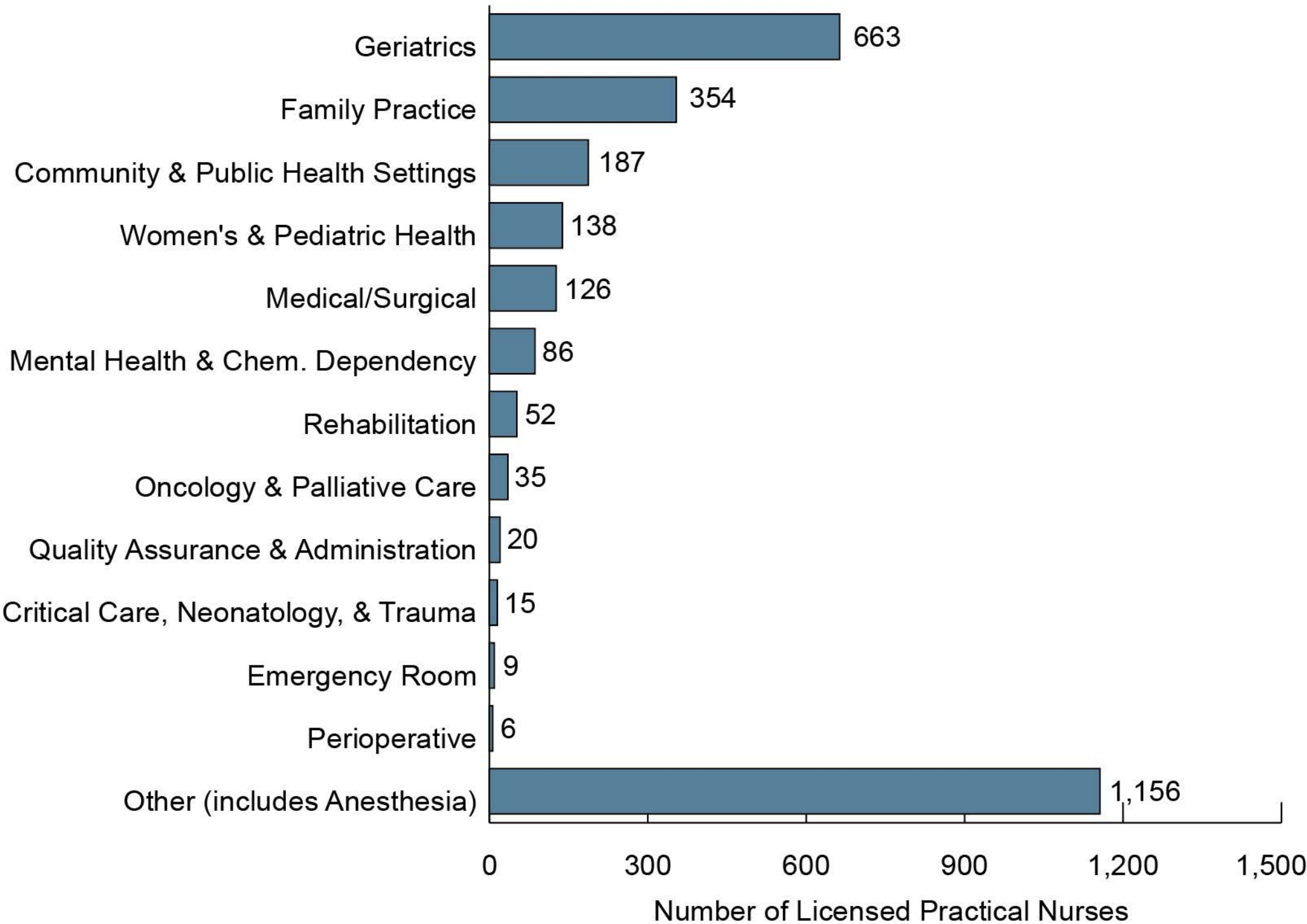


Figure 8.6. Licensed practical nurses' (LPNs') current practice area, 2024.¹

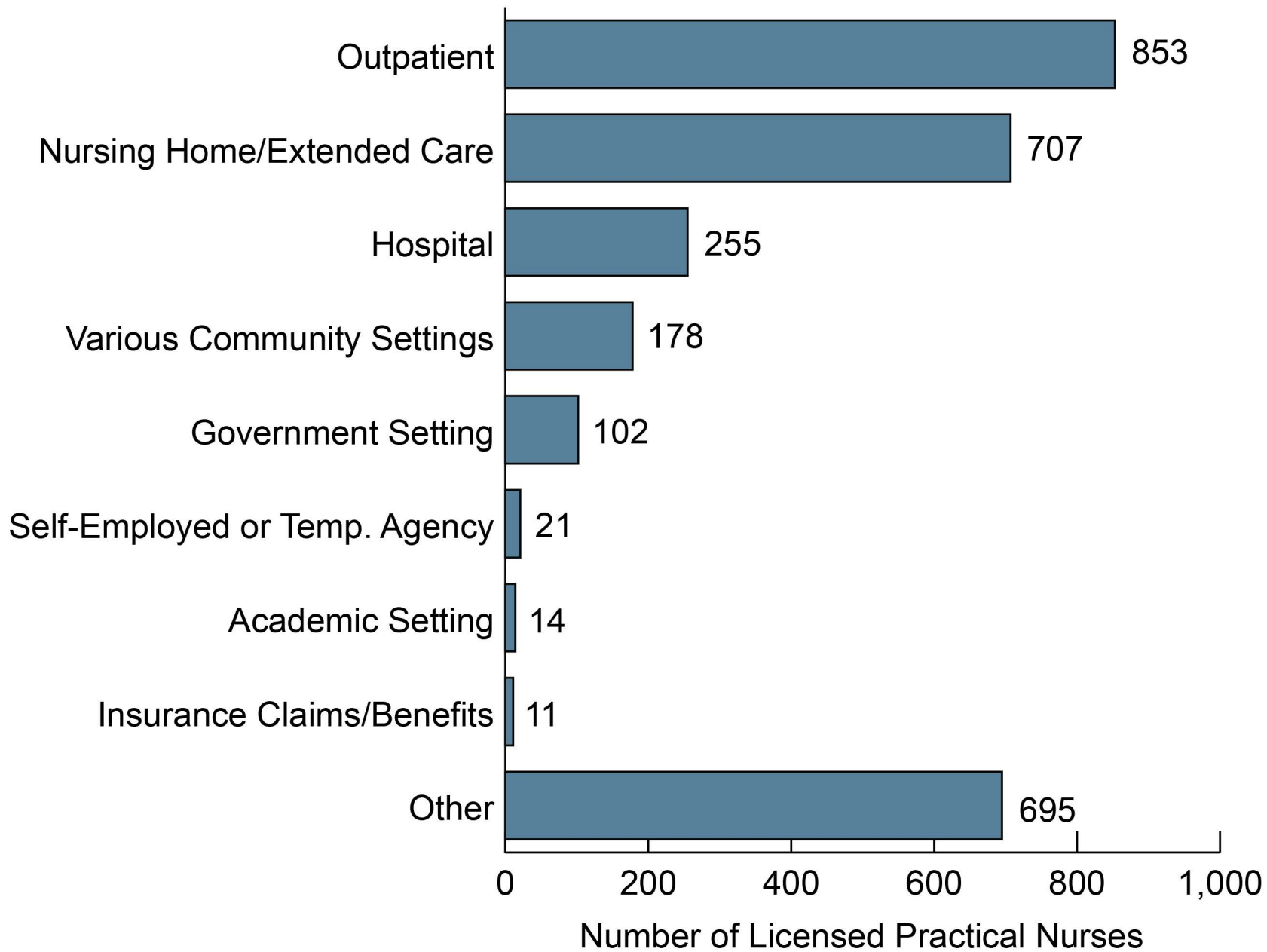


Figure 8.7. Licensed practical nurses' (LPNs') employment settings, 2024.¹ Outpatient: ambulatory care and physicians office; Nursing Home/Extended Care; Hospital; Various Community Settings: home health, occupational health, public/community health, and school health; Government Setting: correctional facility, government, military, and policy/planning/regulatory/licensing agency; Self-Employed or Temp. Agency; Academic Setting: academic setting and nursing education; Insurance Claims/Benefits; Other.

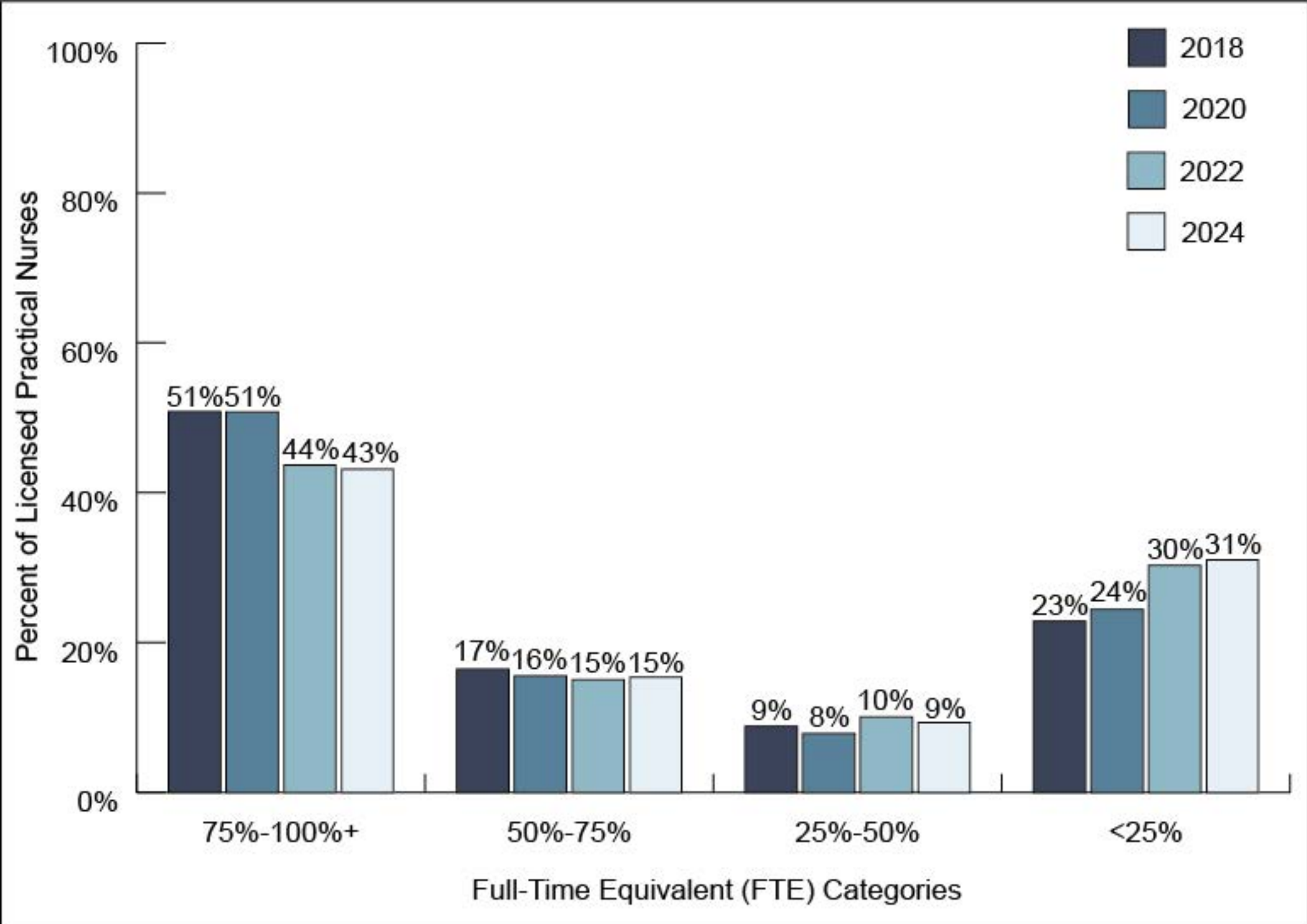


Figure 8.8. Percent of North Dakota licensed practical nurses (LPNs) by full-time equivalent (FTE) category and by year, 2018-2024.¹

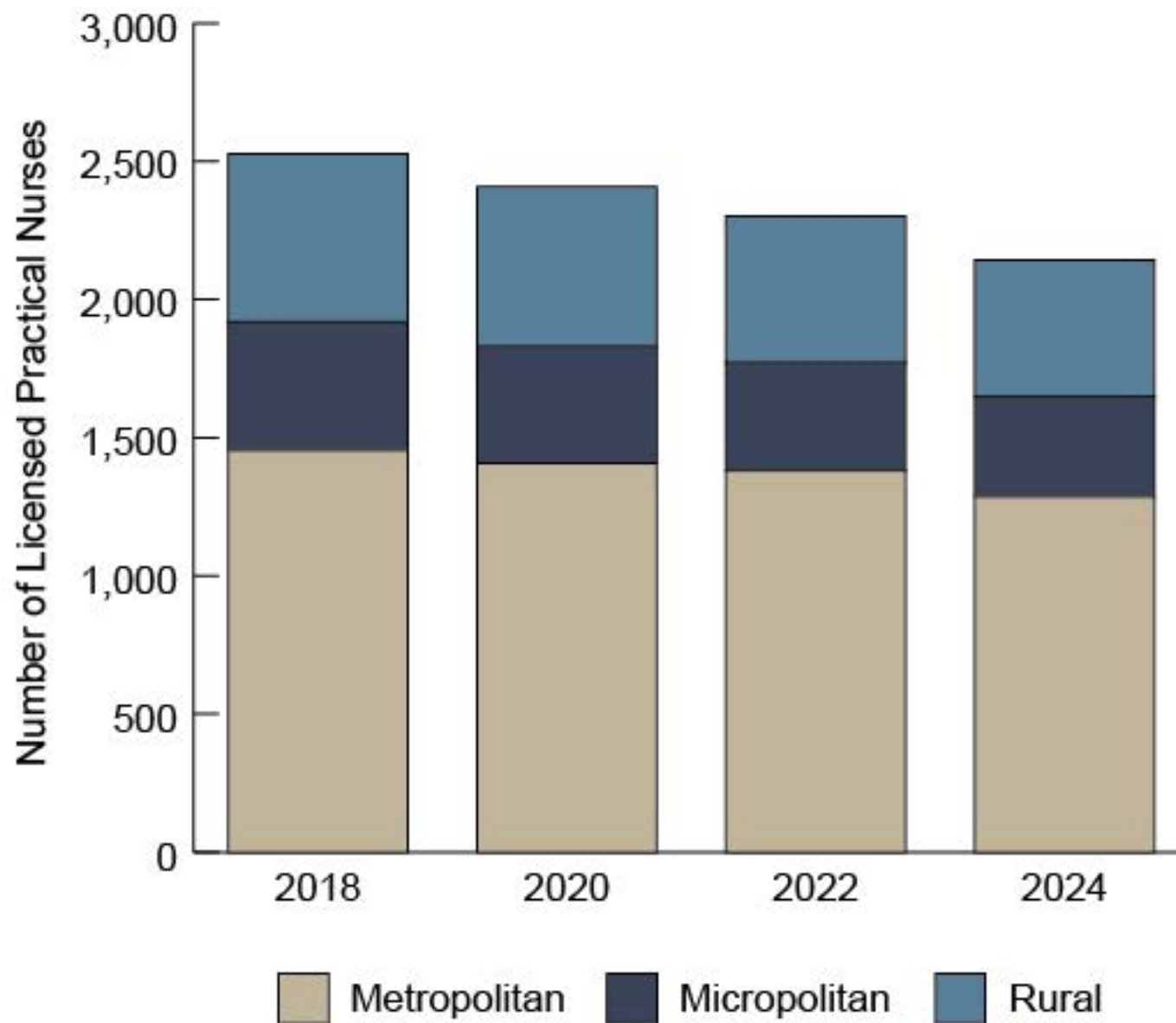


Figure 8.9. Number of licensed practical nurses (LPNs) in North Dakota by year and metropolitan-rural designation, 2018-2024.¹

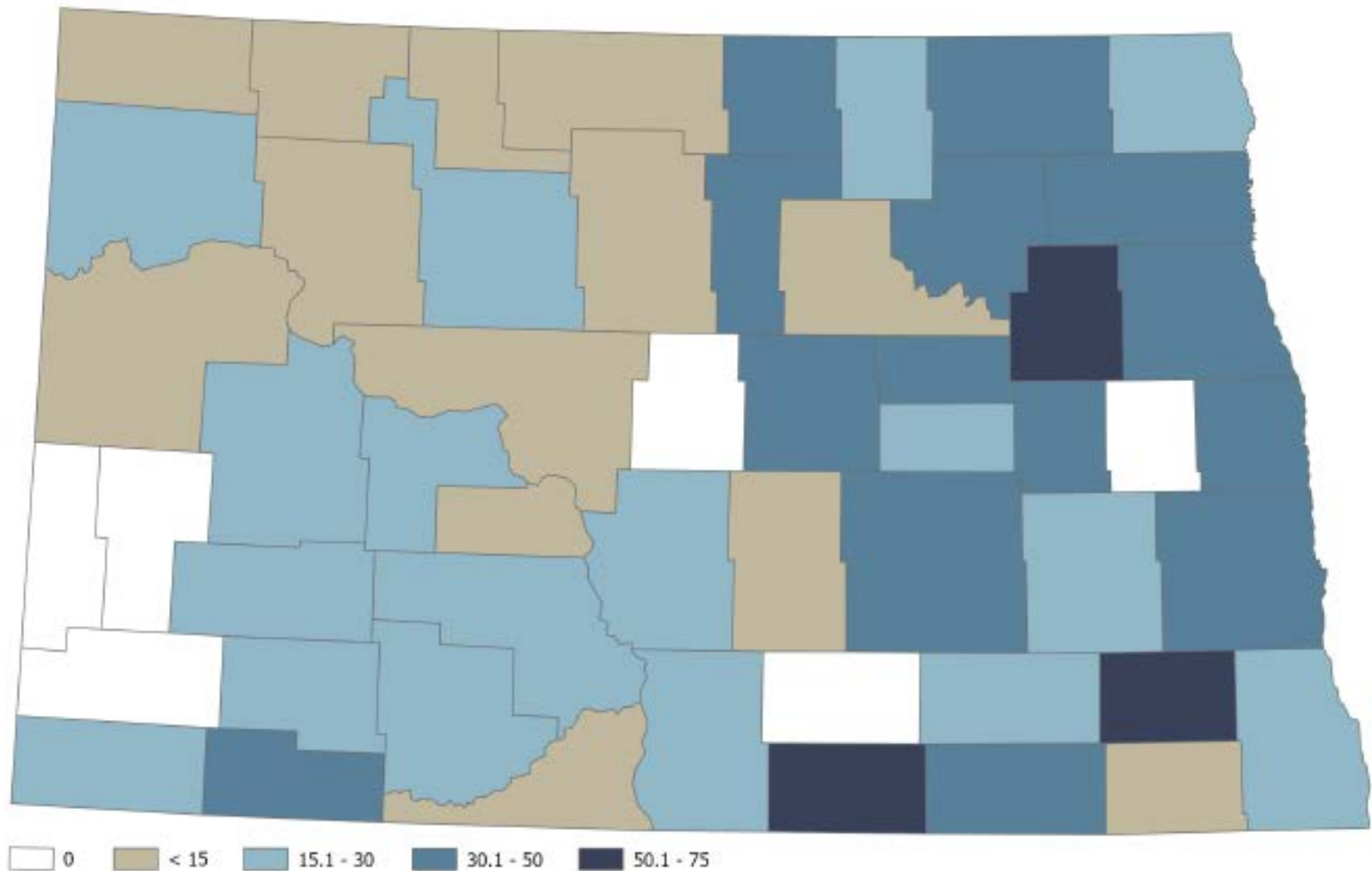


Figure 8.10. Rate of licensed practical nurses (LPNs) per 10,000 North Dakota residents, by county, 2024.¹

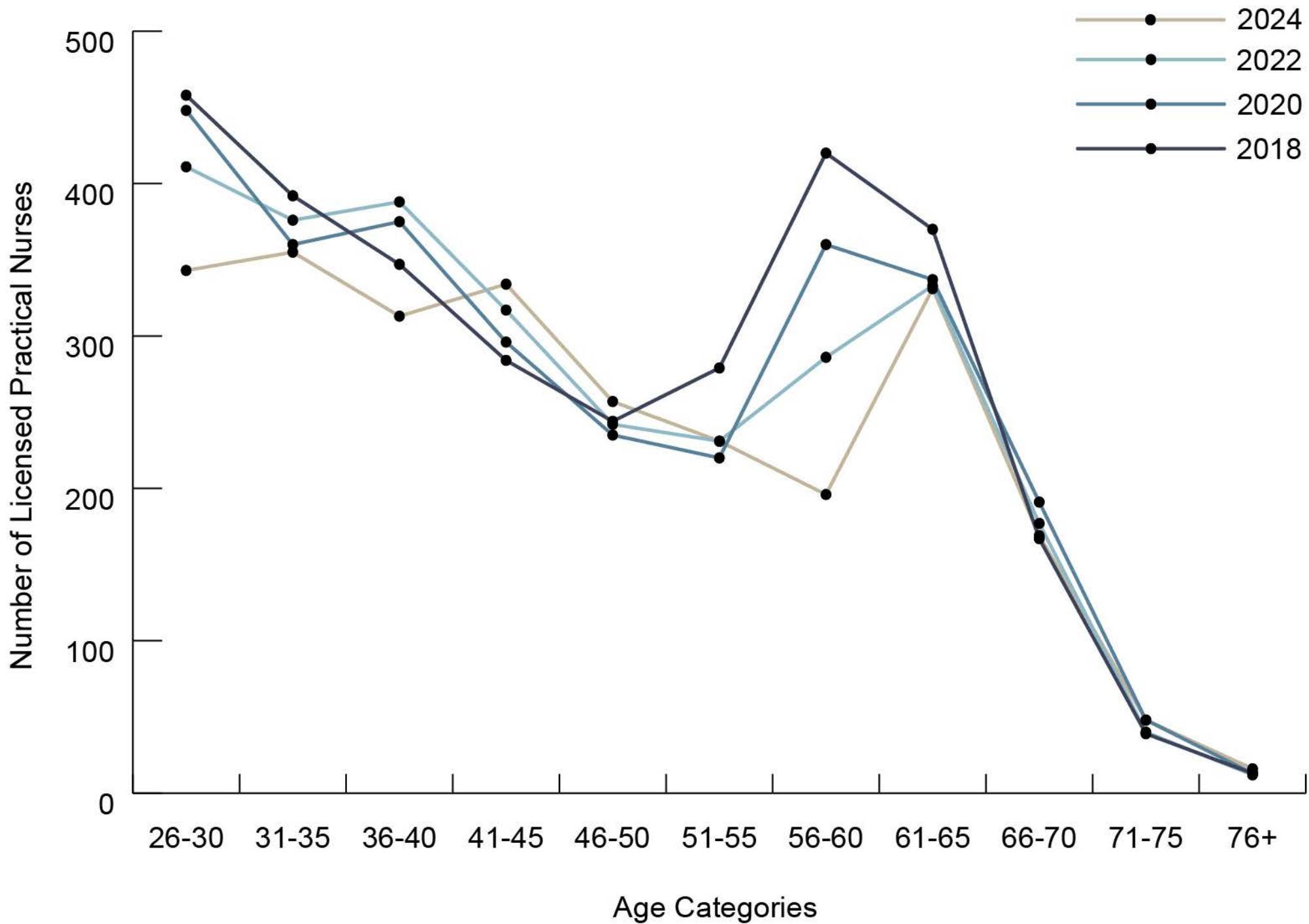


Figure 8.11. Number of North Dakota licensed practical nurses (LPNs) in each age category by year, 2018-2024.¹

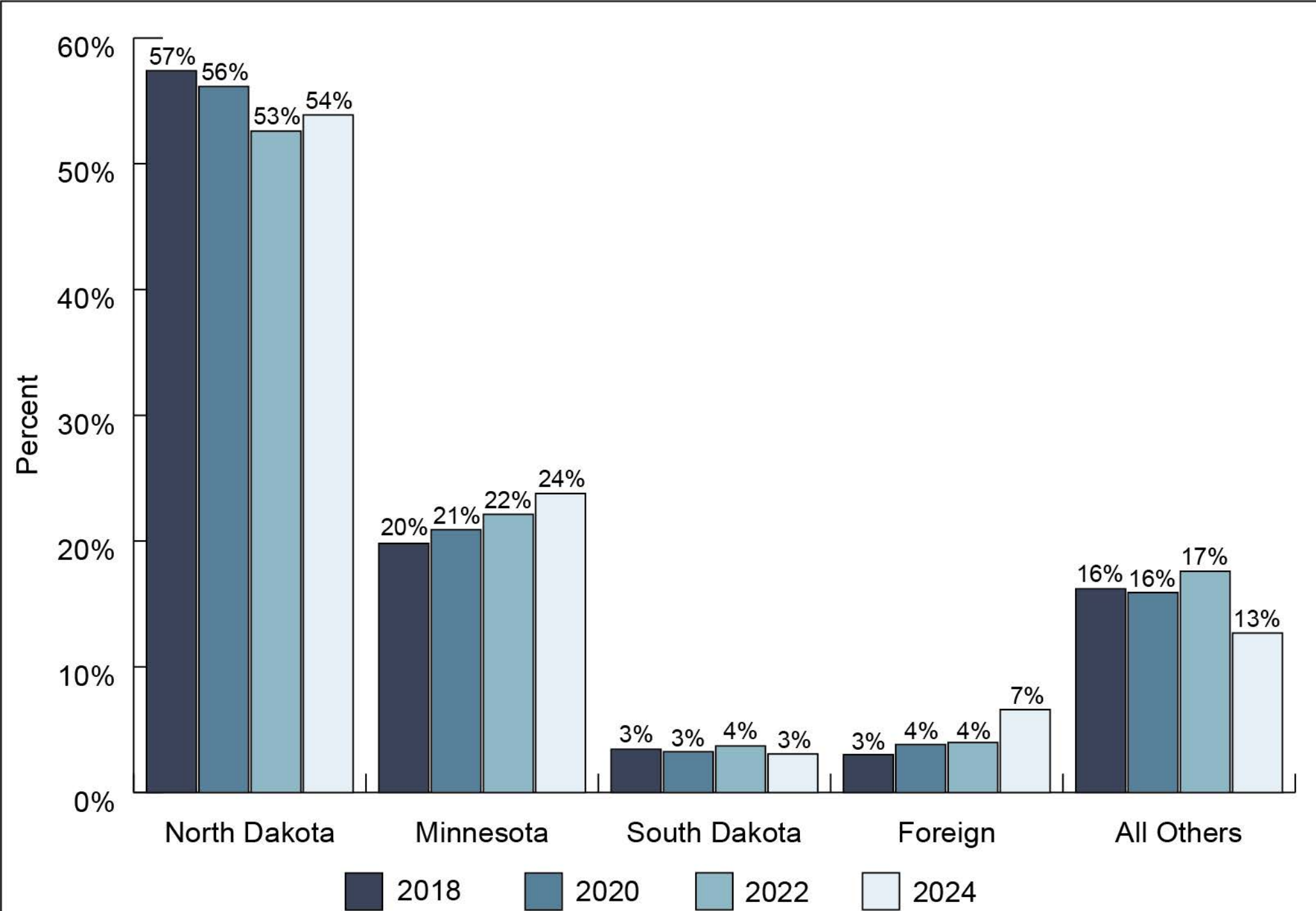


Figure 8.12. North Dakota registered nurses' (RNs') education by state and year, 2018-2024.²

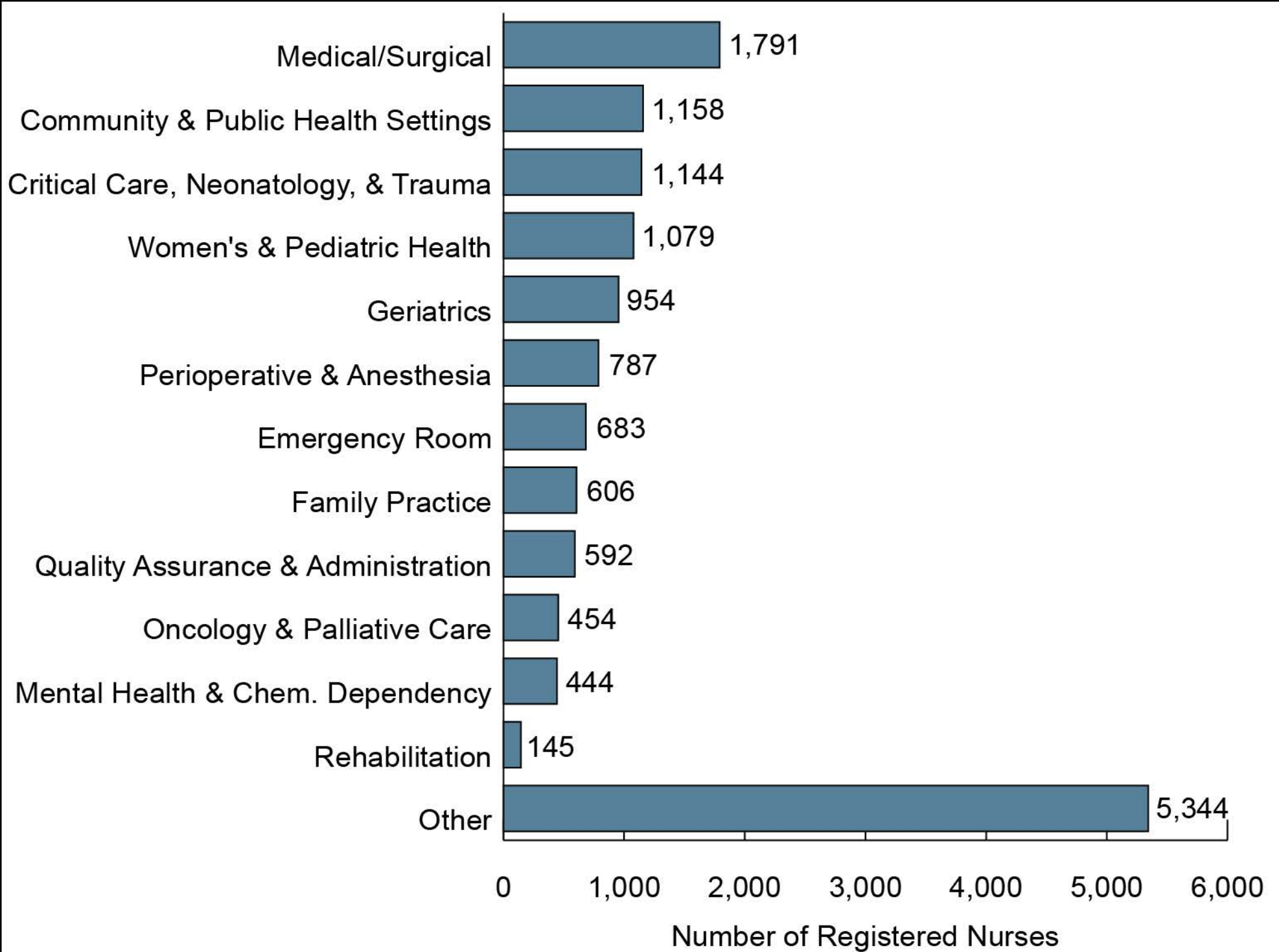


Figure 8.13. Registered nurses' (RNs') current practice area, 2024.¹

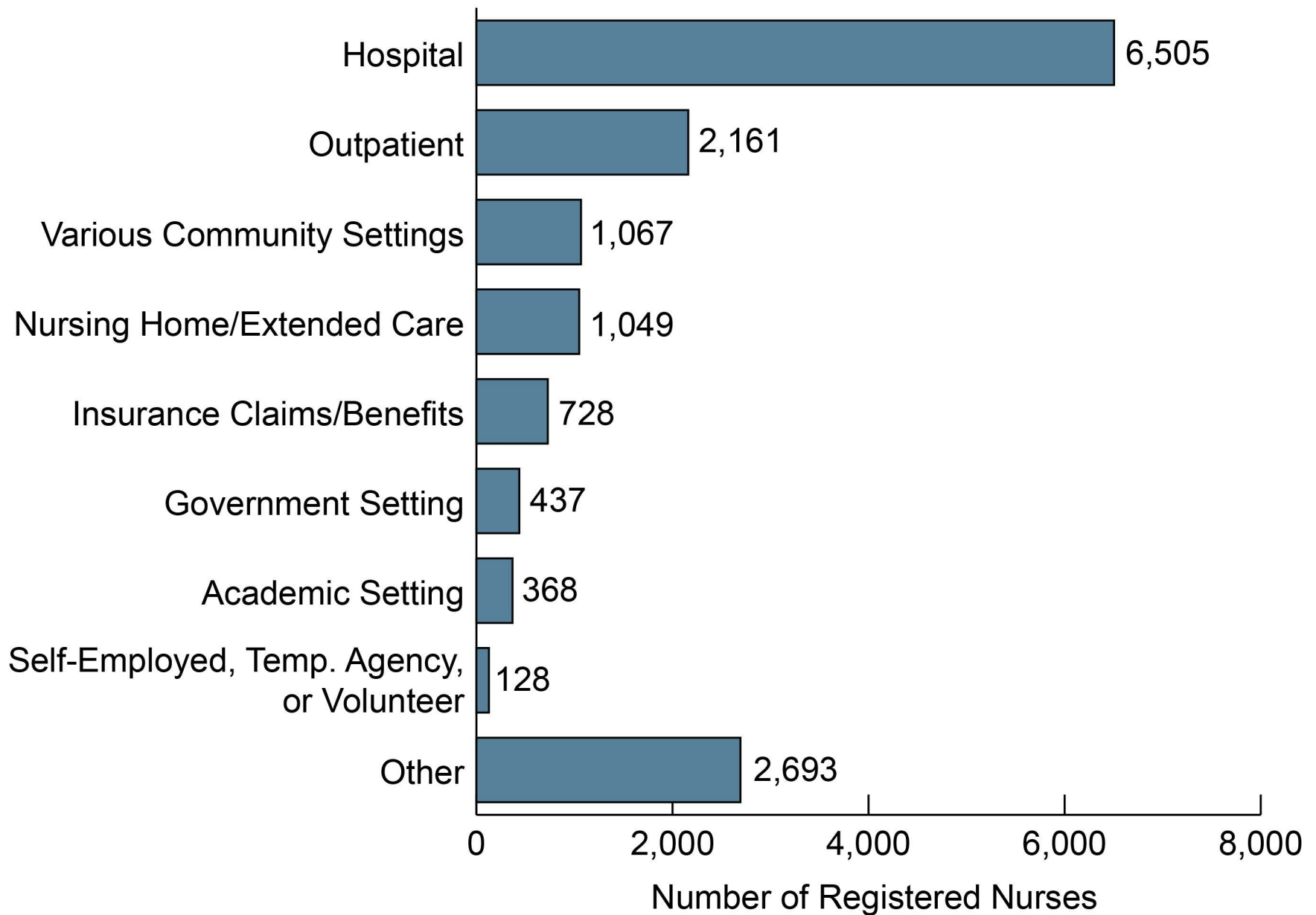


Figure 8.14. Registered nurses' (RNs') employment settings, 2024.¹ Hospital; Outpatient: ambulatory care and physicians office; Various Community Settings: church, home health, occupational health, public/community health, school health, and social services; Nursing Home/Extended Care; Insurance Claims/Benefits; Government Setting: correctional facility, government, military, and policy/planning/regulatory/licensing agency; Academic Setting: academic setting and nursing education; Self-Employed, Temp. Agency, or Volunteer; Other.

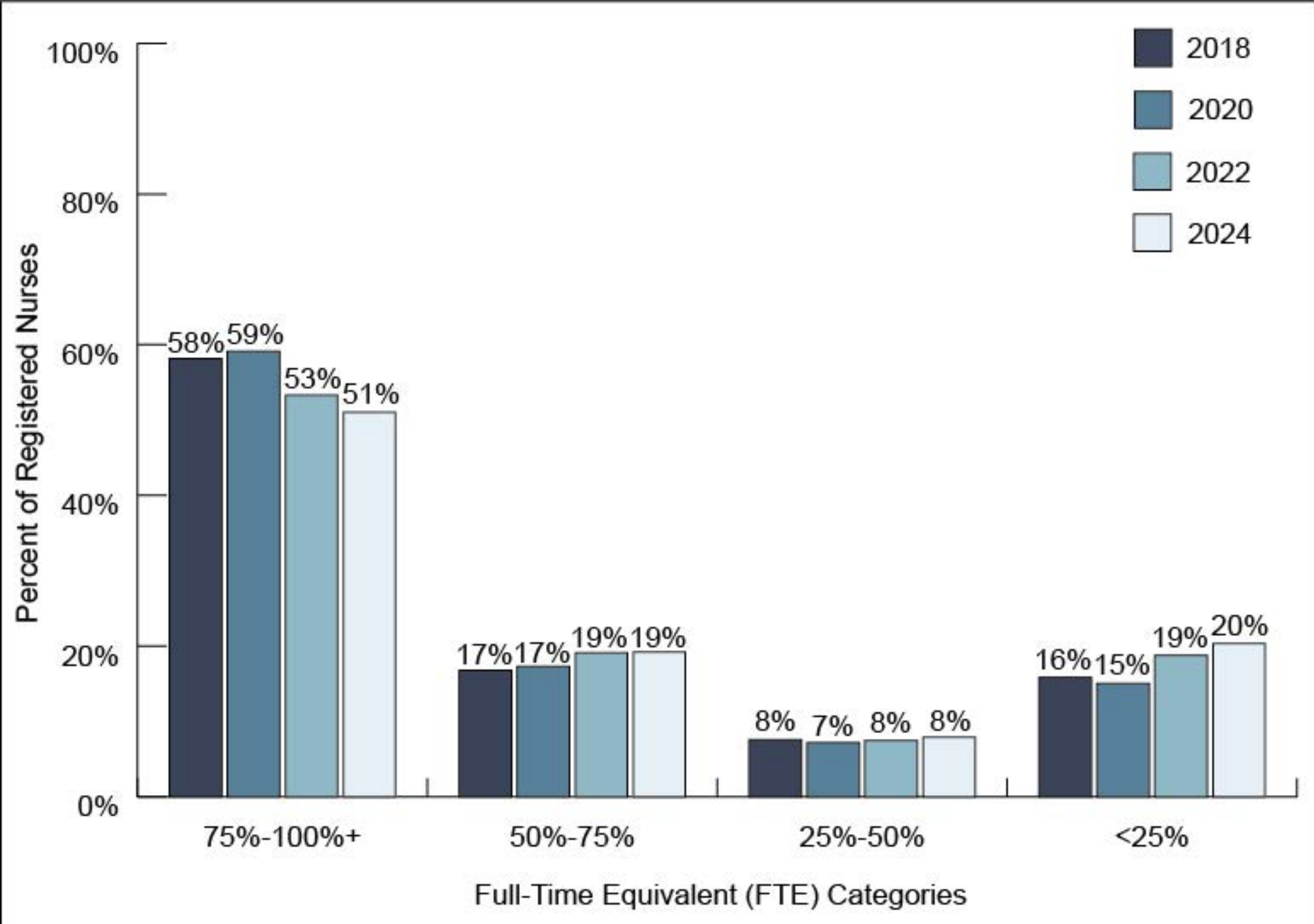


Figure 8.15. Percent of North Dakota registered nurses (RNs) by full-time equivalent (FTE) category and by year, 2018-2024.¹

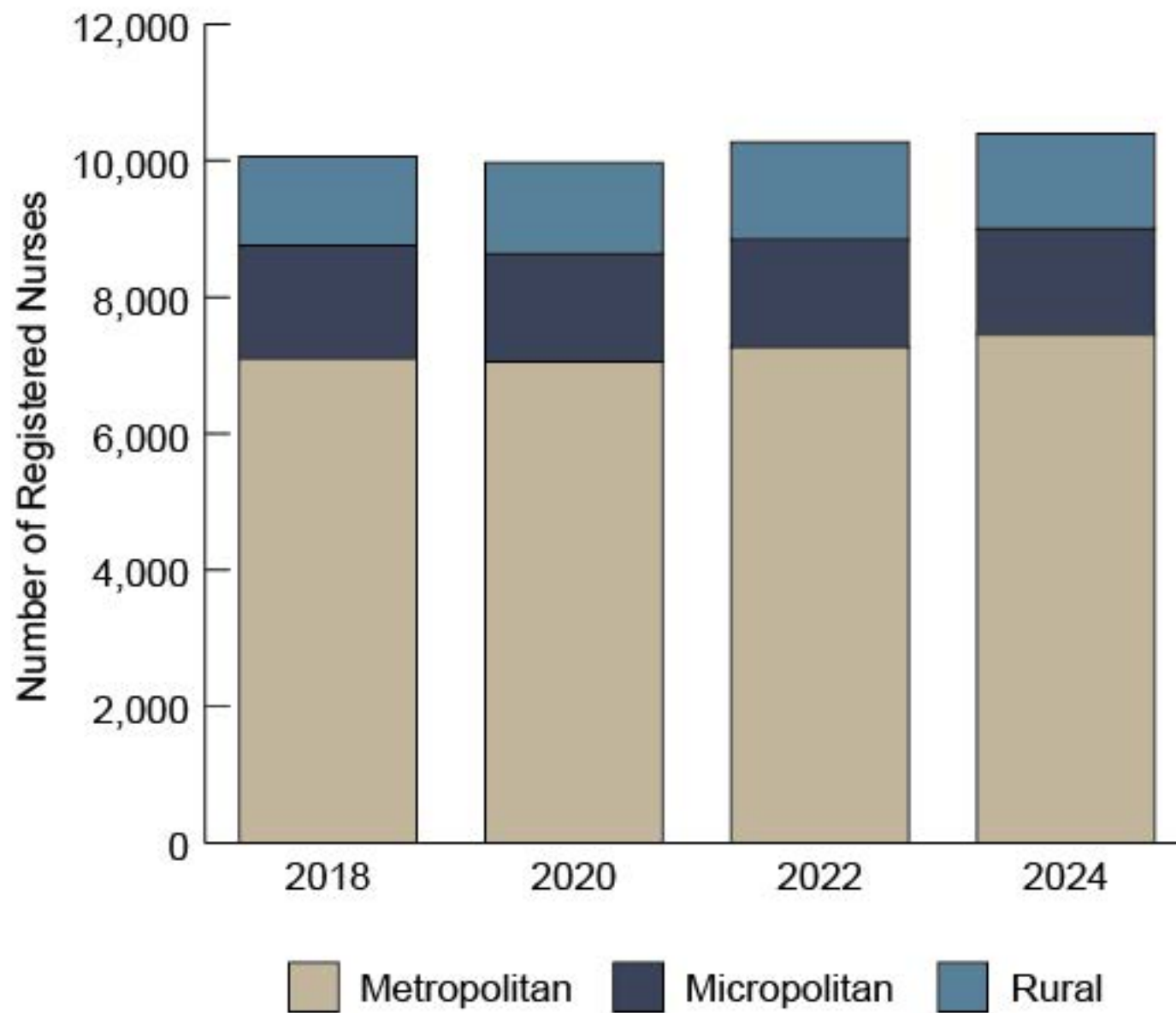


Figure 8.16. Number of registered nurses (RNs) in North Dakota by year and metropolitan-rural designation, 2018-2024.¹

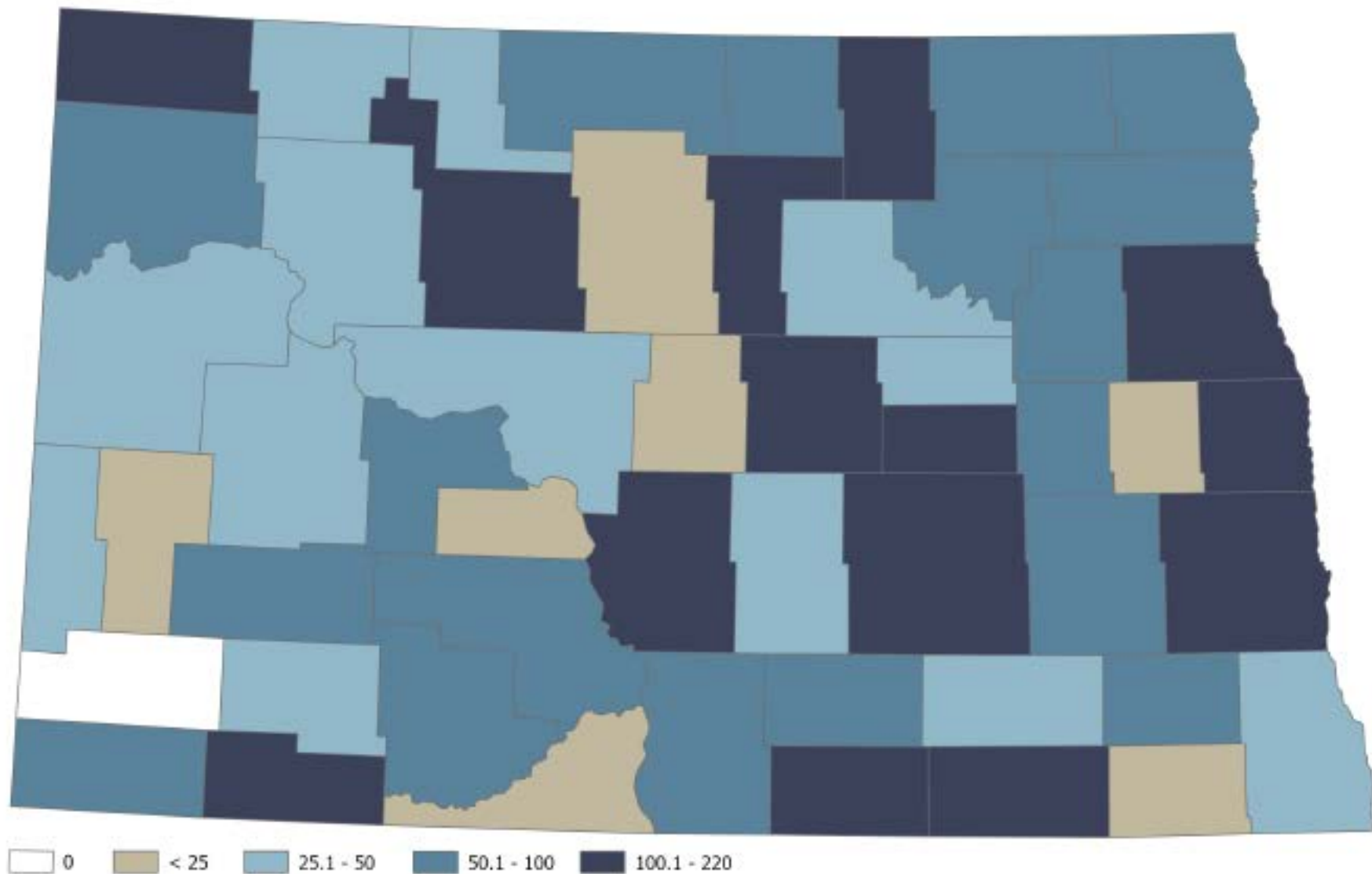


Figure 8.17. Rate of registered nurses (RNs) per 10,000 North Dakota residents, by county, 2024.¹

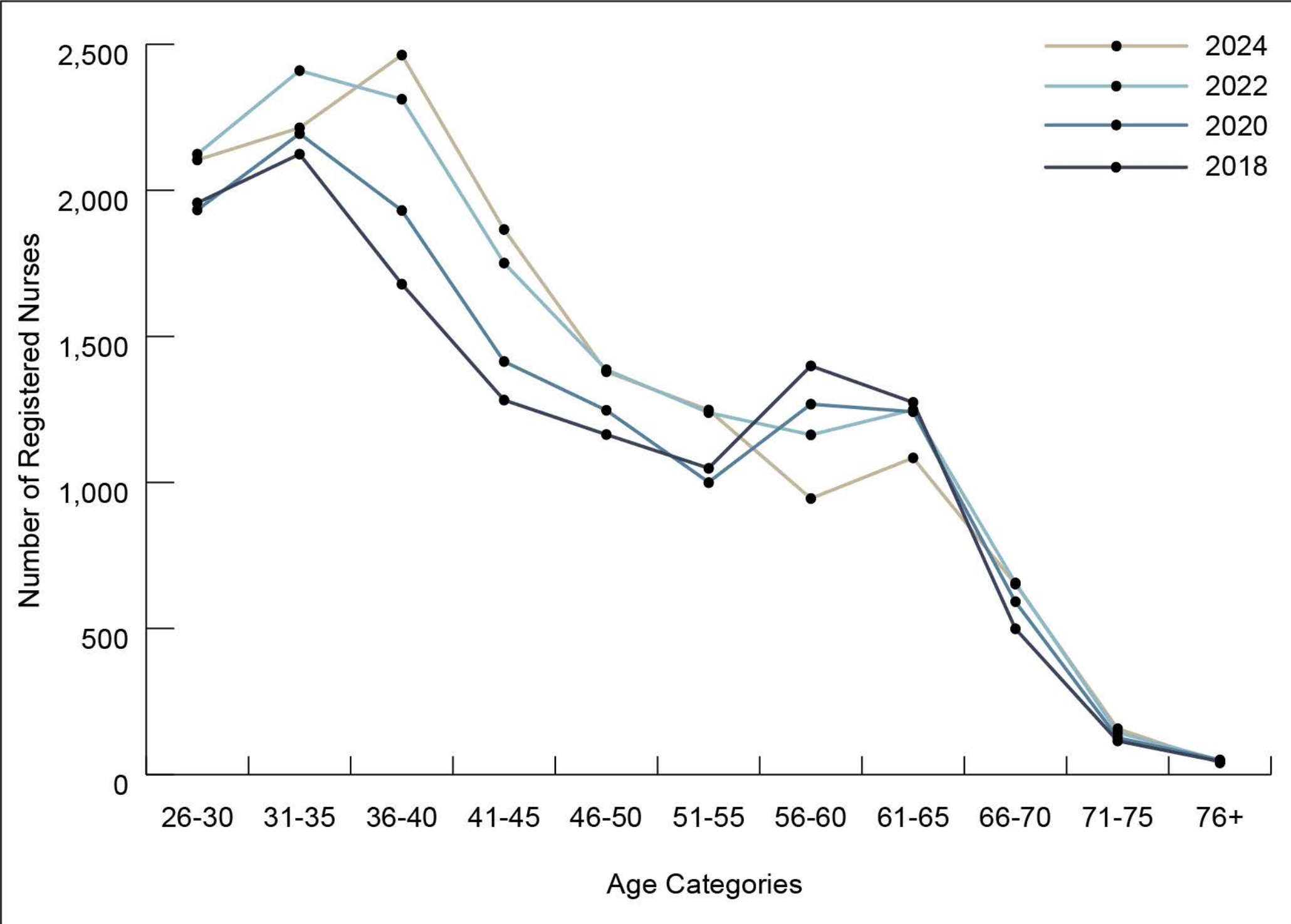


Figure 8.18. Number of North Dakota registered nurses (RNs) by age category and year, 2018-2024.¹

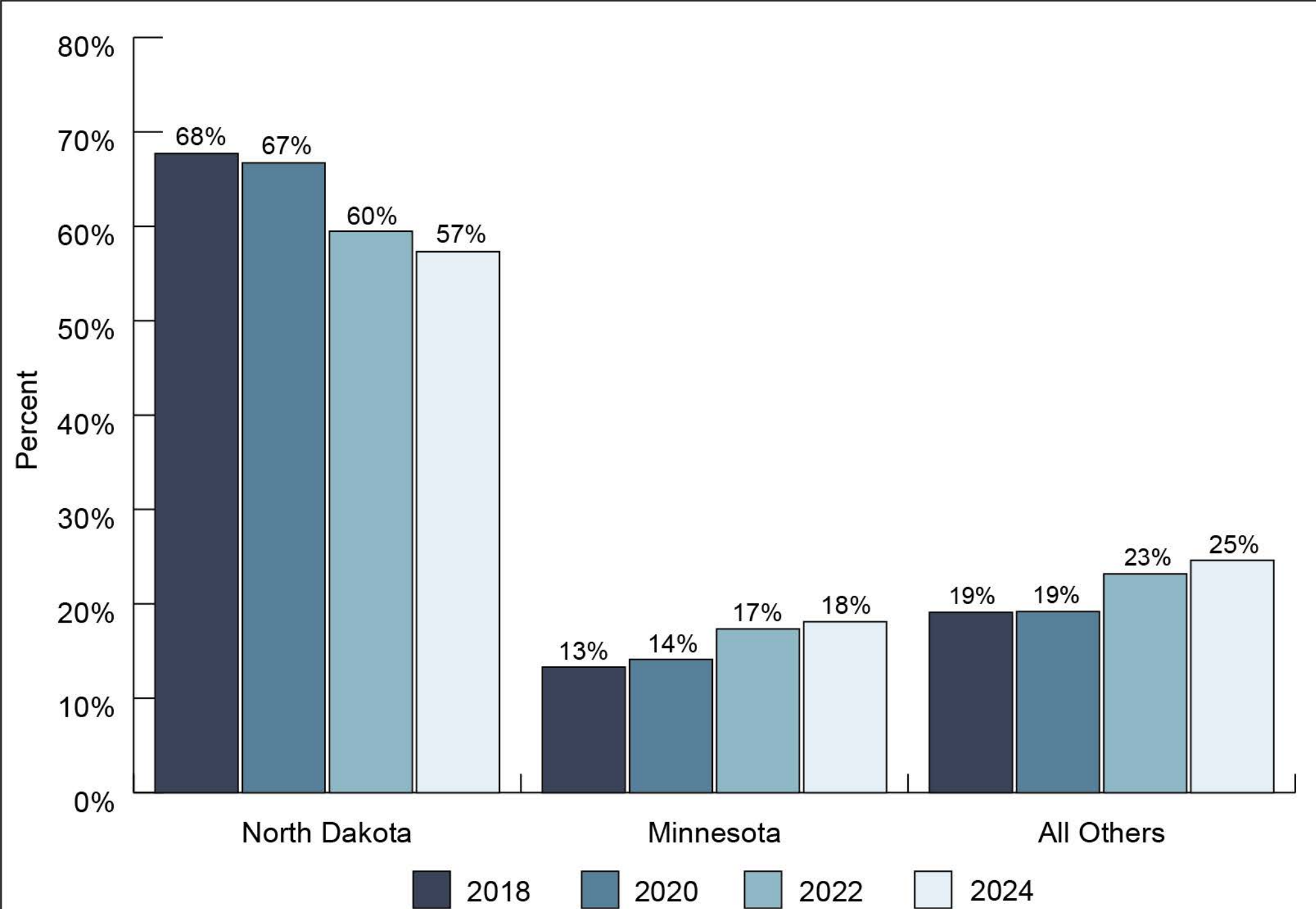


Figure 8.19. North Dakota nurse practitioners' (NPs) education state by year, 2018-2024.¹

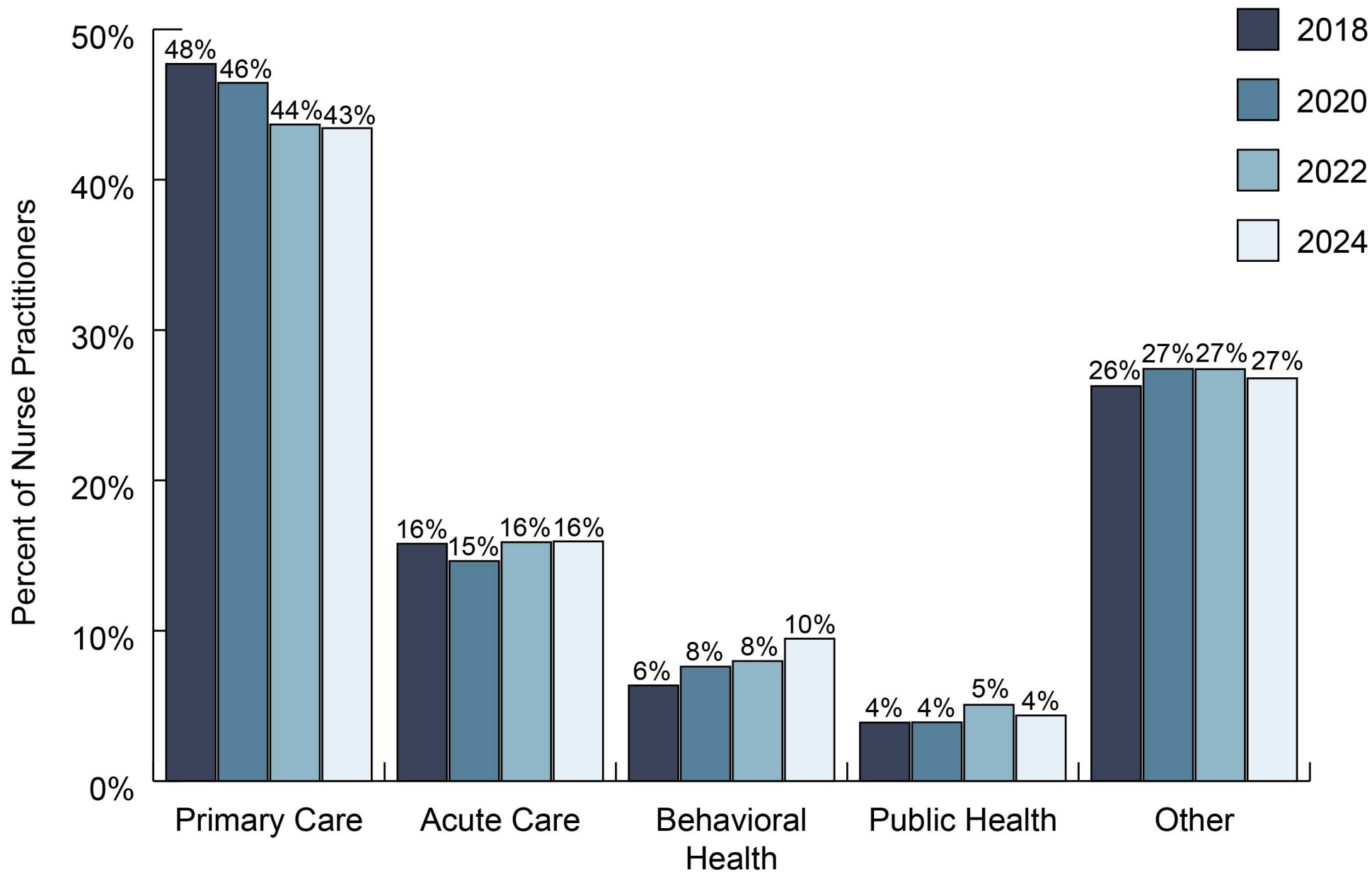


Figure 8.20. Nurse practitioners' (NPs) practice area by year, 2018-2024.² The categories include the following practice areas; Primary Care: family practice, geriatrics, maternal/child health, pediatrics, women's health; Acute Care: anesthesia, critical care, emergency, medical/surgical, neonatology, oncology, palliative care, perioperative, trauma; Behavioral Health: chemical dependency, mental health; Public Health: community, home health, nursing administration, occupational health, parish, public/community health, rehabilitation, school.

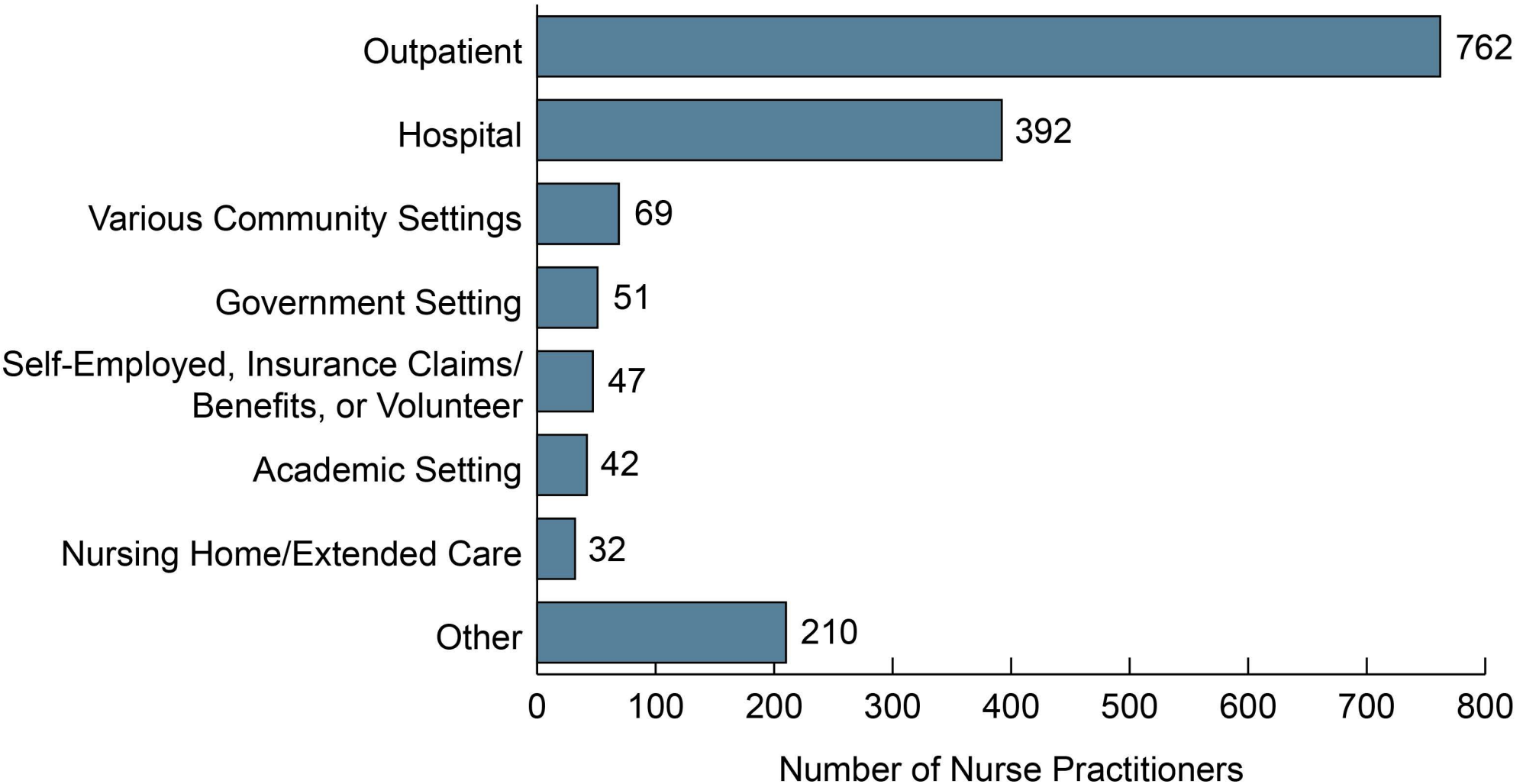


Figure 8.21. Nurse practitioners' (NPs) employment settings, 2024.¹ Outpatient: ambulatory care and physicians office; Hospital; Various Community Settings: church, home health, occupational health, public/community health, and school health; Government Setting: correctional facility, government, military, and policy/planning/regulatory/licensing agency; Self-Employed, Insurance Claims/Benefits, or Volunteer; Academic Setting: academic setting and nursing education; Nursing Home/Extended Care; Other.

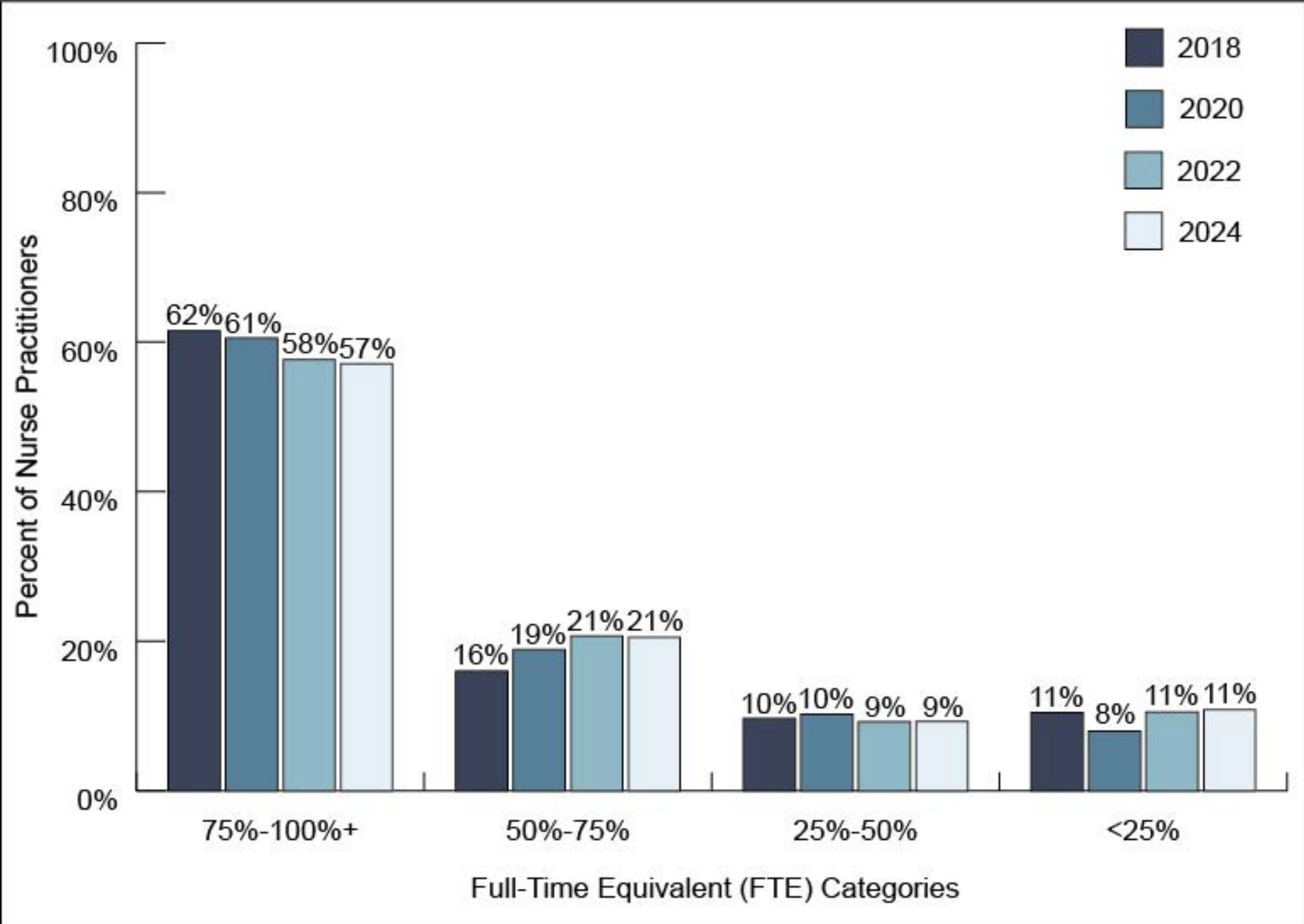


Figure 8.22. Percent of North Dakota nurse practitioners (NPs) by full-time equivalent (FTE) category and by year, 2018-2024.¹

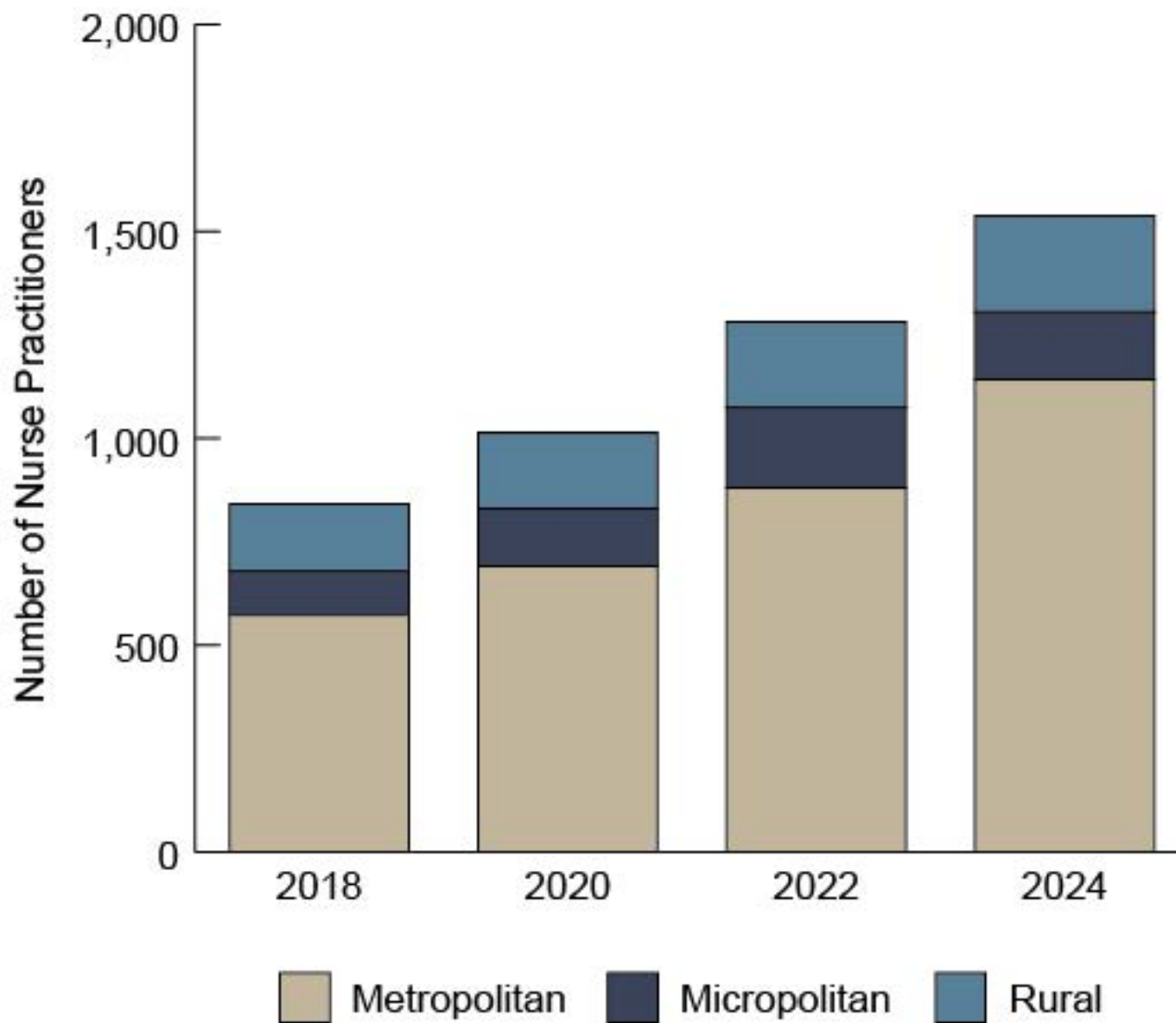


Figure 8.23. Number of nurse practitioners (NPs) in North Dakota by year and metropolitan-rural designation, 2018-2024.¹

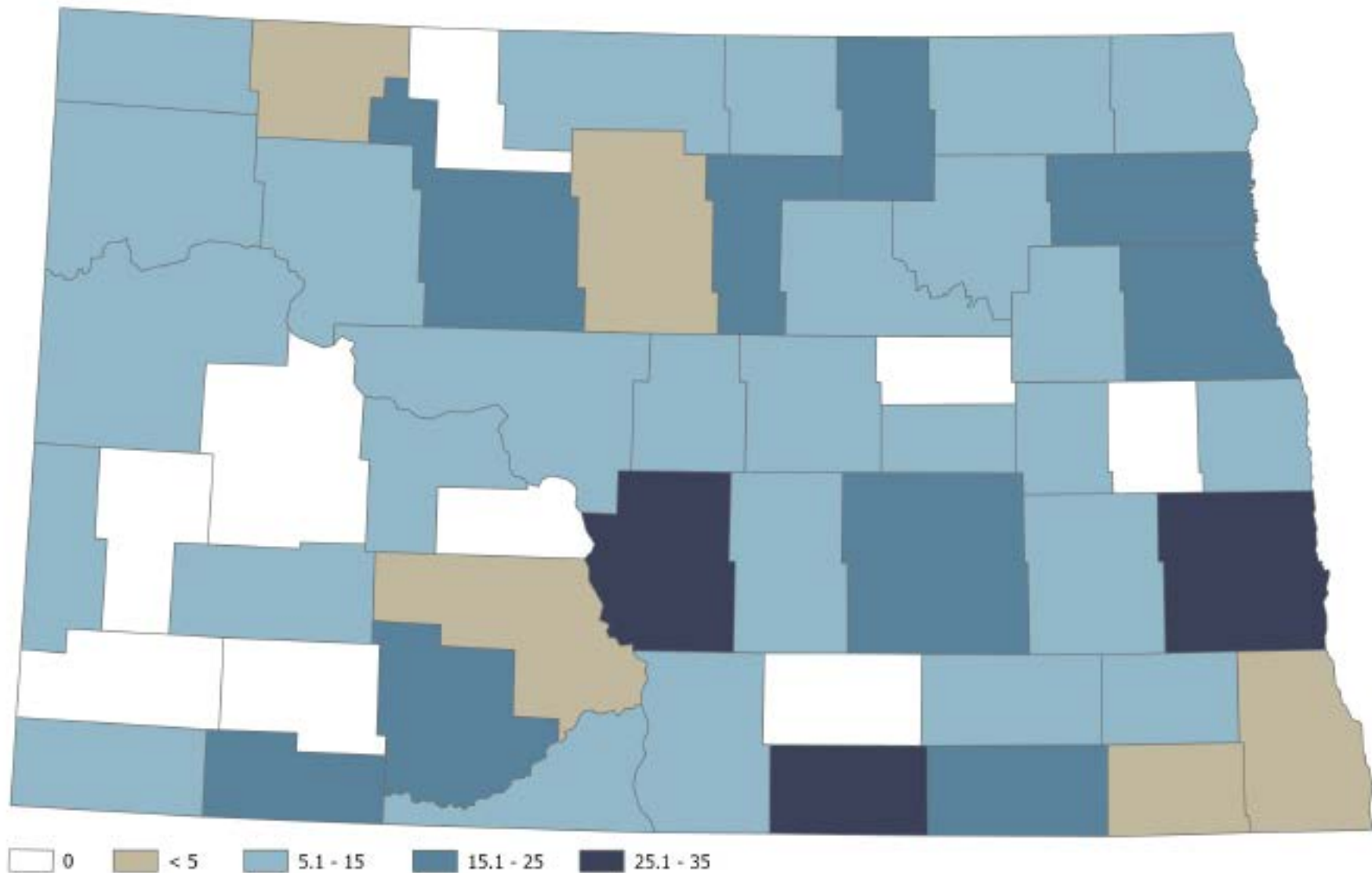


Figure 8.24. Rate of nurse practitioners (NPs) per 10,000 North Dakota residents, by county, 2024.¹

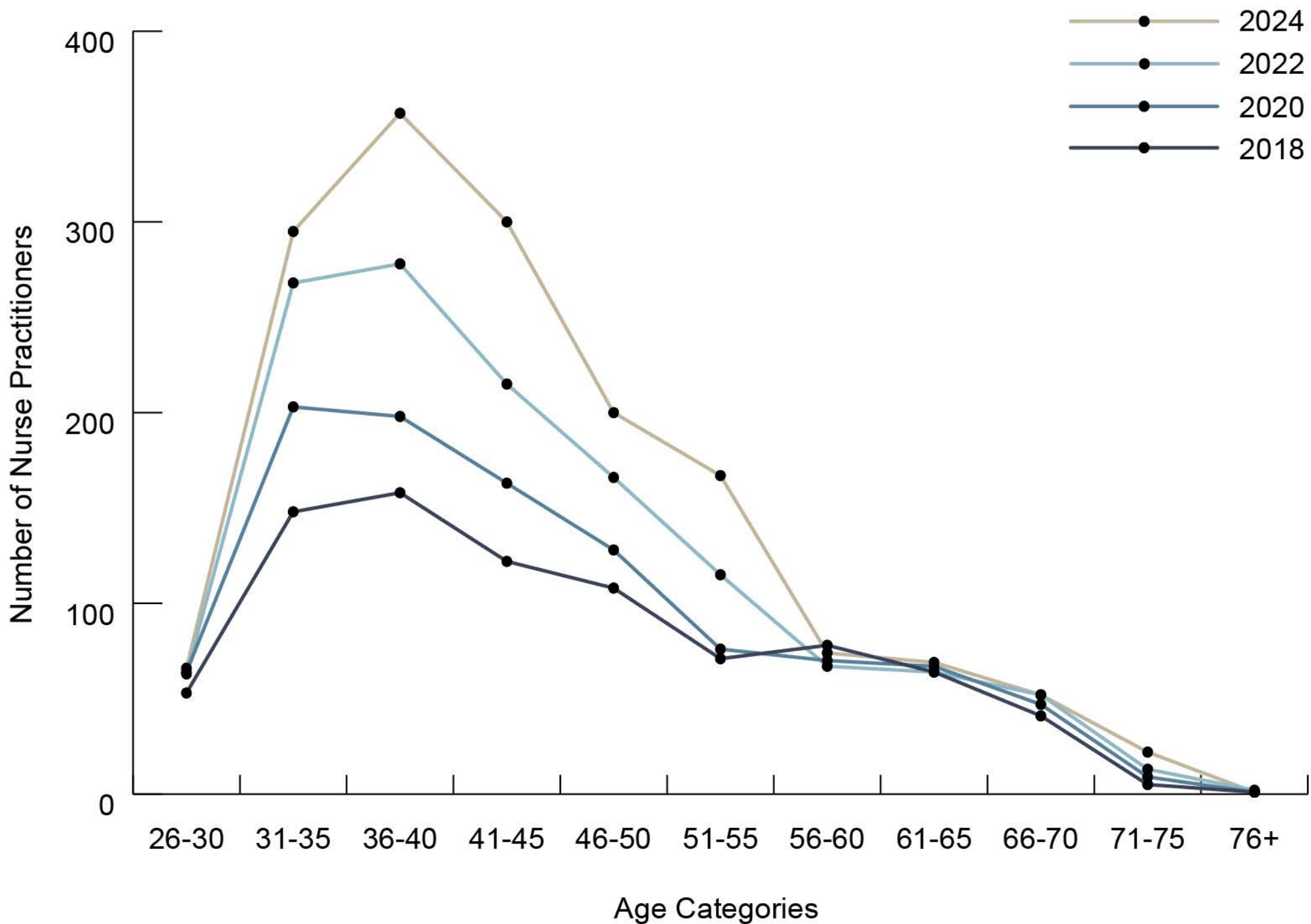


Figure 8.25. Number of North Dakota nurse practitioners (NPs) in each age category by year, 2018-2024.¹

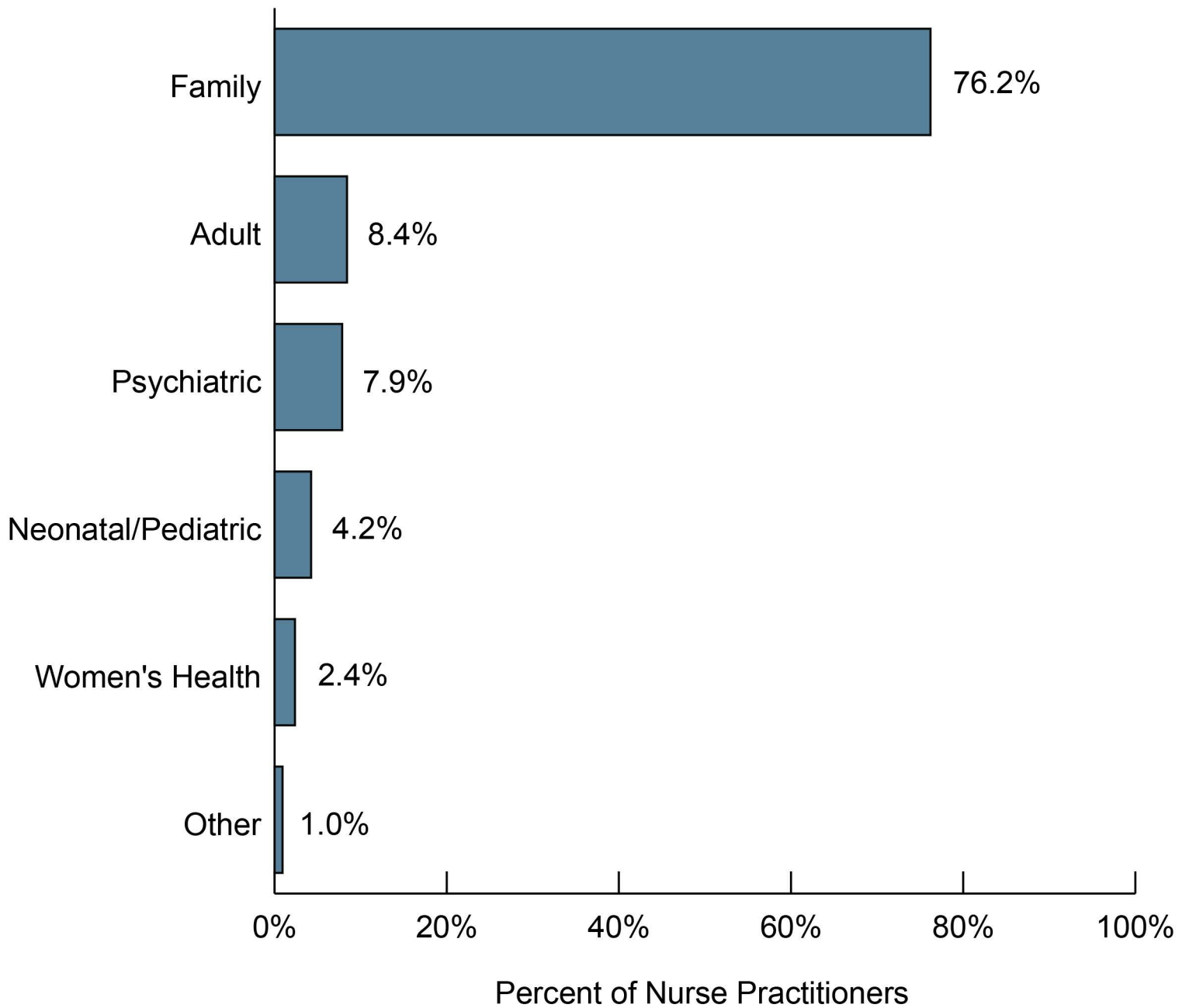


Figure 8.26. Nurse practitioners' (NPs) certification types, 2024.¹

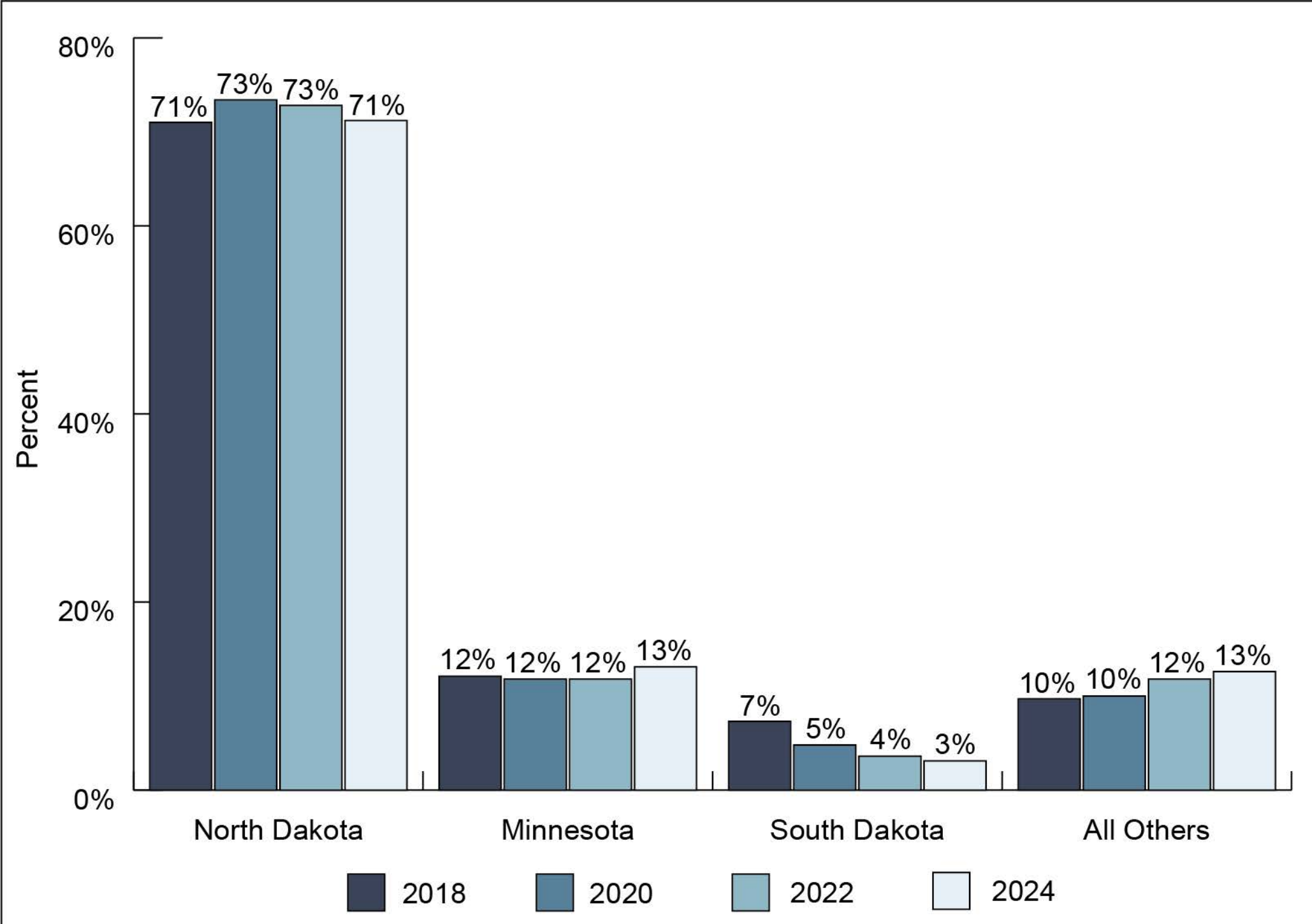


Figure 8.27. North Dakota certified registered nurse anesthetists' (CRNAs) education state by year, 2018-2024.²

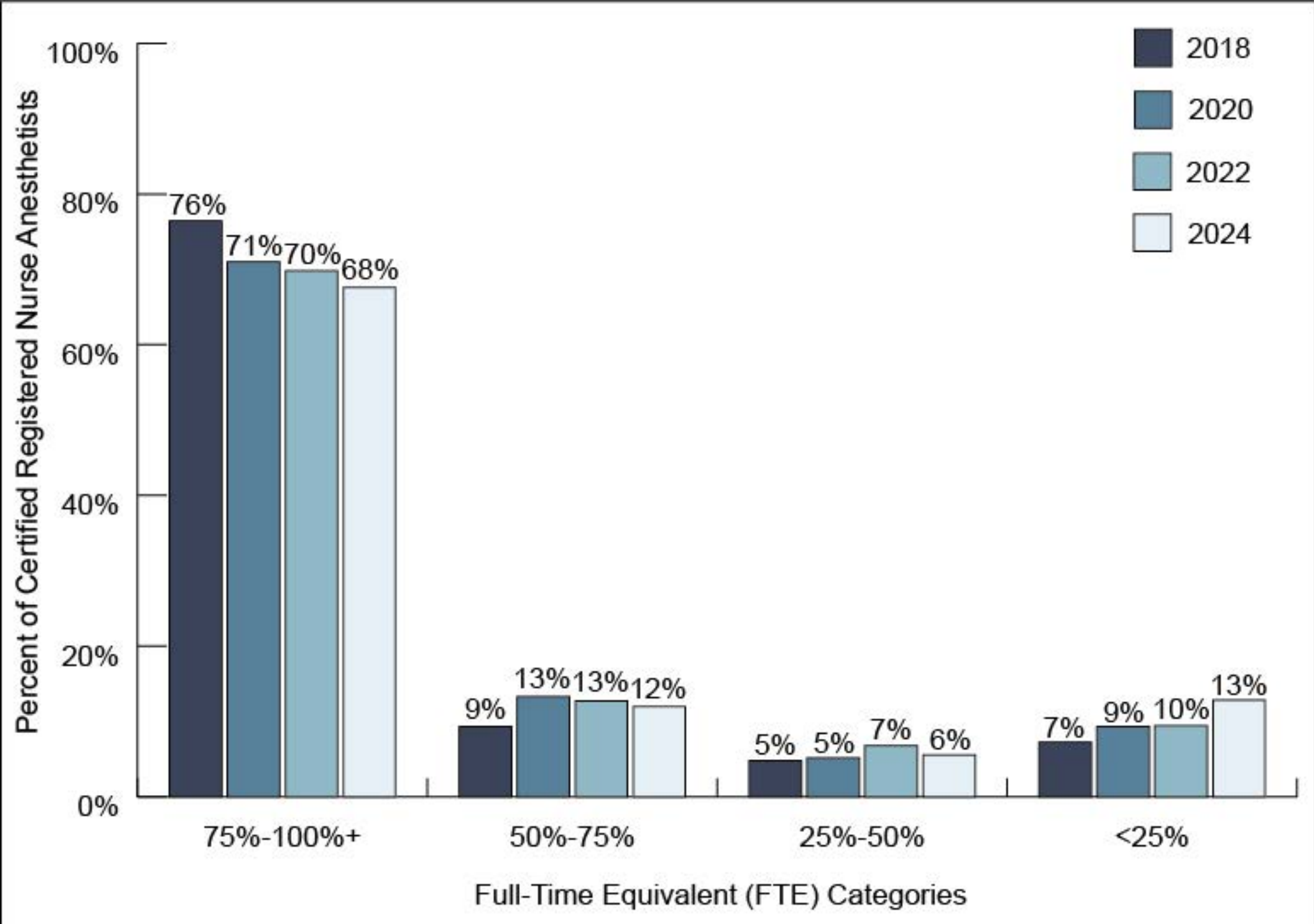


Figure 8.28. Percent of North Dakota certified registered nurse anesthetists (CRNAs) by full-time equivalent (FTE) category and by year, 2018-2024.¹

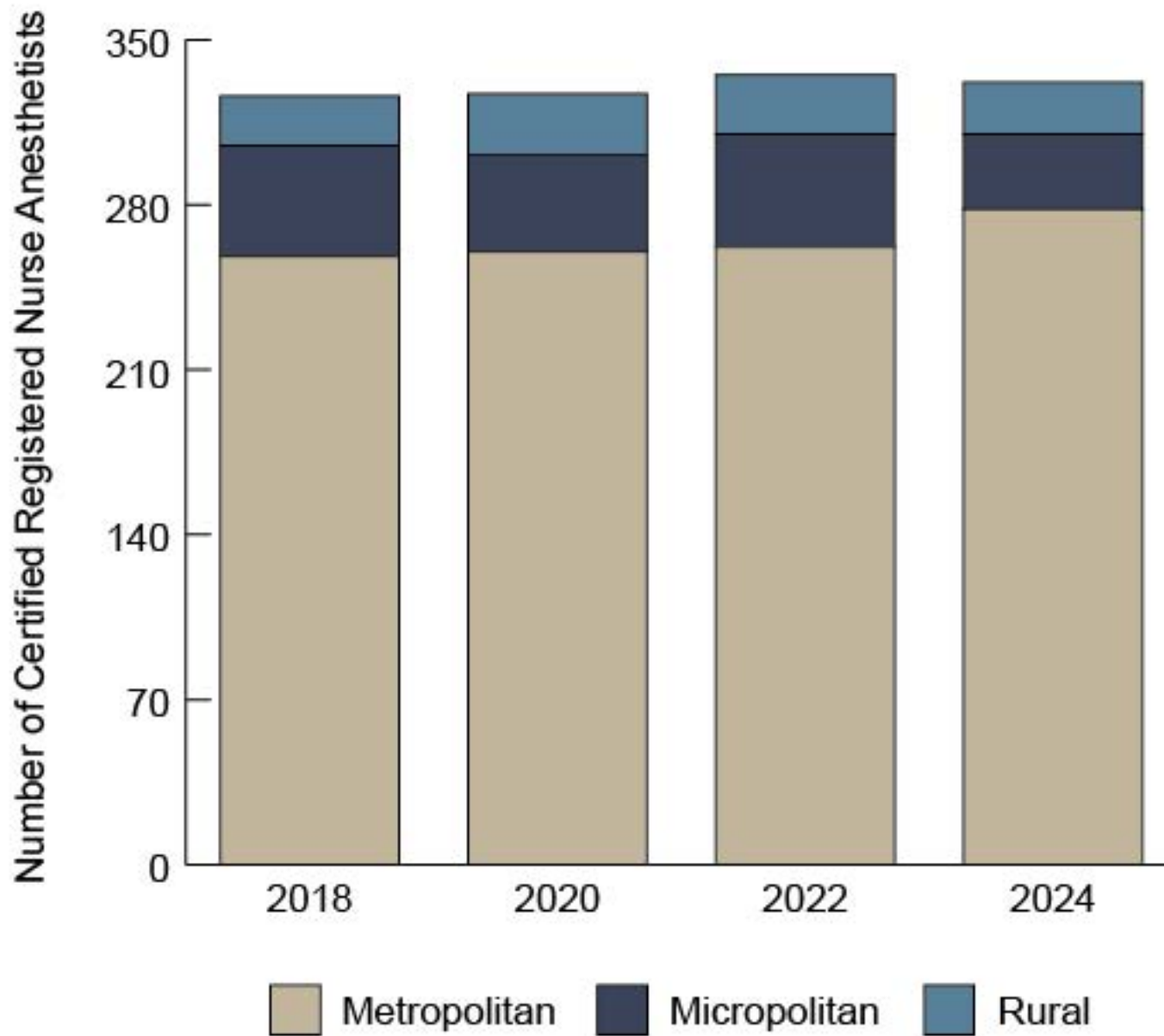


Figure 8.29. Number of certified registered nurse anesthetists (CRNAs) in North Dakota by year and metropolitan-rural designation, 2018-2024.¹

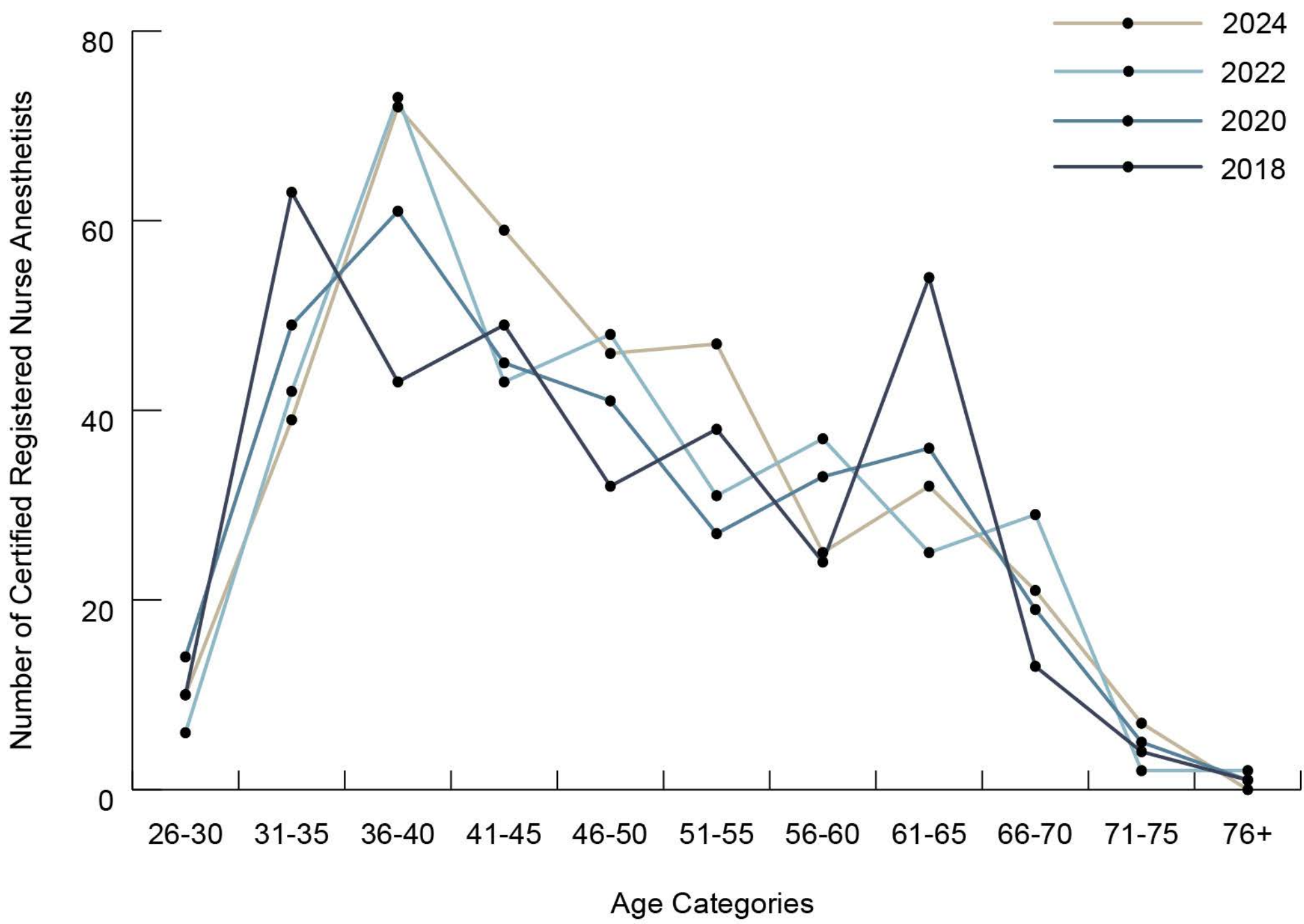


Figure 8.30. Number of North Dakota certified registered nurse anesthetists (CRNAs) in each age category by year, 2018-2024.¹

Table 8.1***State of employer and state of residence for nurses licensed in North Dakota, 2024.¹***

License Type	Employer in North Dakota						Employer Outside of North Dakota*		Total
	State of Residence								
	ND		MN, SD, or MT		Other State		N	%	N
	N	%	N	%	N	%			
NP	1,092	68.0%	119	7.4%	4	0.2%	390	24.3%	1,605
CRNA	271	75.7%	26	7.3%	-	0.0%	61	17.0%	358
CNS	22	73.3%	3	10.0%	1	3.3%	4	13.3%	30
CNM	17	58.6%	5	17.2%	-	0.0%	7	24.1%	29
RN	9,139	60.0%	1,255	8.2%	35	0.2%	4,790	31.5%	15,219
LPN	1,939	67.9%	219	7.7%	2	0.1%	695	24.3%	2,855
Total	12,480	62.1%	1,627	8.1%	42	0.2%	5,947	29.6%	20,096

*This includes 1,793 with an employer in MN, SD, or MT, 2,507 with an employer in another state, and 1,640 with no defined employer state.

Table 8.2***North Dakota's practical nurse program 6 year trends, 2016-2023.³***

Practical Nursing Program Trends	FY 2016-2017	FY 2017-2018	FY 2018-2019	FY 2019-2020	FY 2020-2021	FY 2021-2022	FY 2022-2023
Program Admissions	275	300	305	295	312	243	277
Total Enrollment	379	419	417	396	393	381	300
Graduate Certificate Program Graduates	92	132	138	128	155	135	129
Associate Degree Program Graduates	55	93	61	76	70	56	31
Total Graduates	147	225	199	204	225	191	160

Information provided is from the '18-'19, '19-'20, '20-'21, '21-'22, & '22-'23 NDBON Nursing Education Annual Reports

Table 8.3***North Dakota's registered nurse program 6 year trends, 2016-2023.³***

Registered Nurse Program Trends	FY 2016-2017	FY 2017-2018	FY 2018-2019	FY 2019-2020	FY 2020-2021	FY 2021-2022	FY 2022-2023
Associate Degree Program Admissions	122	161	157	176	207	187	204
Baccalaureate Degree Program Admissions	639	612	706	671	643	475	223
Total Enrollment	1,584	1,514	1,830	1,797	1,758	1,755	1,474
Associate Degree Program Graduates	103	119	151	143	188	165	165
Baccalaureate Program Graduates*	488	553	570	563	730	495	480
Total Graduates	591	672	721	706	751	660	645

Information provided is from the '18-'19, '19-'20, '20-'21, '21-'22, & '22-'23 NDBON Nursing Education Annual Reports
**Note total for each fiscal year includes Basic BSN, LPN to BSN, Diploma to BSN, and ADN to BSN.*

Table 8.4***Nurse practitioner (NP) graduates from North Dakota programs, 2018-2023.²***

University	Degree	Program	2018	2019	2020	2021	2022	2023
North Dakota State University	Doctor of Nursing Practice	Family Nurse Practitioner	16	15	13	15	19	19
University of Mary	Doctor of Nursing Practice	Family Nurse Practitioner	22	23	20	17	21	18
University of North Dakota	Master of Science	Family Nurse Practitioner	34	35	36	0*	77	84
		Adult-Geriatric Primary Care Nurse Practitioner	11	17	8	0*	24	18
		Psychiatric & Mental Health Nurse Practitioner	14	19	24	14	43	54
Total			97	109	101	46	184	193

*Curriculum was changed from FT/PT option to only PT = 1 yr with no grads.

CHAPTER NINE:

BEHAVIORAL AND OTHER NON-PHYSICIAN HEALTHCARE WORKFORCE

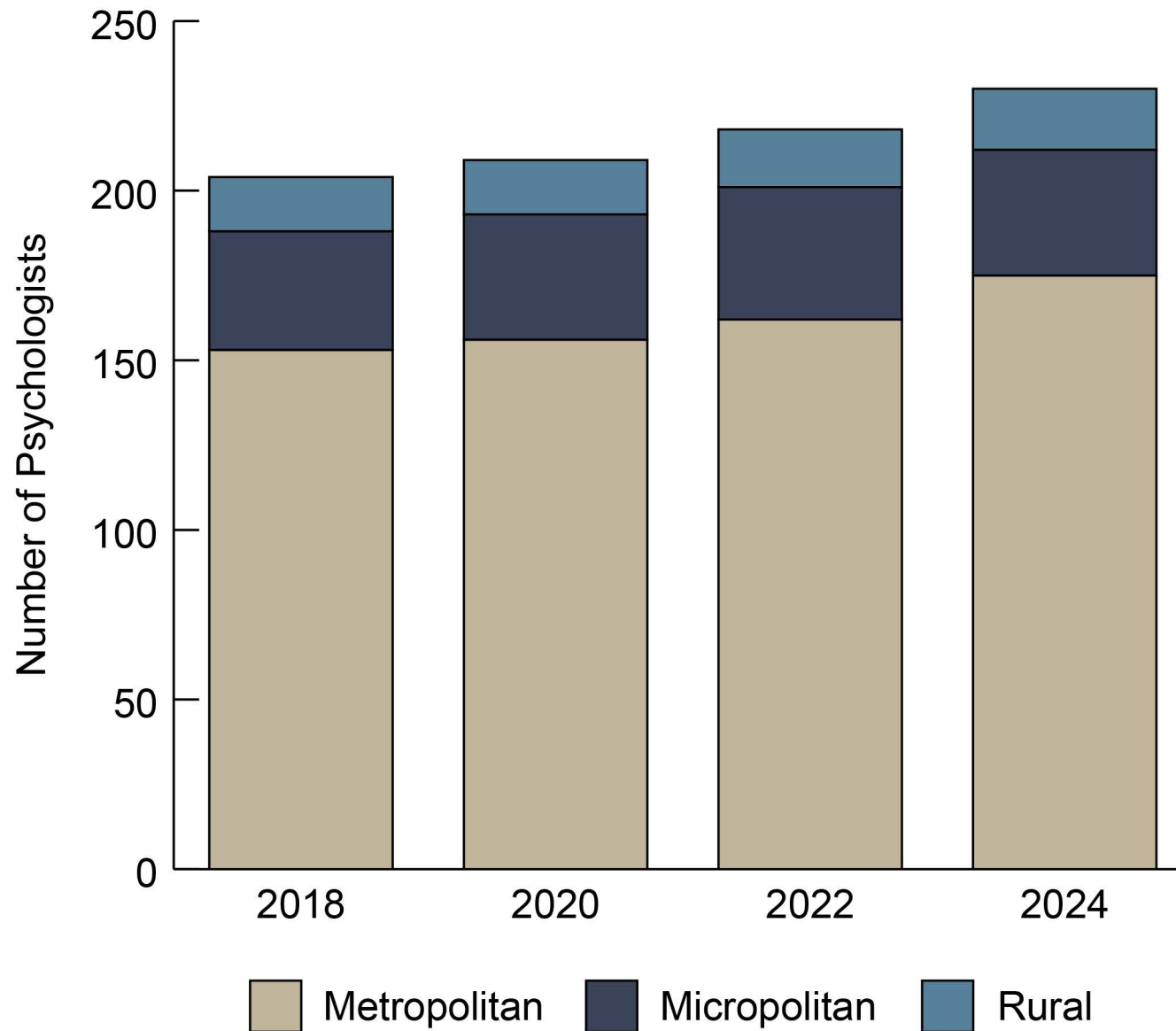


Figure 9.1. Number of psychologists in North Dakota by year and metropolitan-rural designation, 2018-2024.² Data used for this graphic represent those psychologists with a valid location in North Dakota.

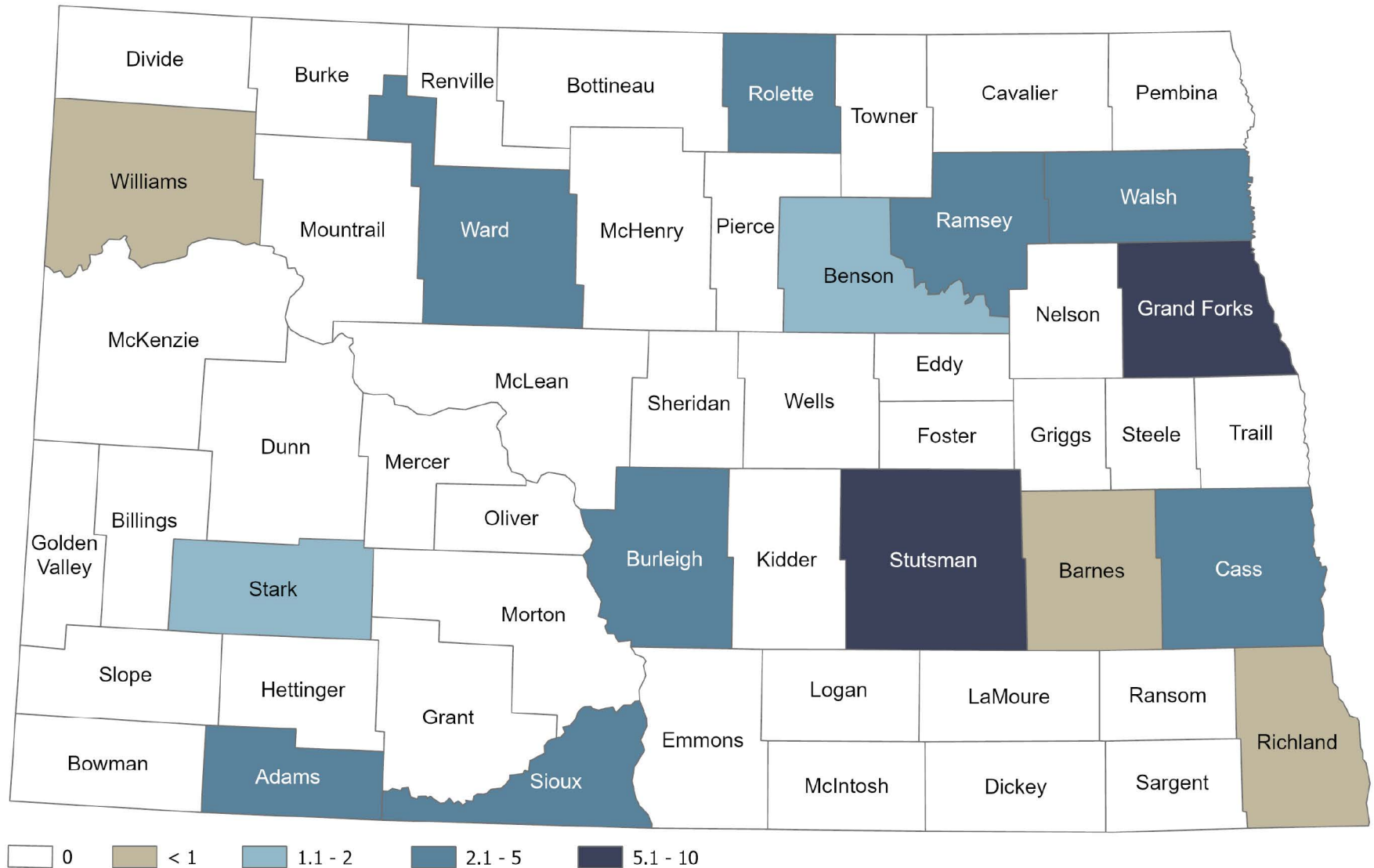
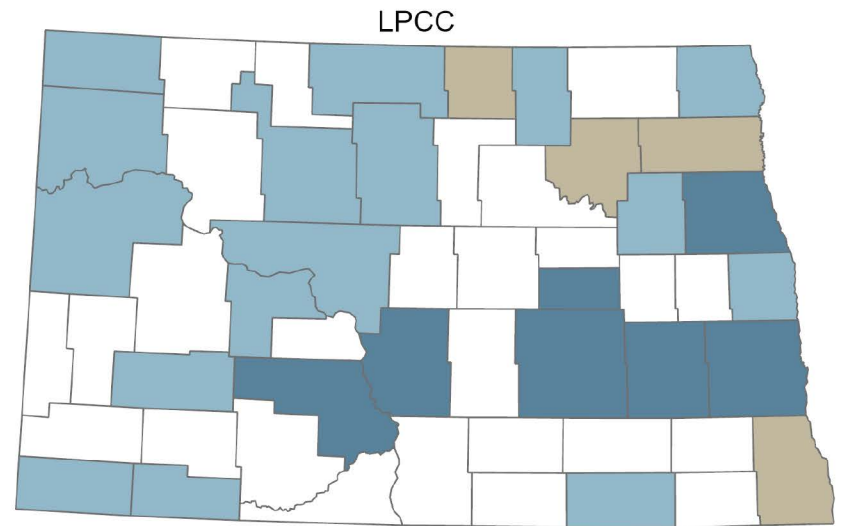
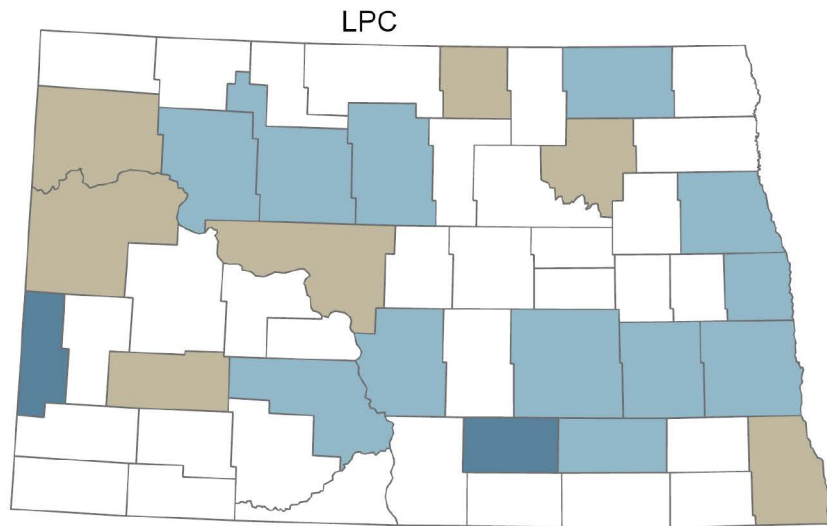
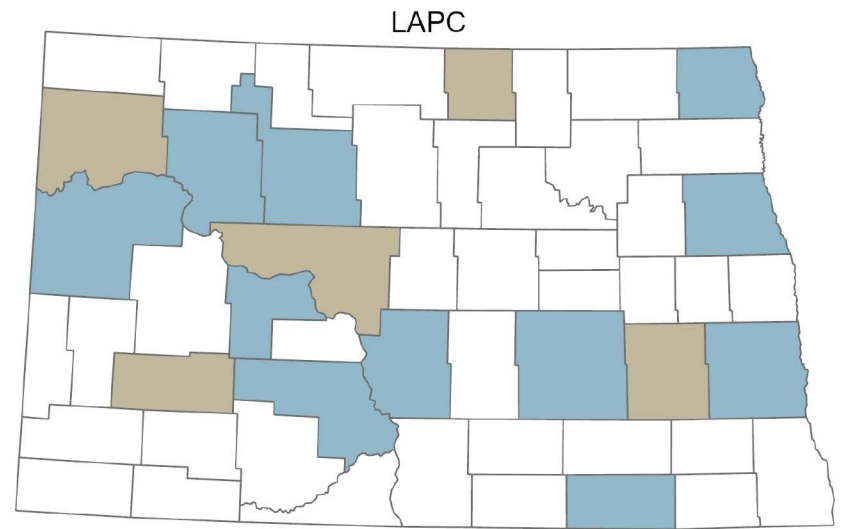
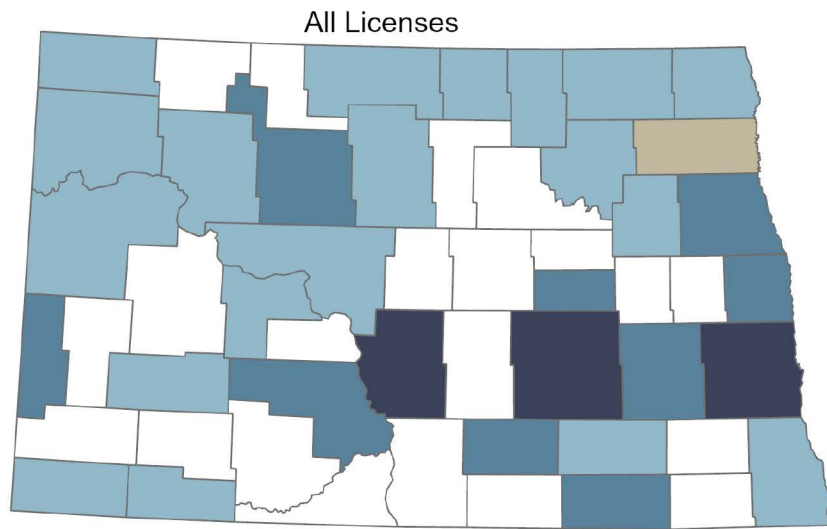


Figure 9.2. Rate of psychologists per 10,000 North Dakota residents, by county, 2024.²



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Figure 9.3. Rate of counselors per 10,000 North Dakota residents, by license type and by county, 2024.³

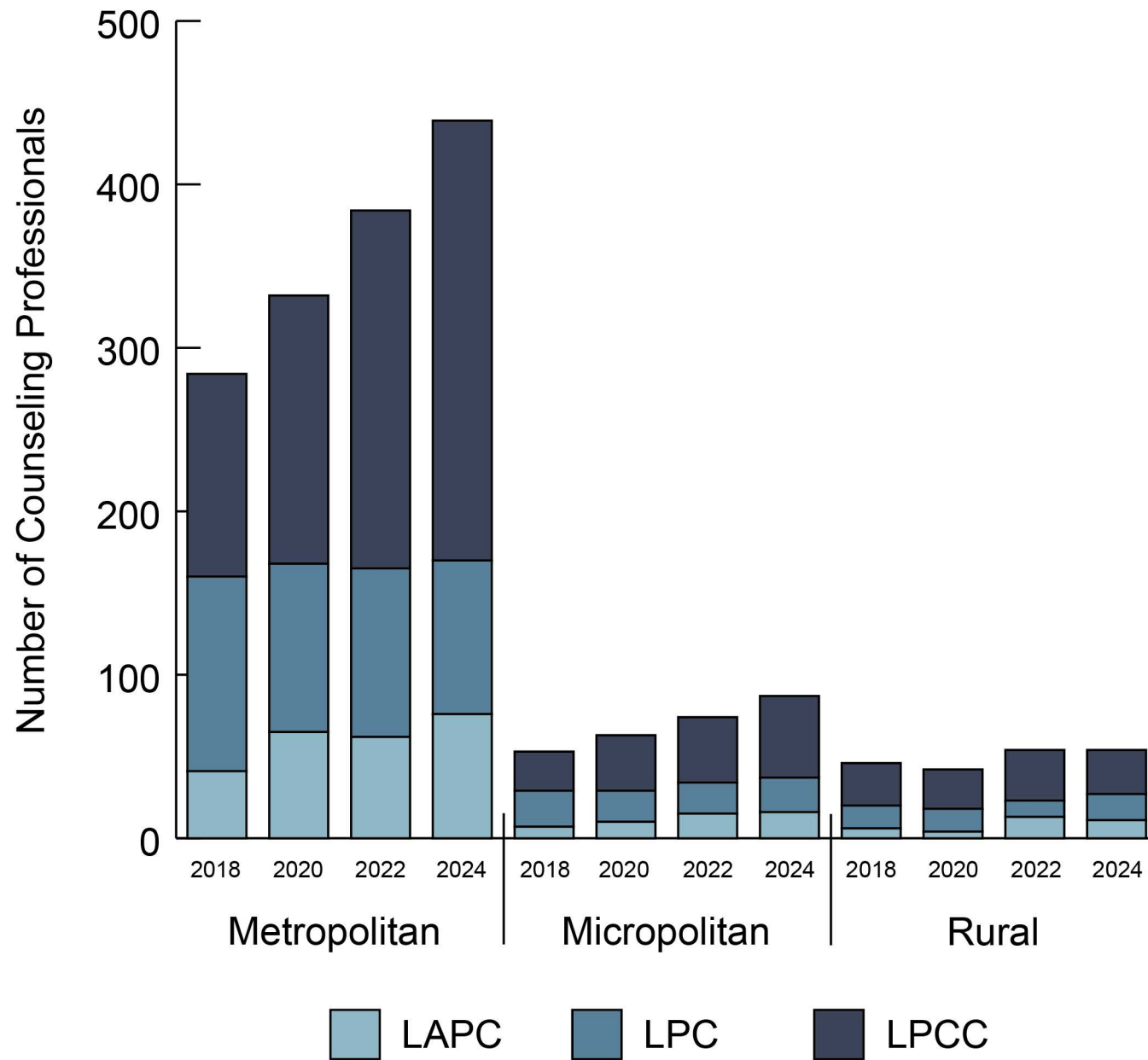


Figure 9.4. Number of counseling professionals in North Dakota by year and metropolitan-rural designation, 2018-2024.³ Data used for this graphic represent those counselors with a valid location in North Dakota.

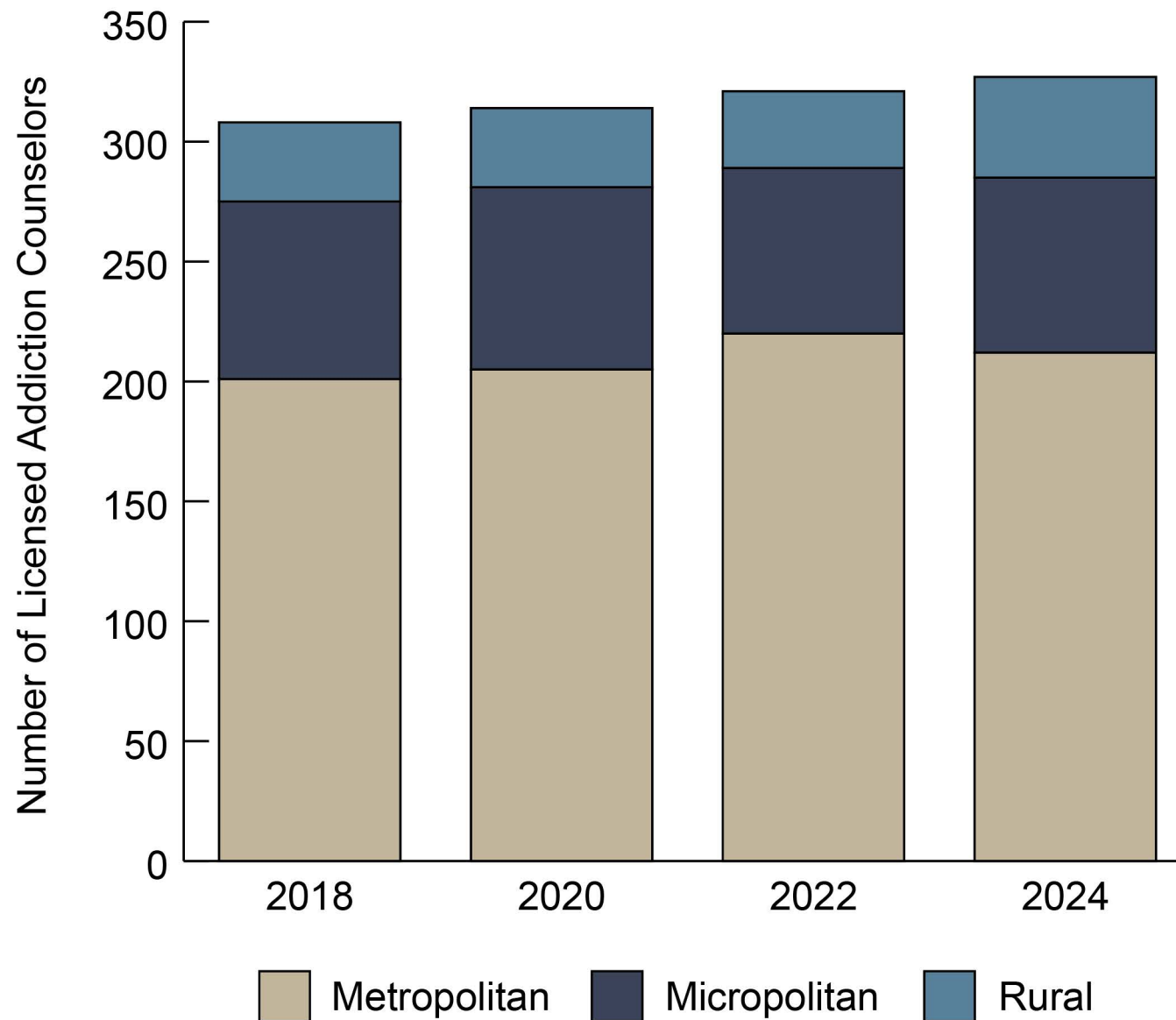


Figure 9.5. Number of licensed addiction counselors in North Dakota by year and metropolitan-rural designation, 2018-2024.⁴ Data used for this graphic represent those licensed addiction counselors with a valid location in North Dakota.

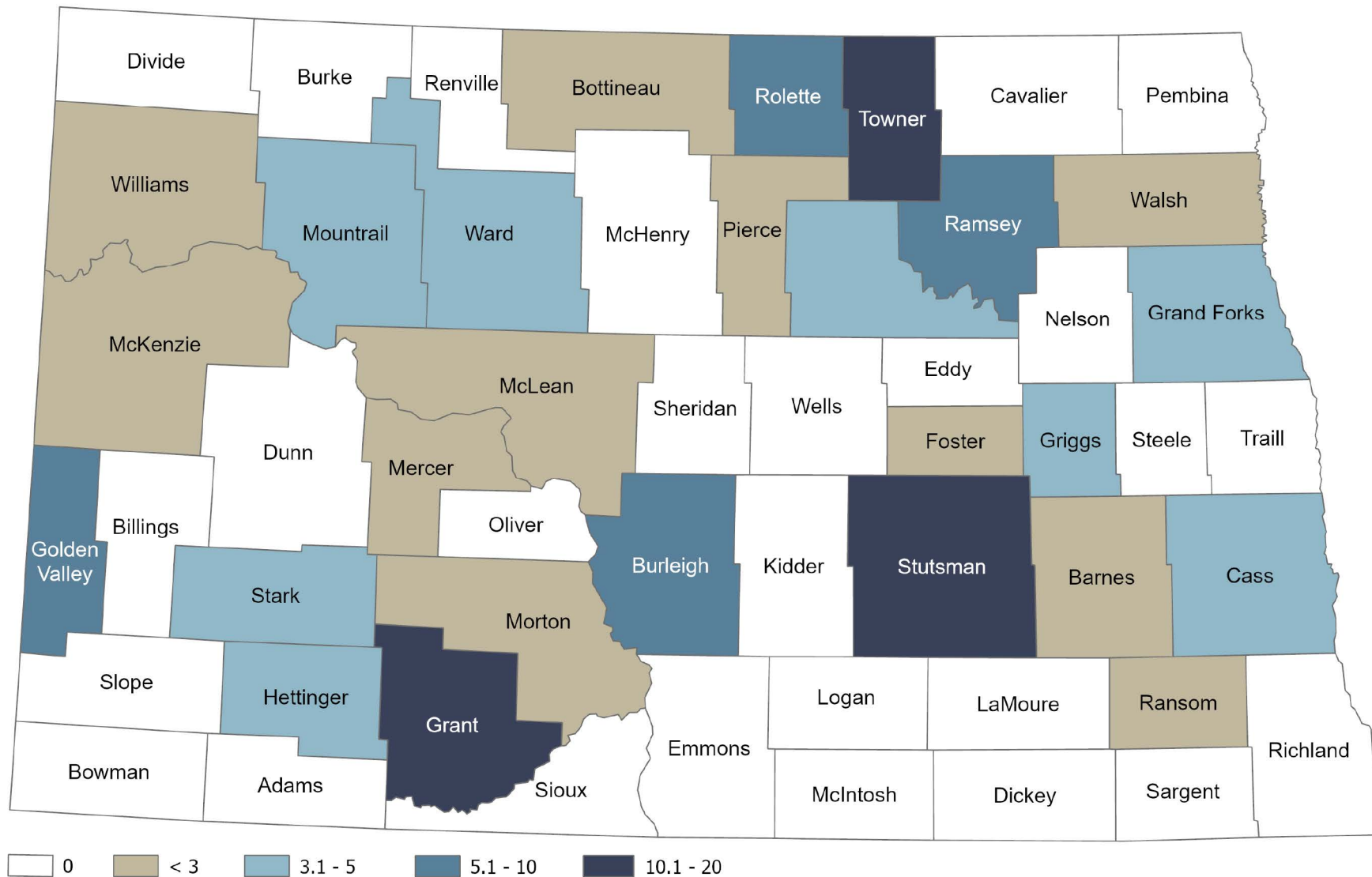


Figure 9.6. Rate of licensed addiction counselors per 10,000 North Dakota residents, by county, 2024.⁴

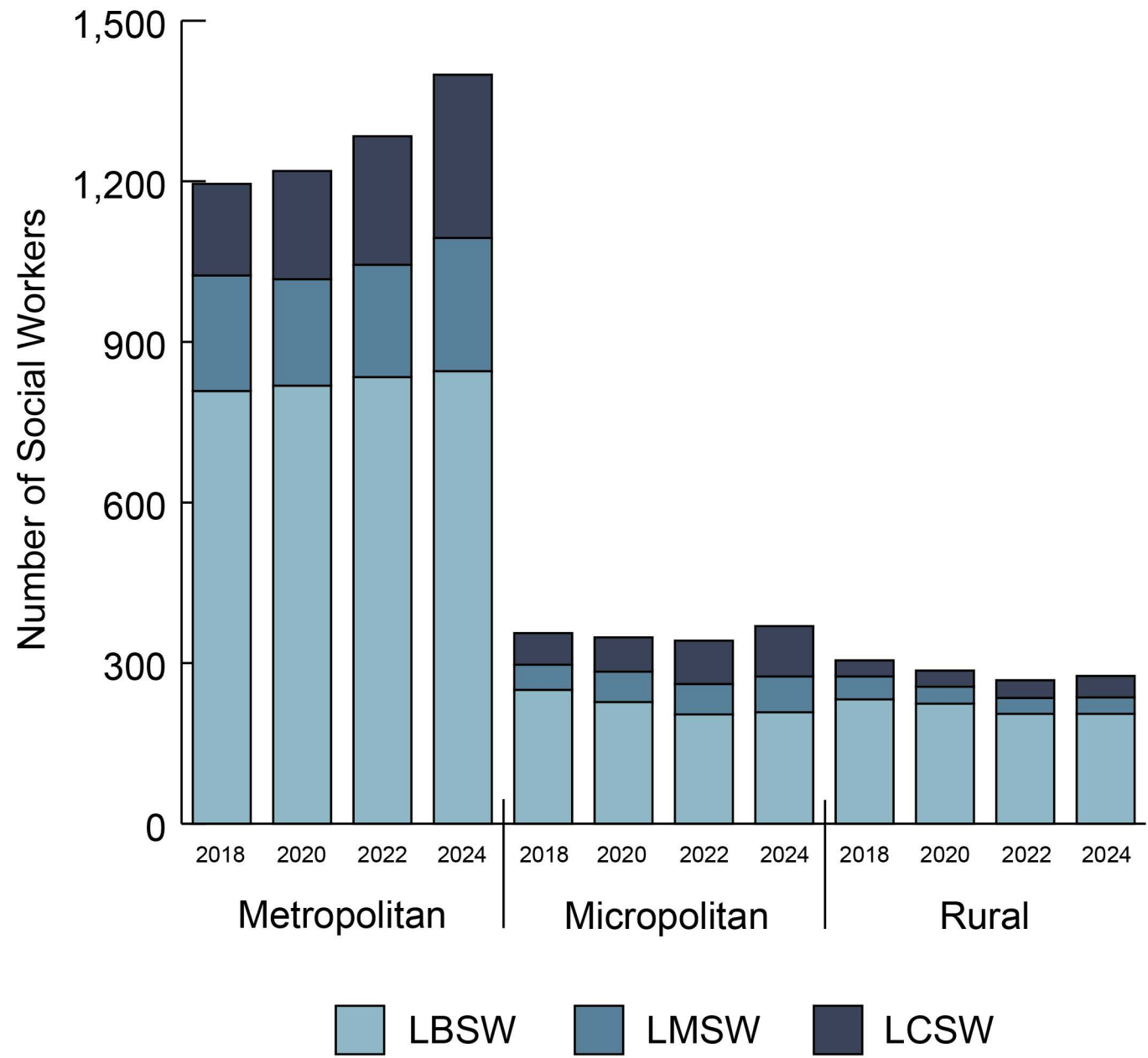
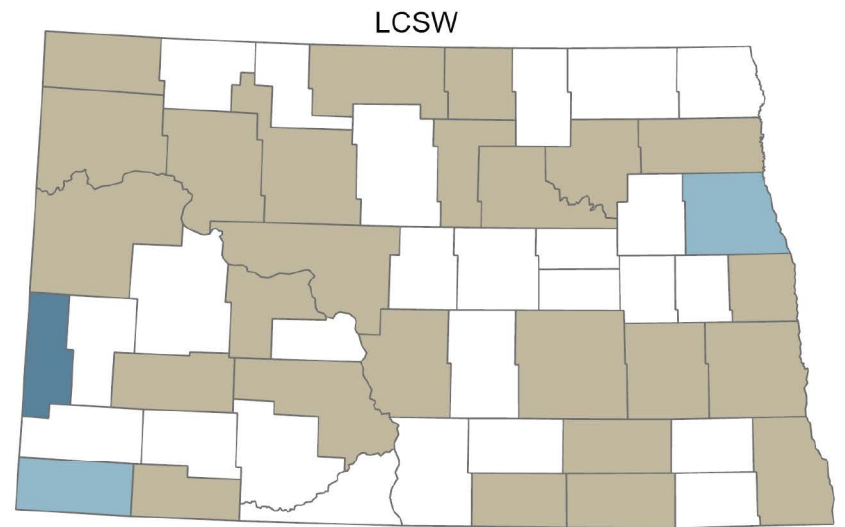
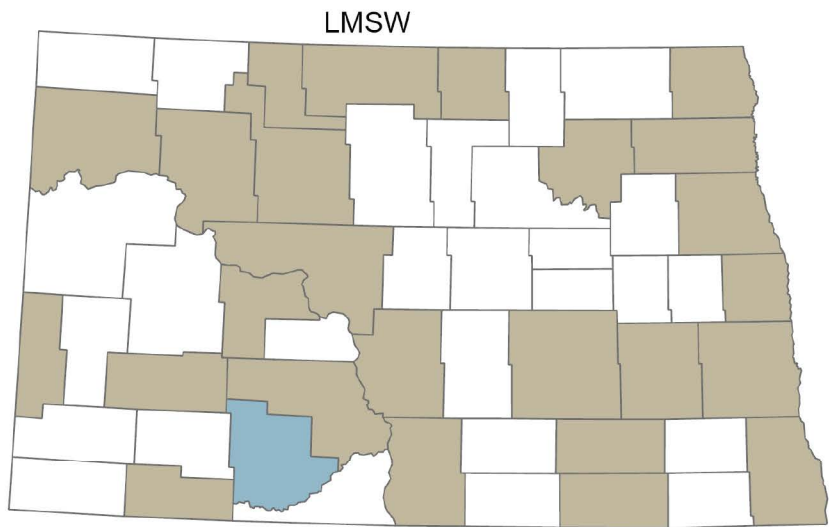
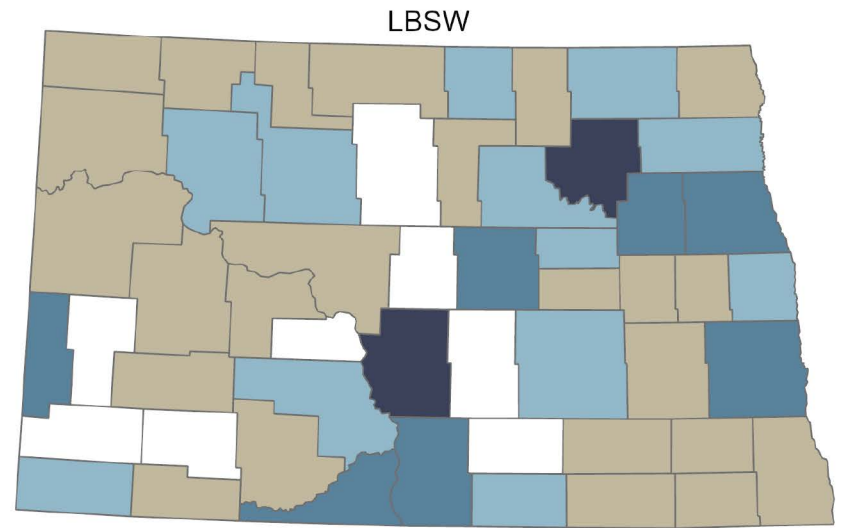
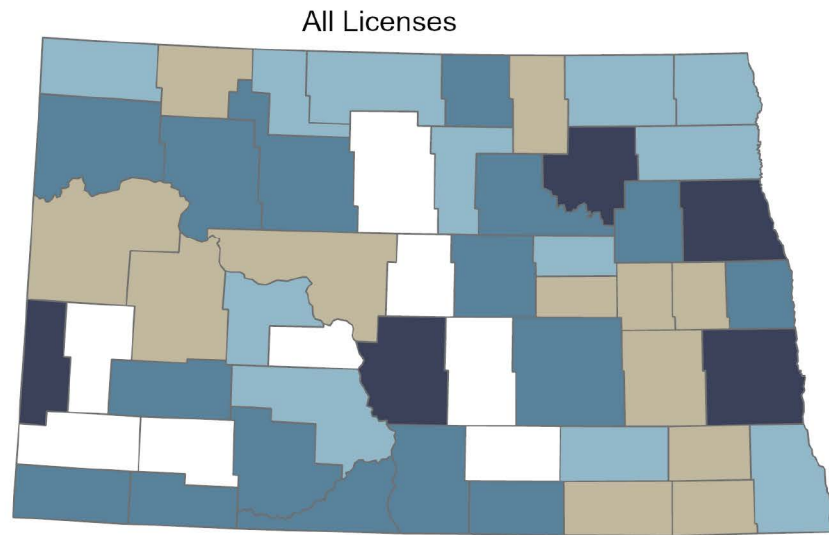


Figure 9.7. Number of social workers in North Dakota by year and metropolitan-rural designation, 2018-2024.⁶ Data used for this graphic represent those social workers with a valid location in North Dakota.



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Figure 9.8. Rate of social workers per 10,000 North Dakota residents, by license type and by county, 2024.⁶

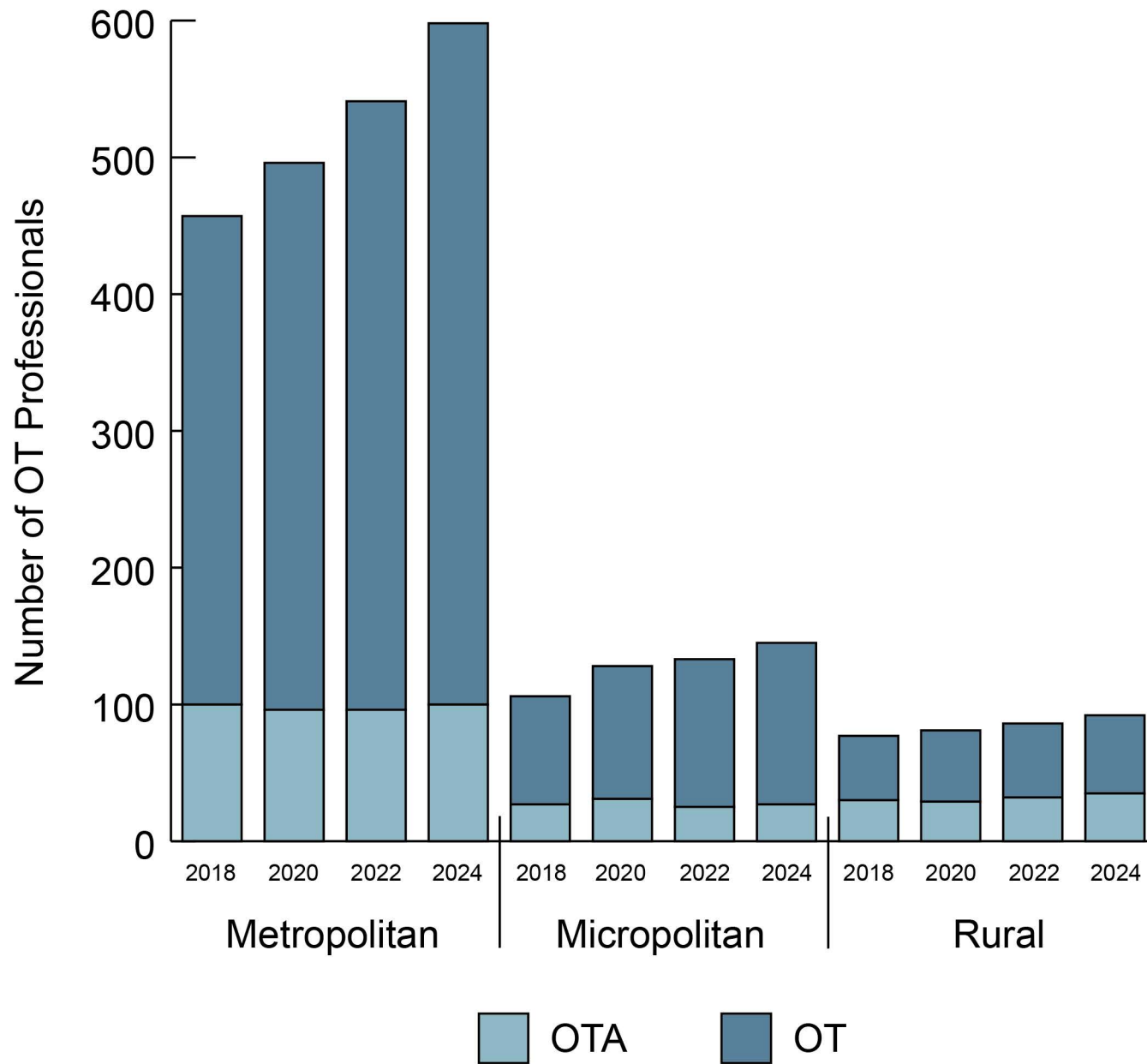


Figure 9.9. Number of occupational therapy (OT) professionals in North Dakota by year and metropolitan-rural designation, 2018-2024.⁷ Data used for this graphic represent those occupational therapy professionals with a valid location in North Dakota.

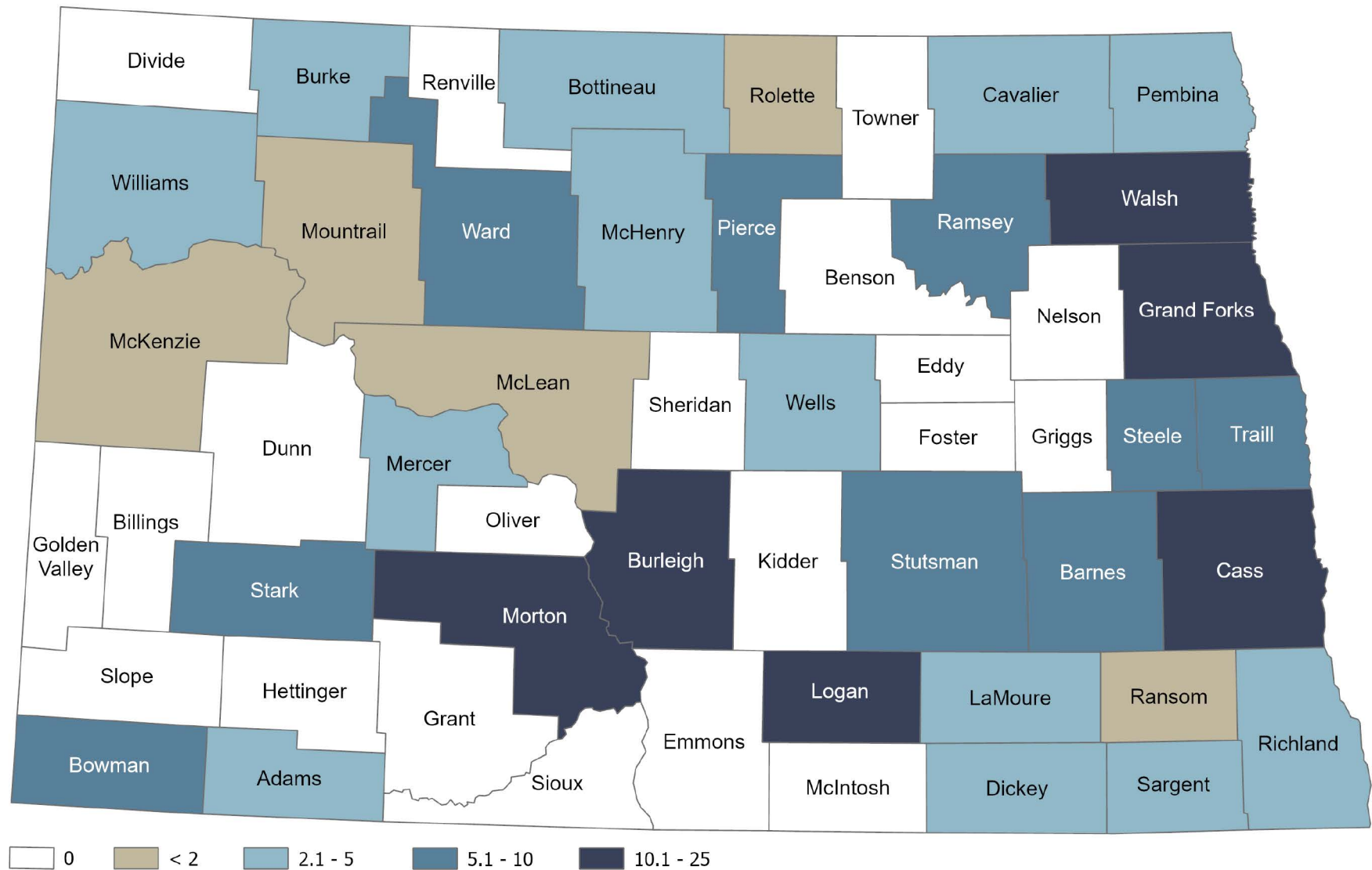


Figure 9.10. Rate of occupational therapists per 10,000 North Dakota residents, by county, 2024.⁷

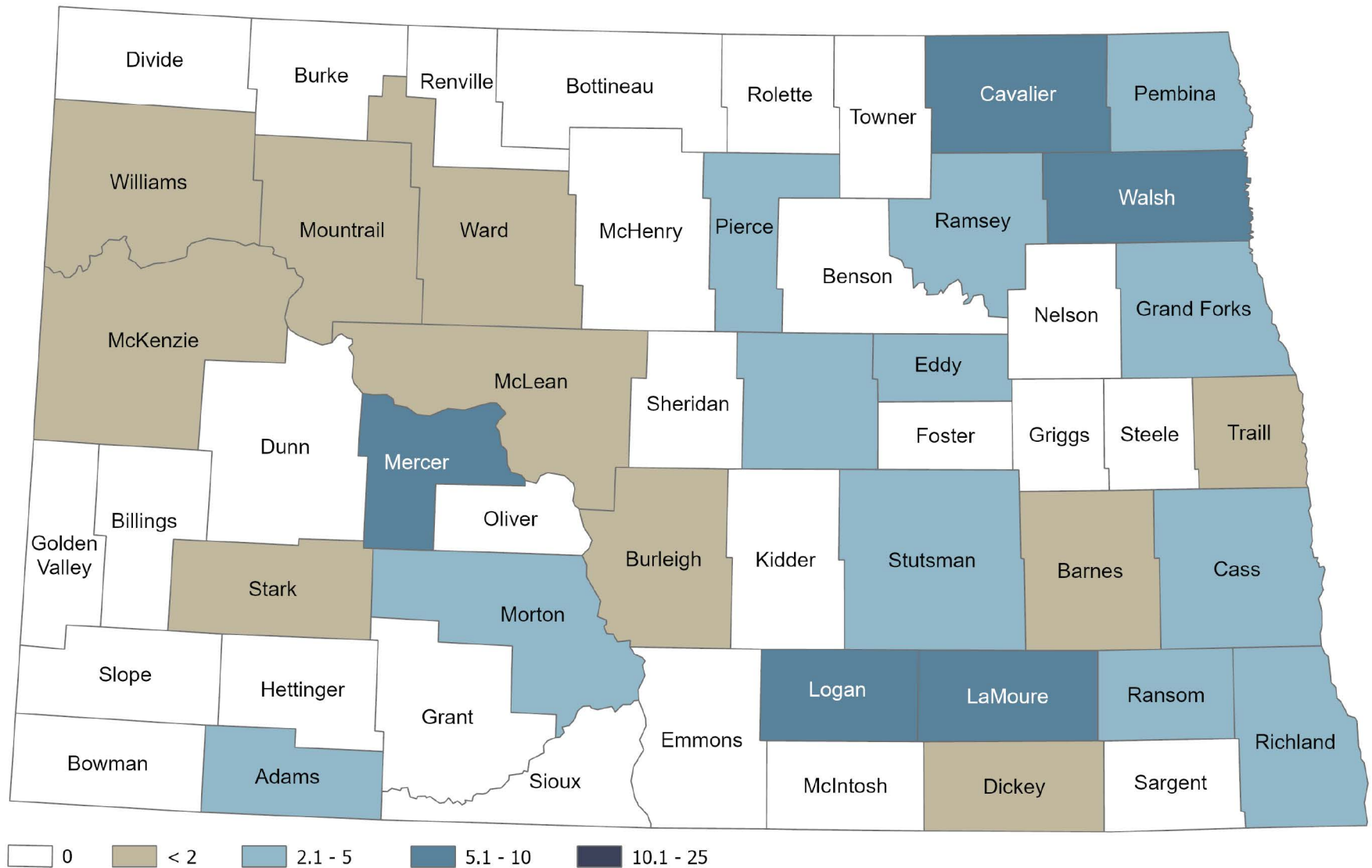


Figure 9.11. Rate of occupational therapy assistants per 10,000 North Dakota residents, by county, 2024.⁷

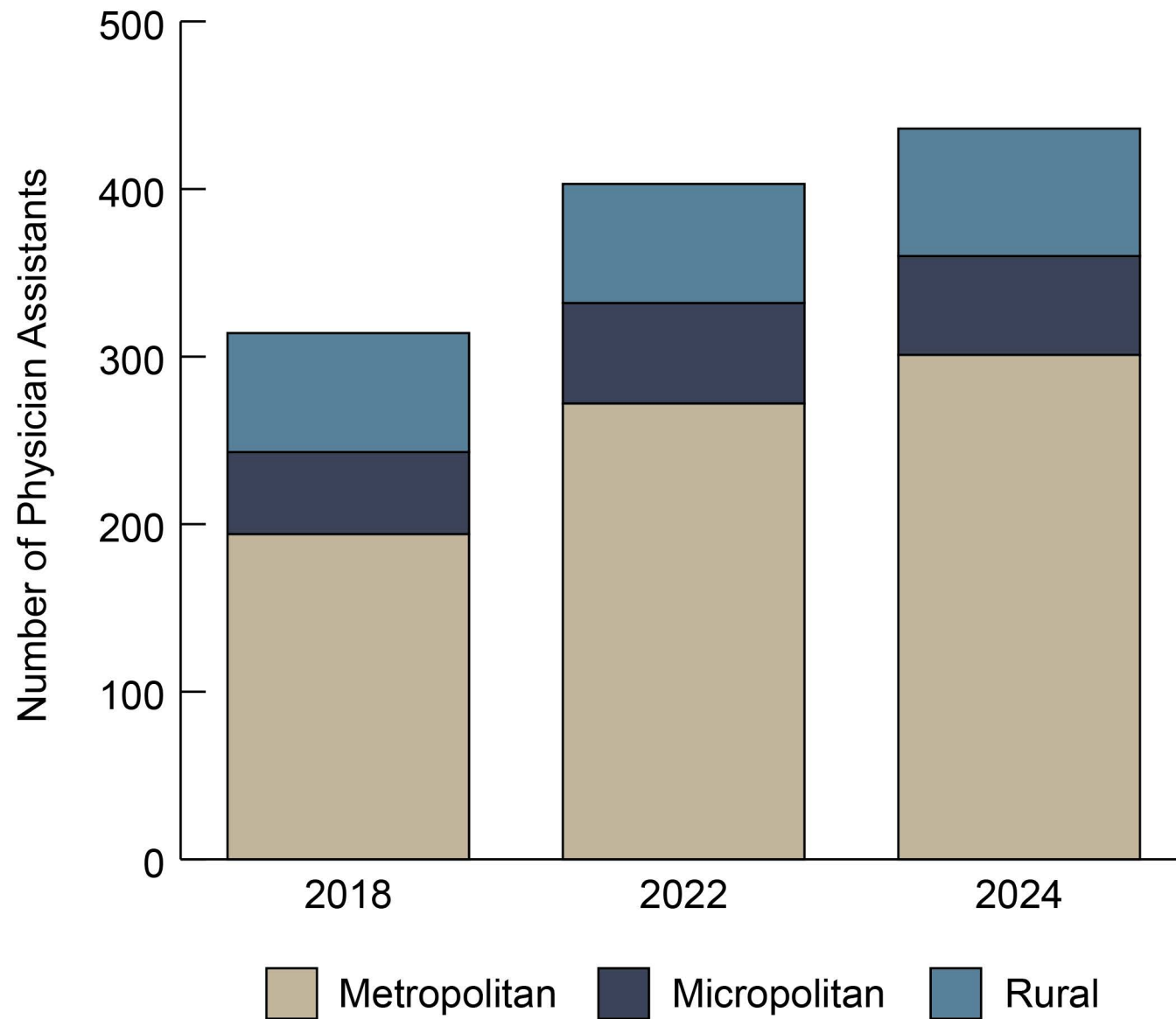


Figure 9.12. Number of physician assistants in North Dakota by year and metropolitan-rural designation, 2018-2024.¹¹ Data used for this graphic represent those physician assistants with a valid location in North Dakota.

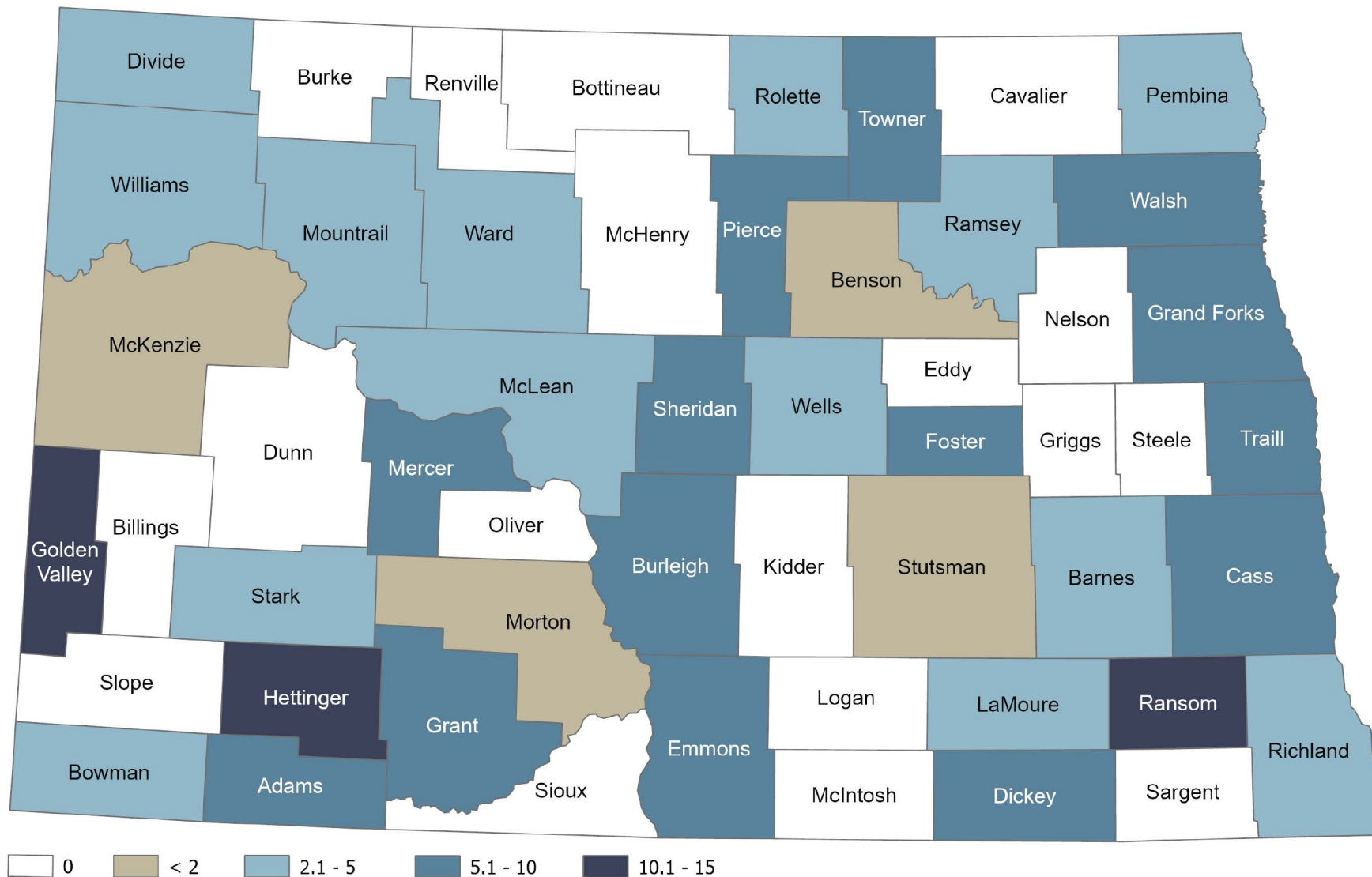


Figure 9.13. Rate of physician assistants per 10,000 North Dakota residents, by county, 2024.¹¹

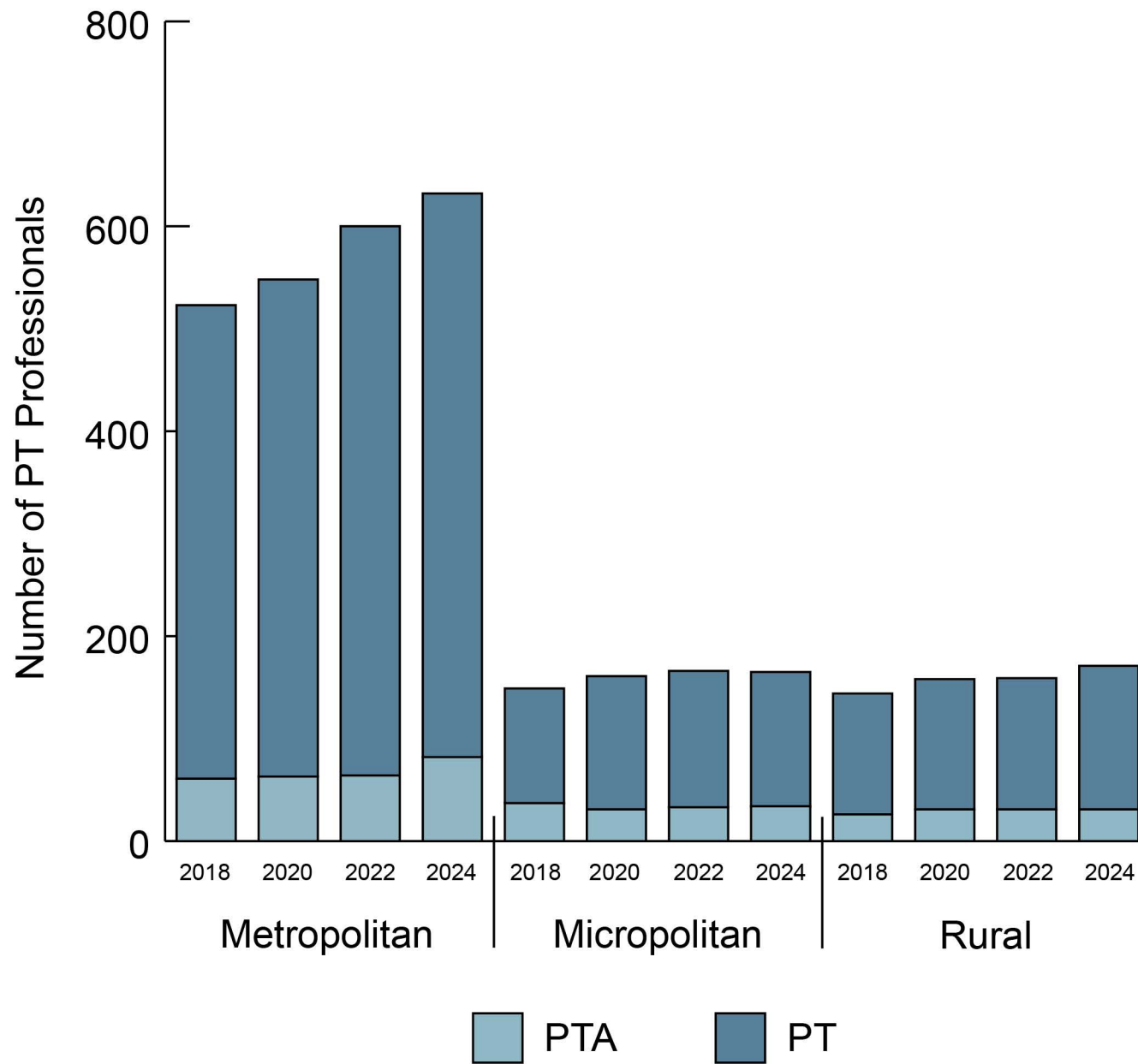


Figure 9.14. Number of physical therapy (PT) professionals in North Dakota by year and metropolitan-rural designation, 2018-2024.¹⁴ Data used for this graphic represent those physical therapy professionals with a valid location in North Dakota.

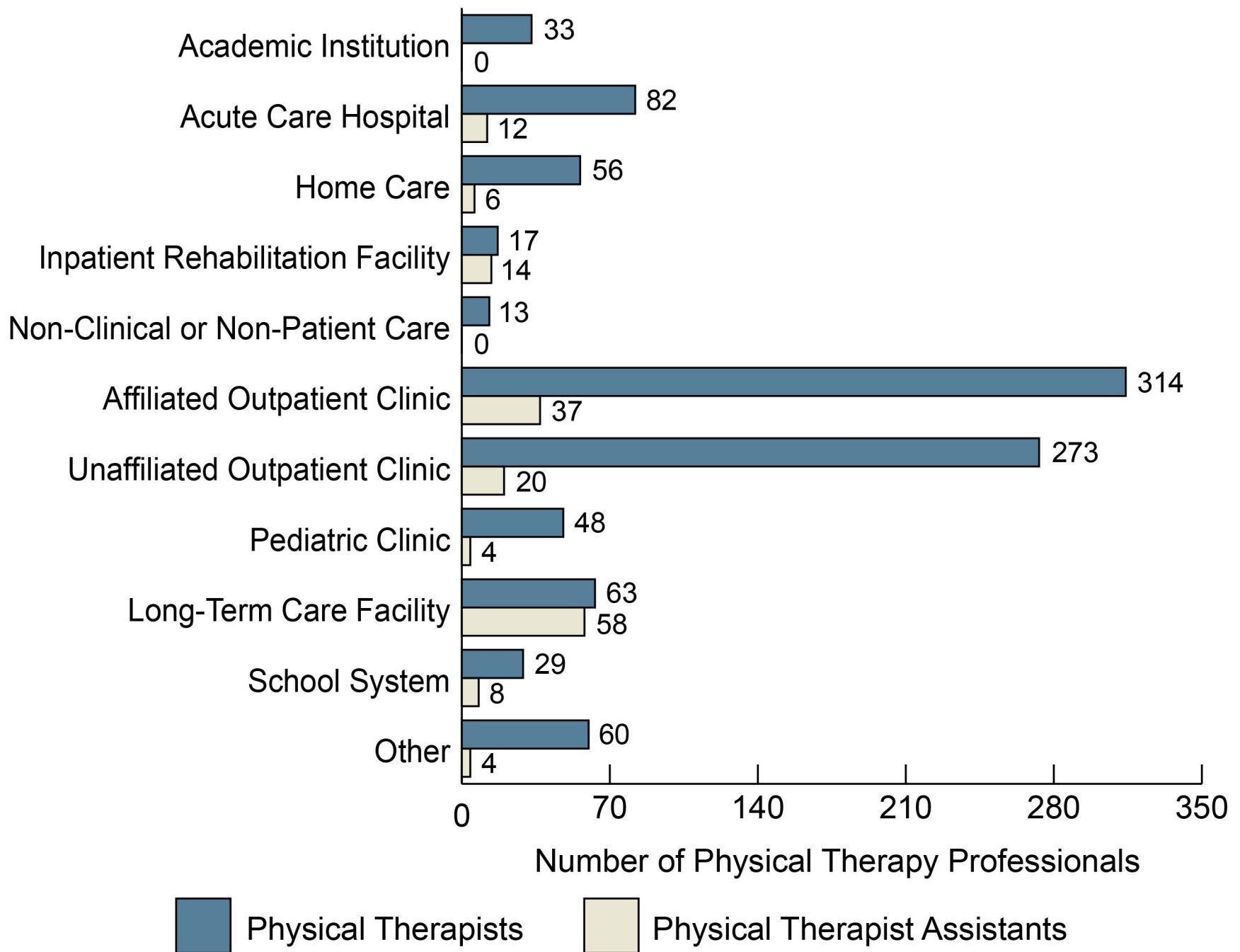


Figure 9.15. Primary workplace setting for North Dakota physical therapists and physical therapist assistants, 2024.¹⁴ Affiliated indicates being affiliated with a hospital, health system, military, or other government agency.

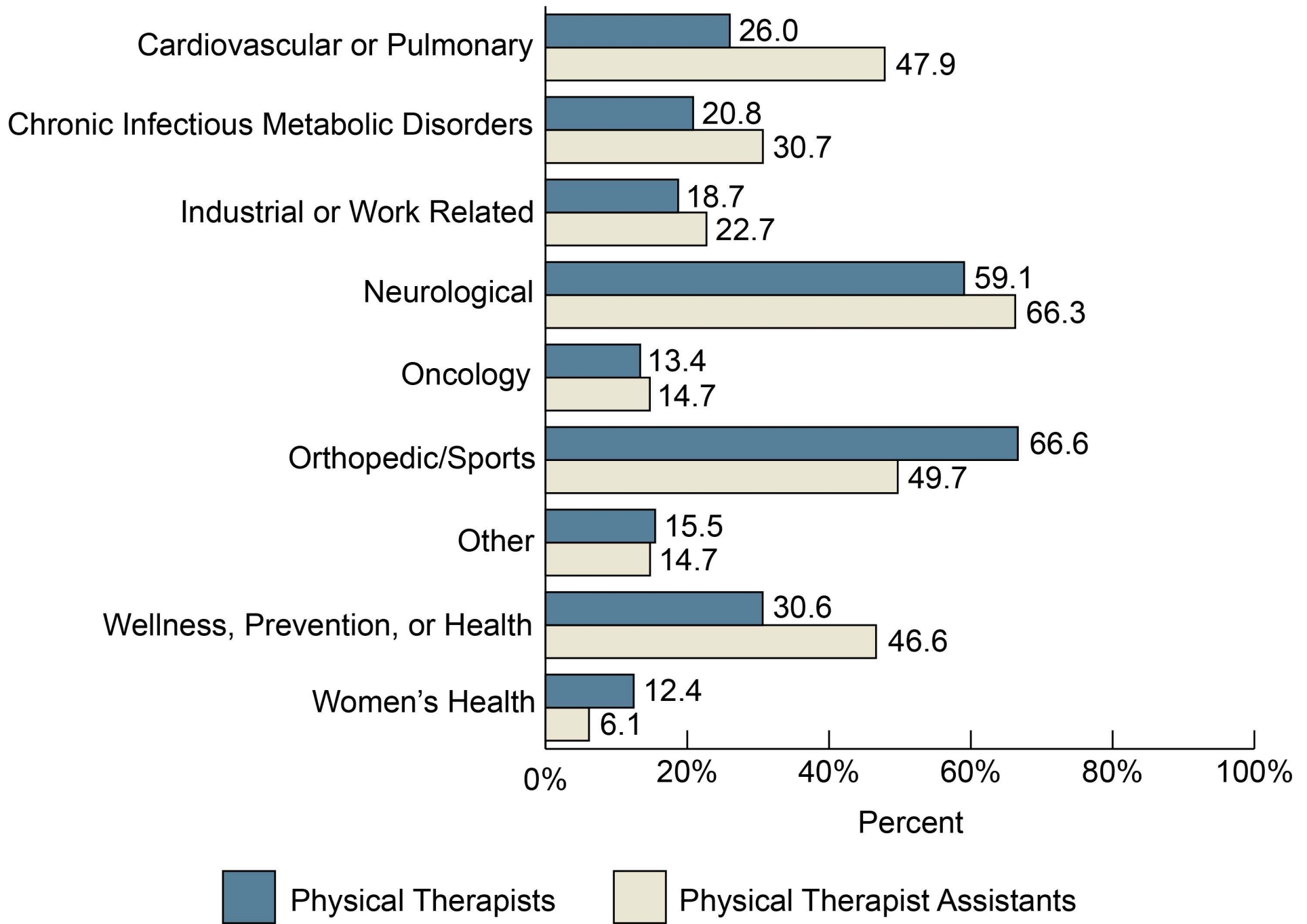


Figure 9.16. Primary injuries or conditions treated by North Dakota physical therapists and physical therapist assistants, 2024.¹⁴

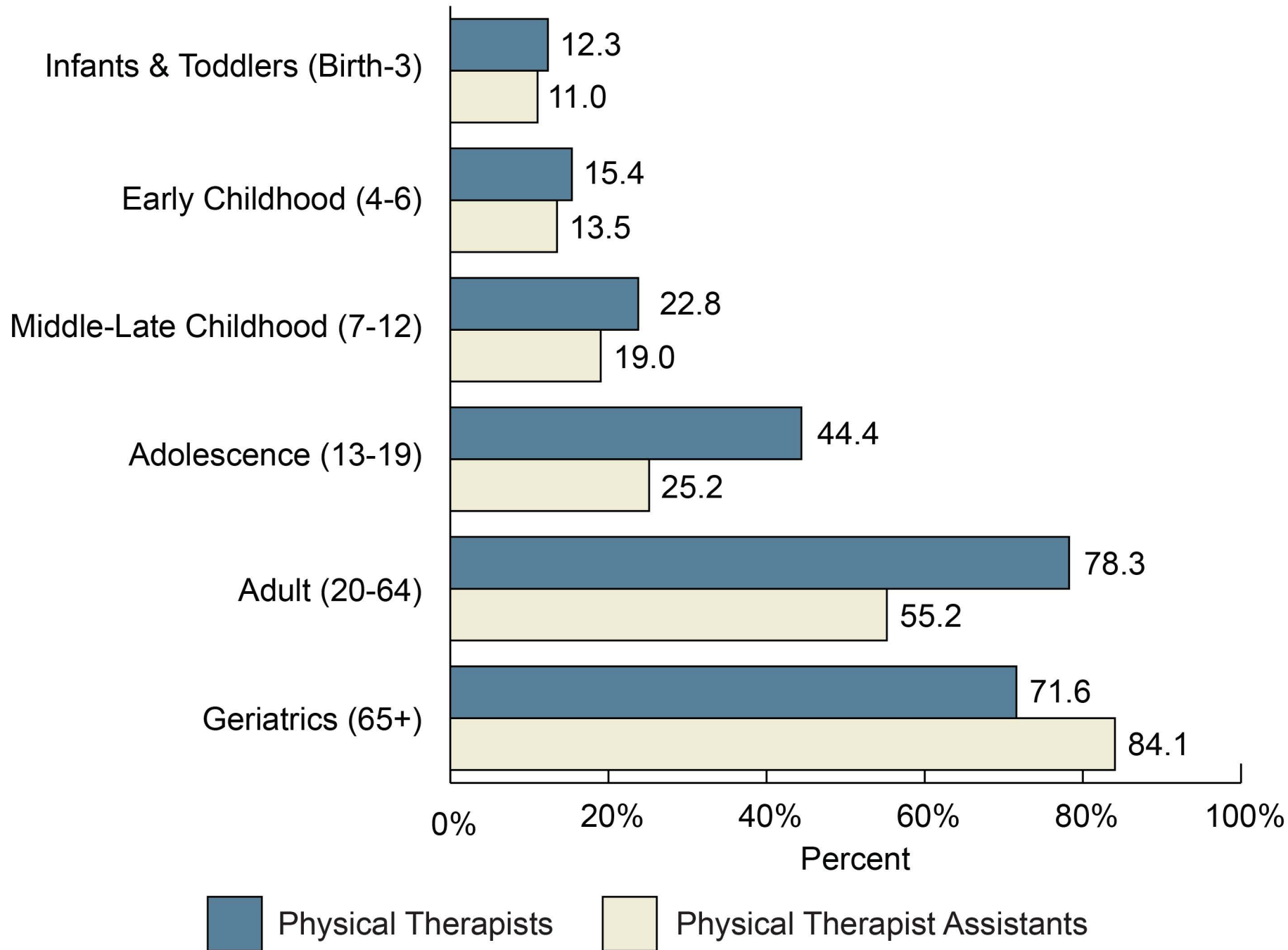


Figure 9.17. Primary patient ages for North Dakota physical therapists and physical therapist assistants, 2024.¹⁴

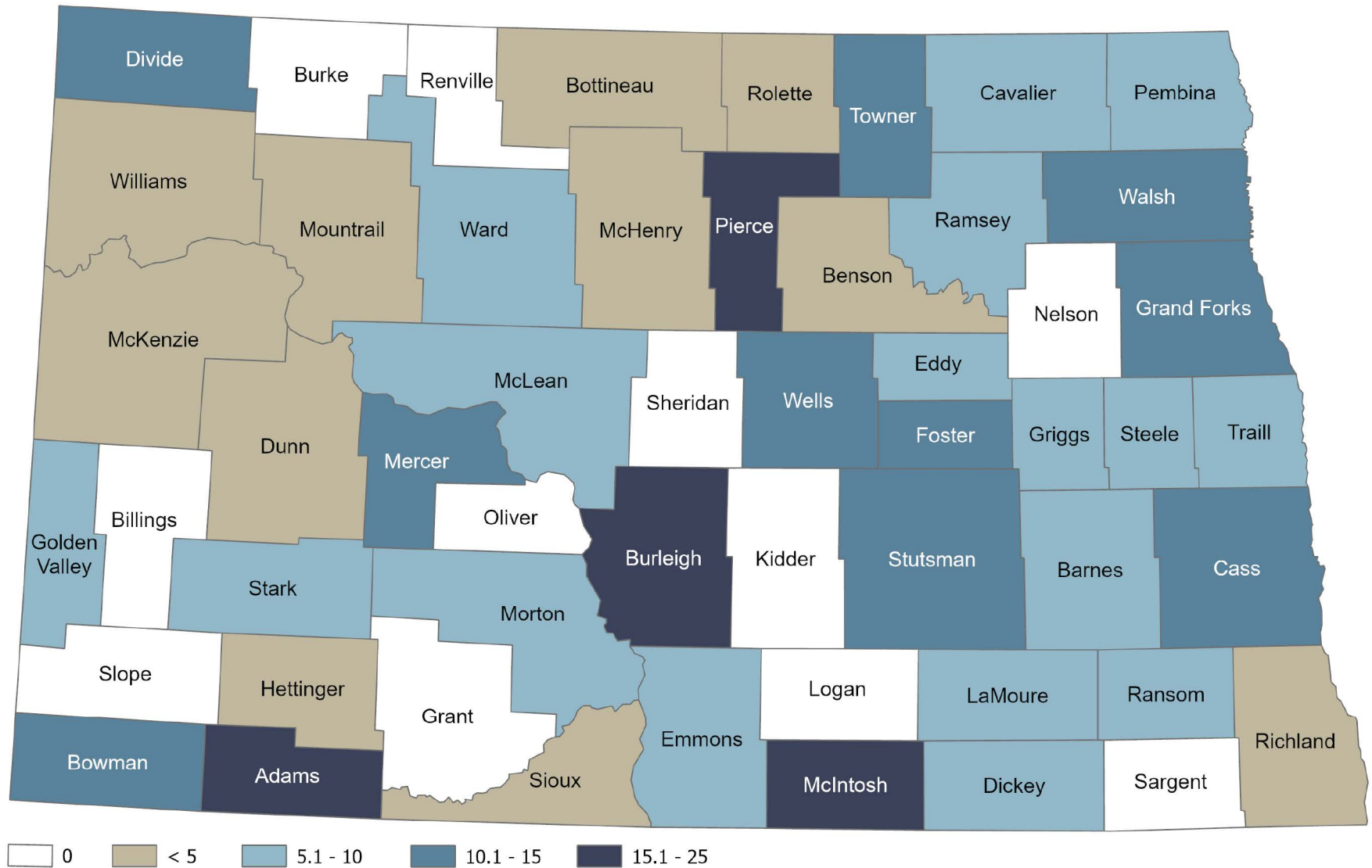


Figure 9.18. Rate of physical therapists per 10,000 North Dakota residents, by county, 2024.¹⁴

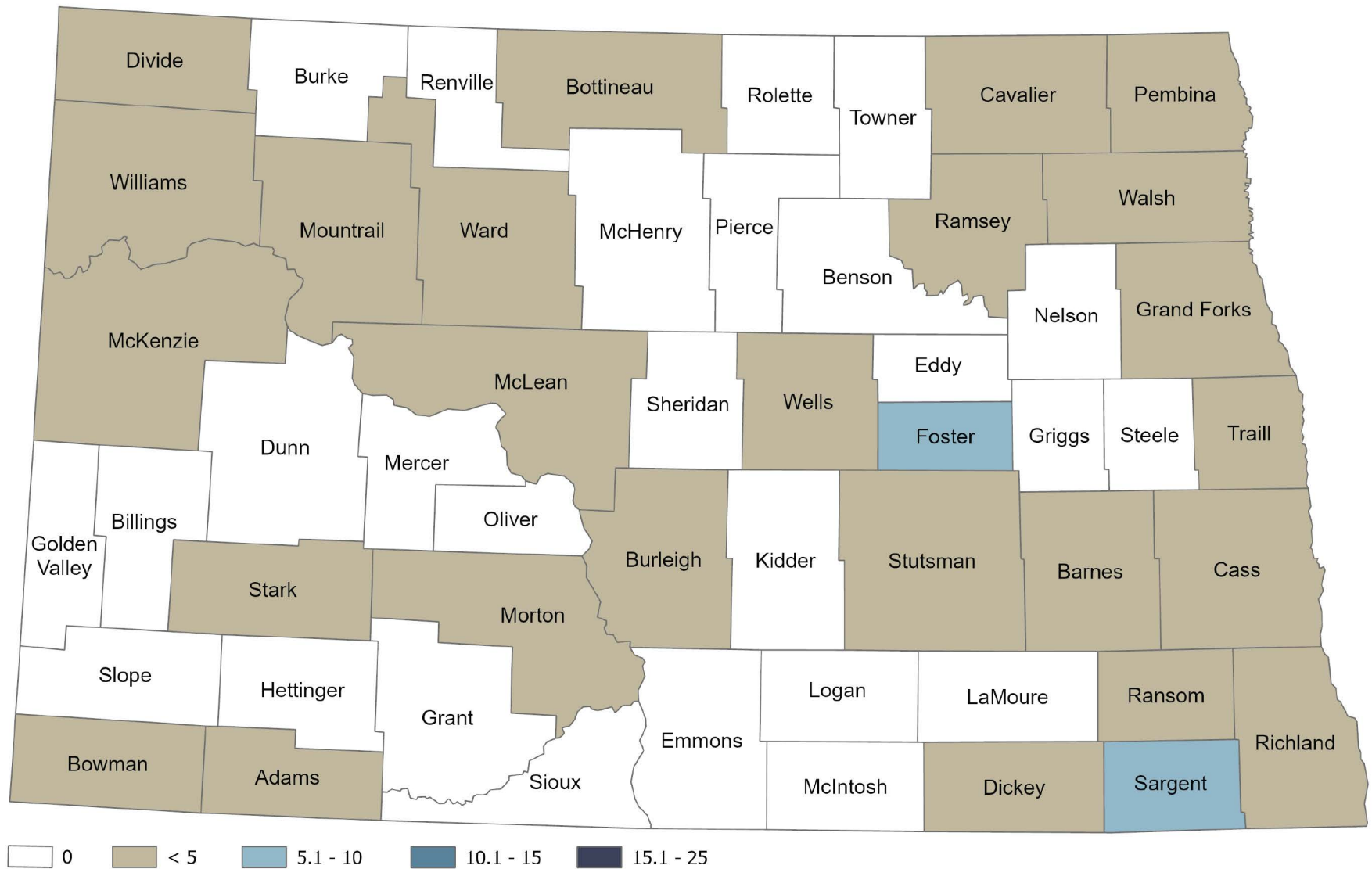


Figure 9.19. Rate of physical therapist assistants per 10,000 North Dakota residents, by county, 2024.¹⁴

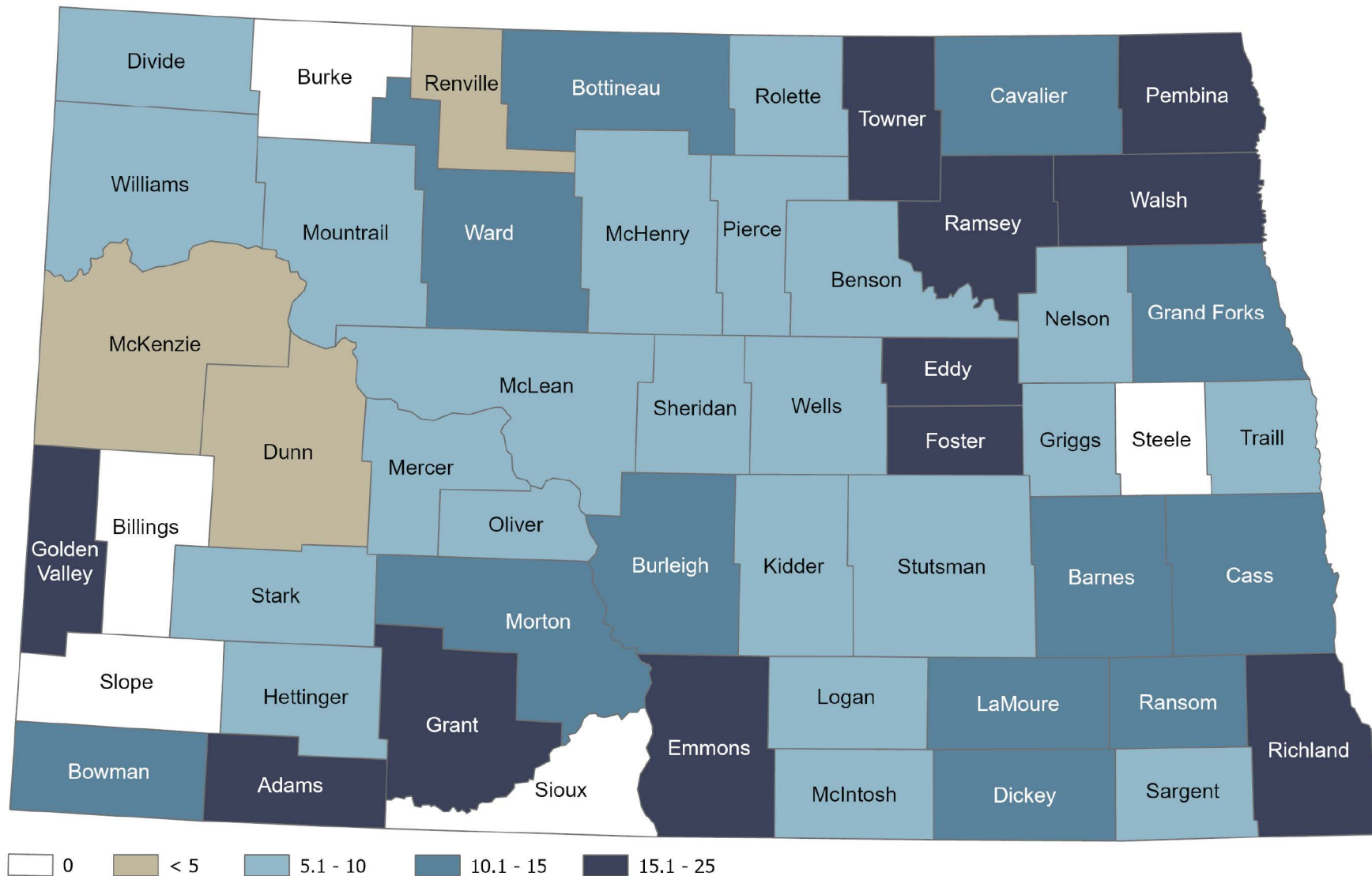


Figure 9.20. Rate of pharmacy technicians per 10,000 North Dakota residents, by county, 2024.¹⁸

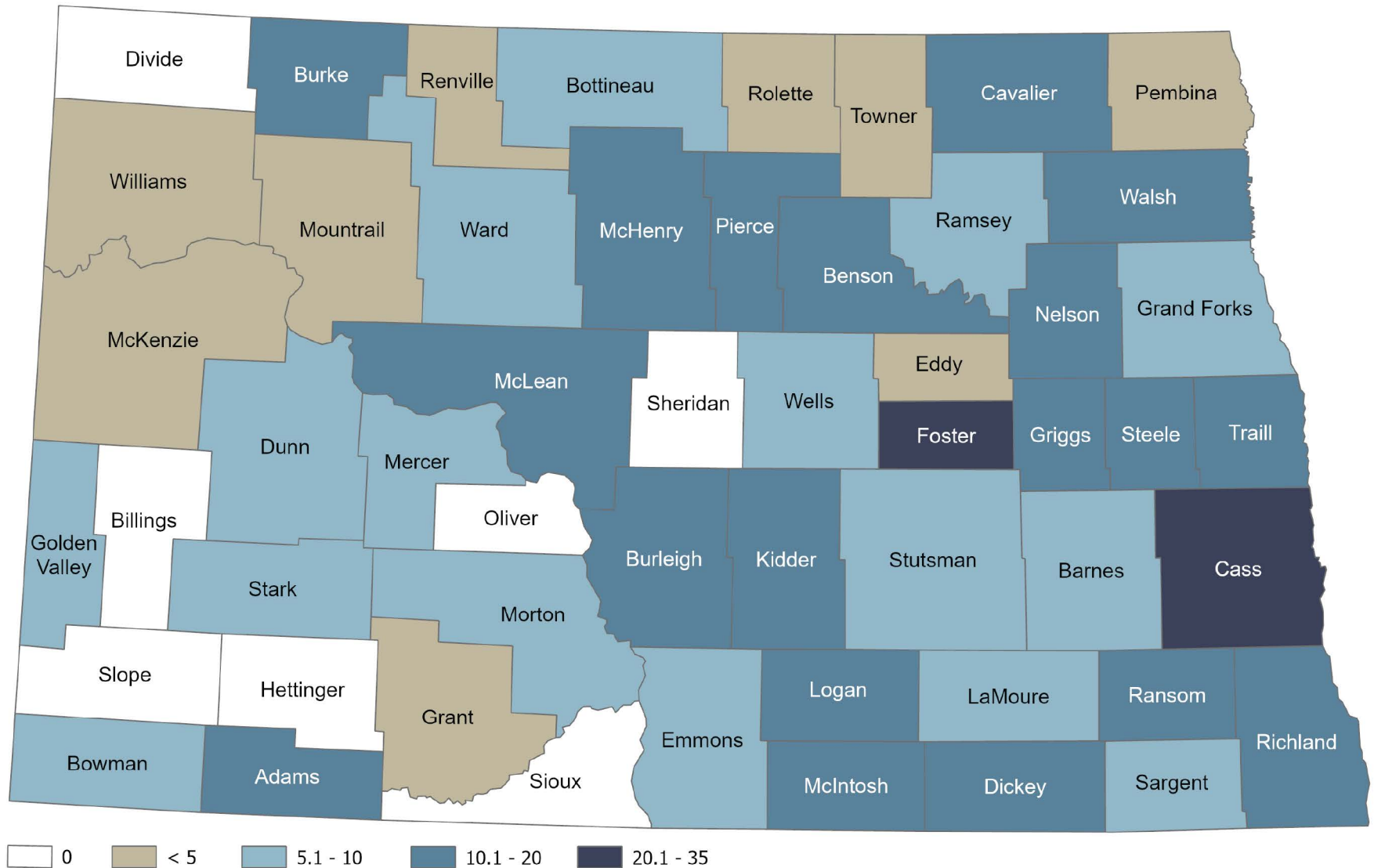


Figure 9.21. Rate of pharmacists per 10,000 North Dakota residents, by county, 2024.¹⁸

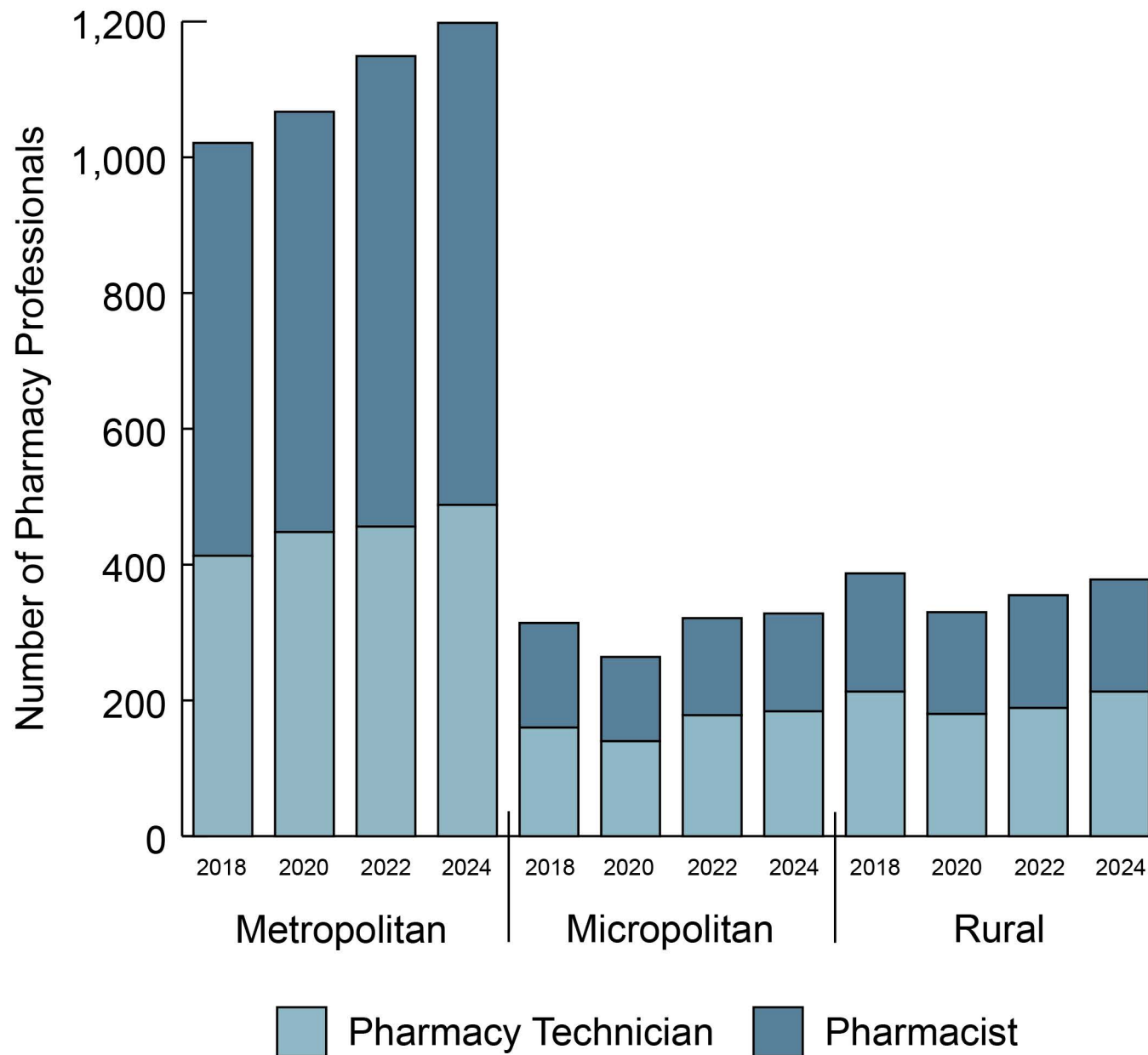


Figure 9.22. Number of pharmacy professionals in North Dakota by year and metropolitan-rural designation, 2018-2024.¹⁸ Data used for this graphic represent those pharmacy professionals with a valid location in North Dakota.

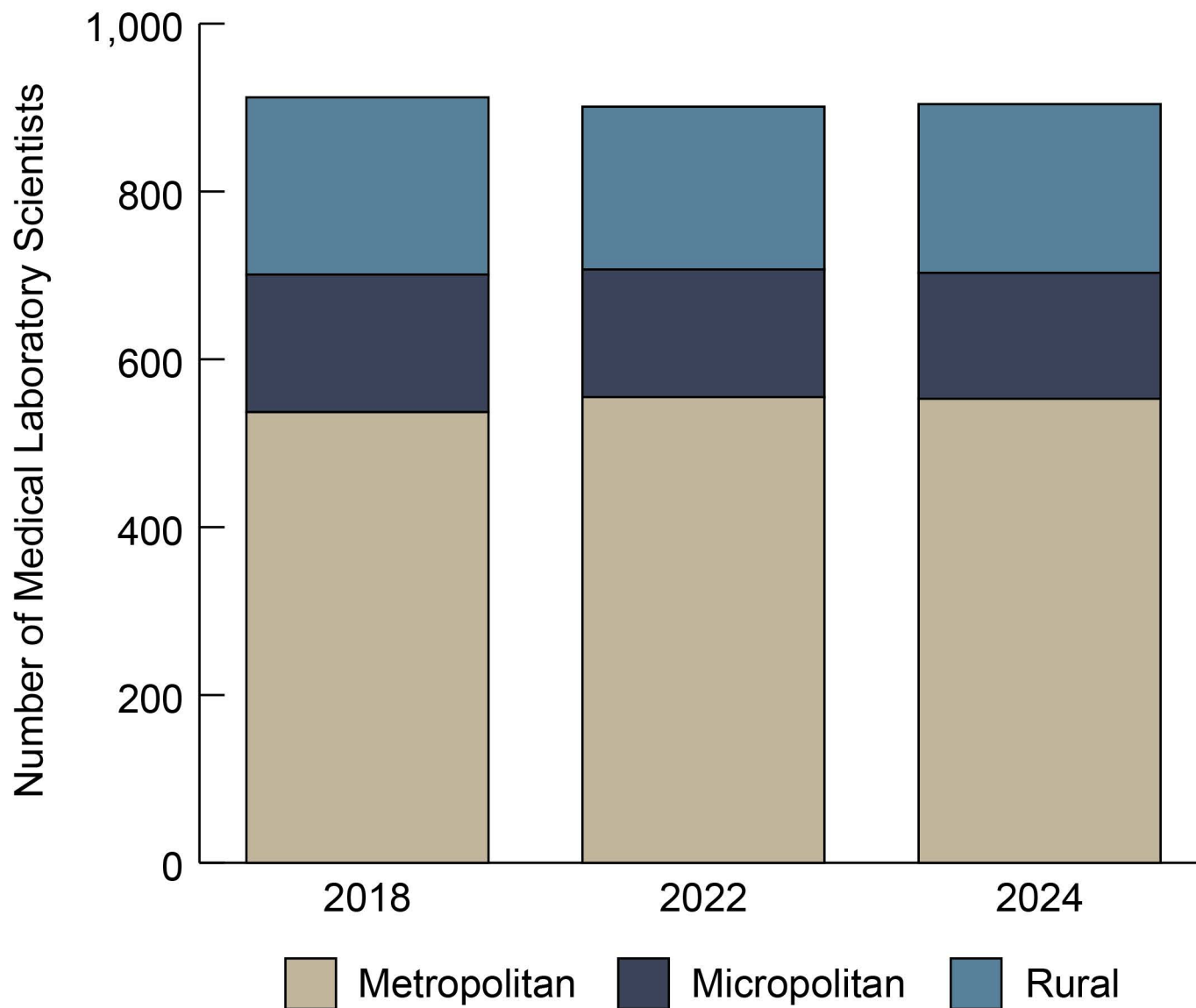


Figure 9.23. Number of medical laboratory scientists in North Dakota by year and metropolitan-rural designation, 2018-2024.¹⁹ Data used for this graphic represent those medical laboratory scientists with a valid location in North Dakota.

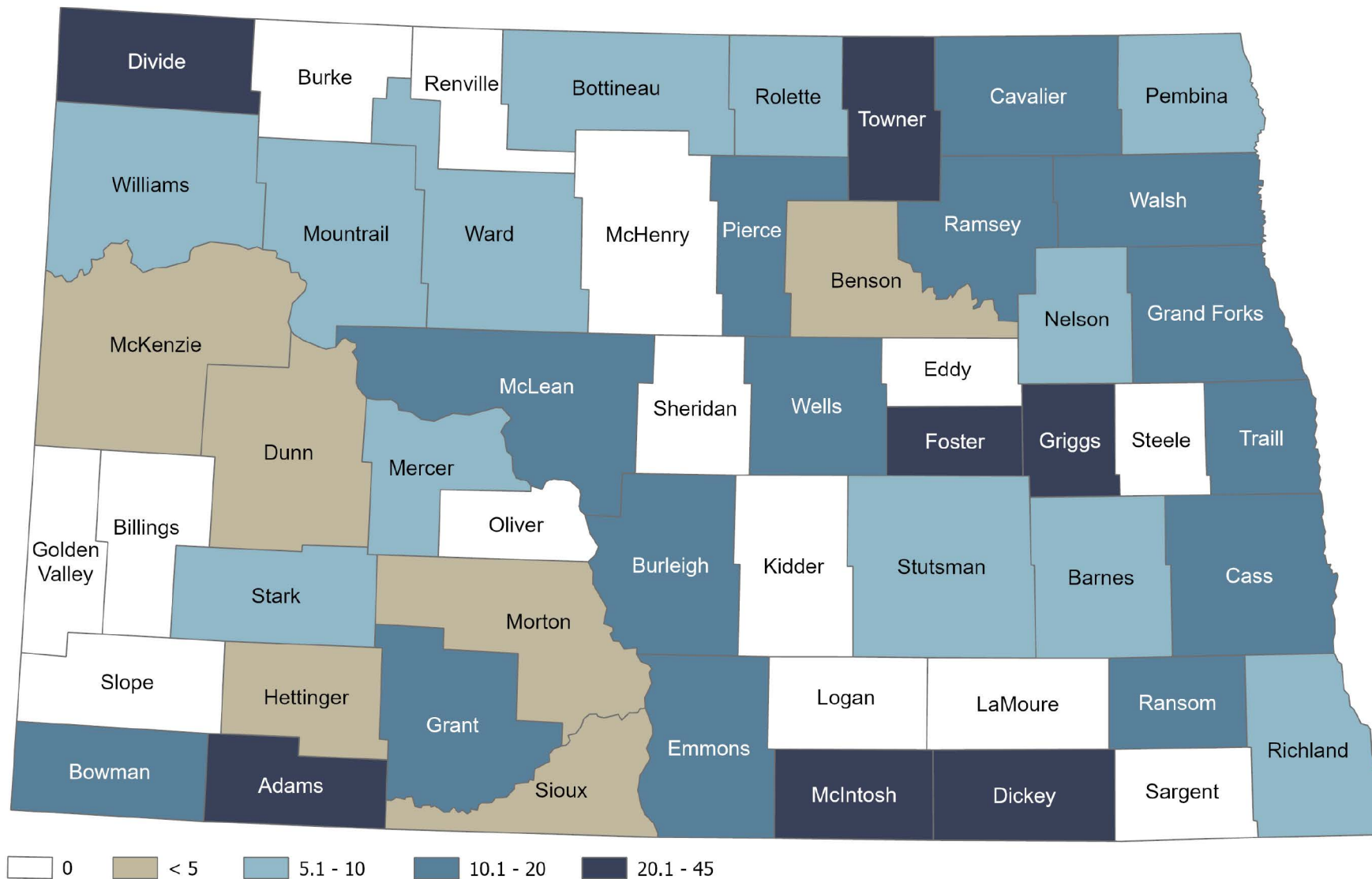


Figure 9.24. Rate of clinical lab professionals per 10,000 North Dakota residents, by county, 2024.¹⁹

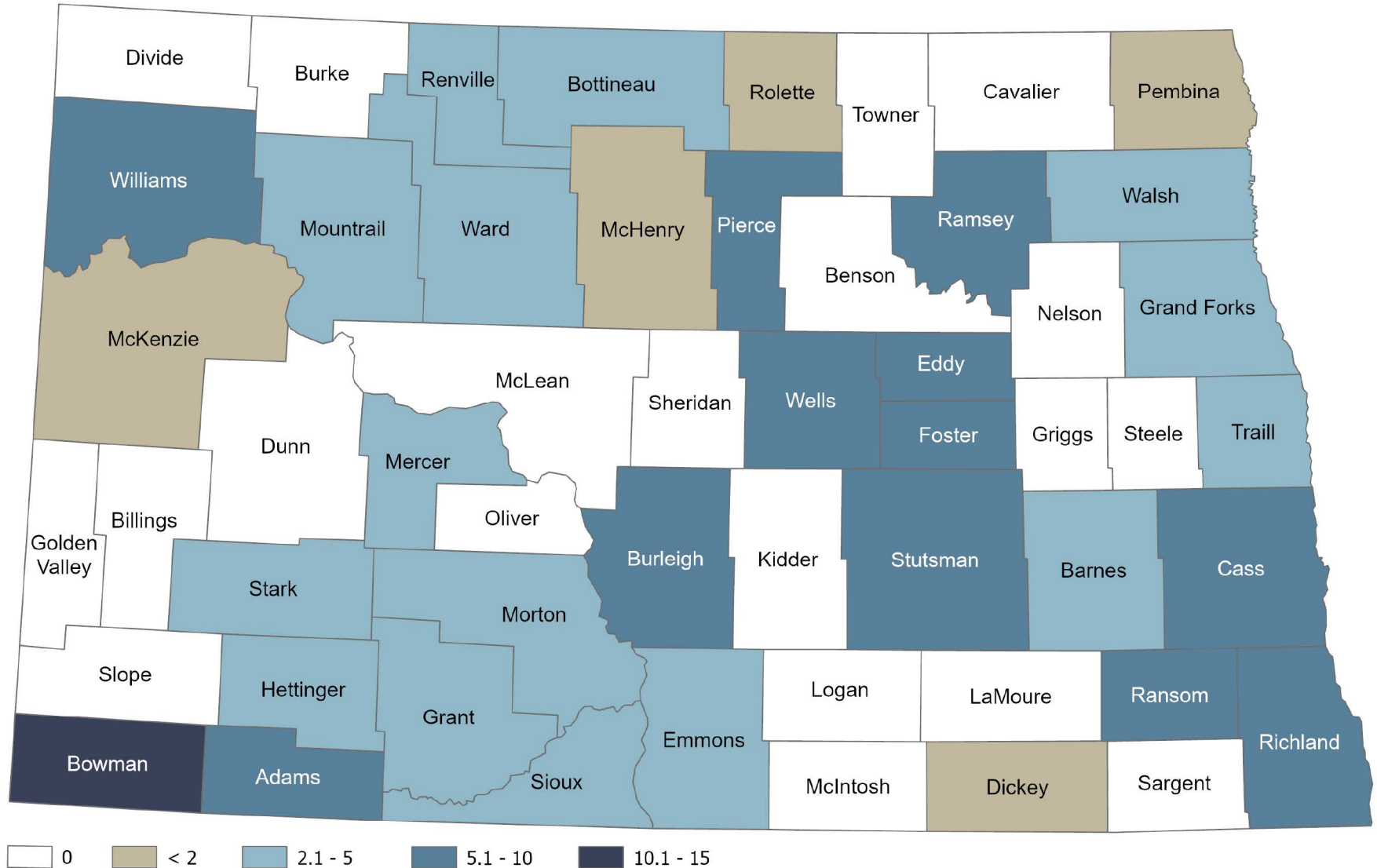


Figure 9.25. Rate of dentists per 10,000 North Dakota residents, by county, 2024.²²

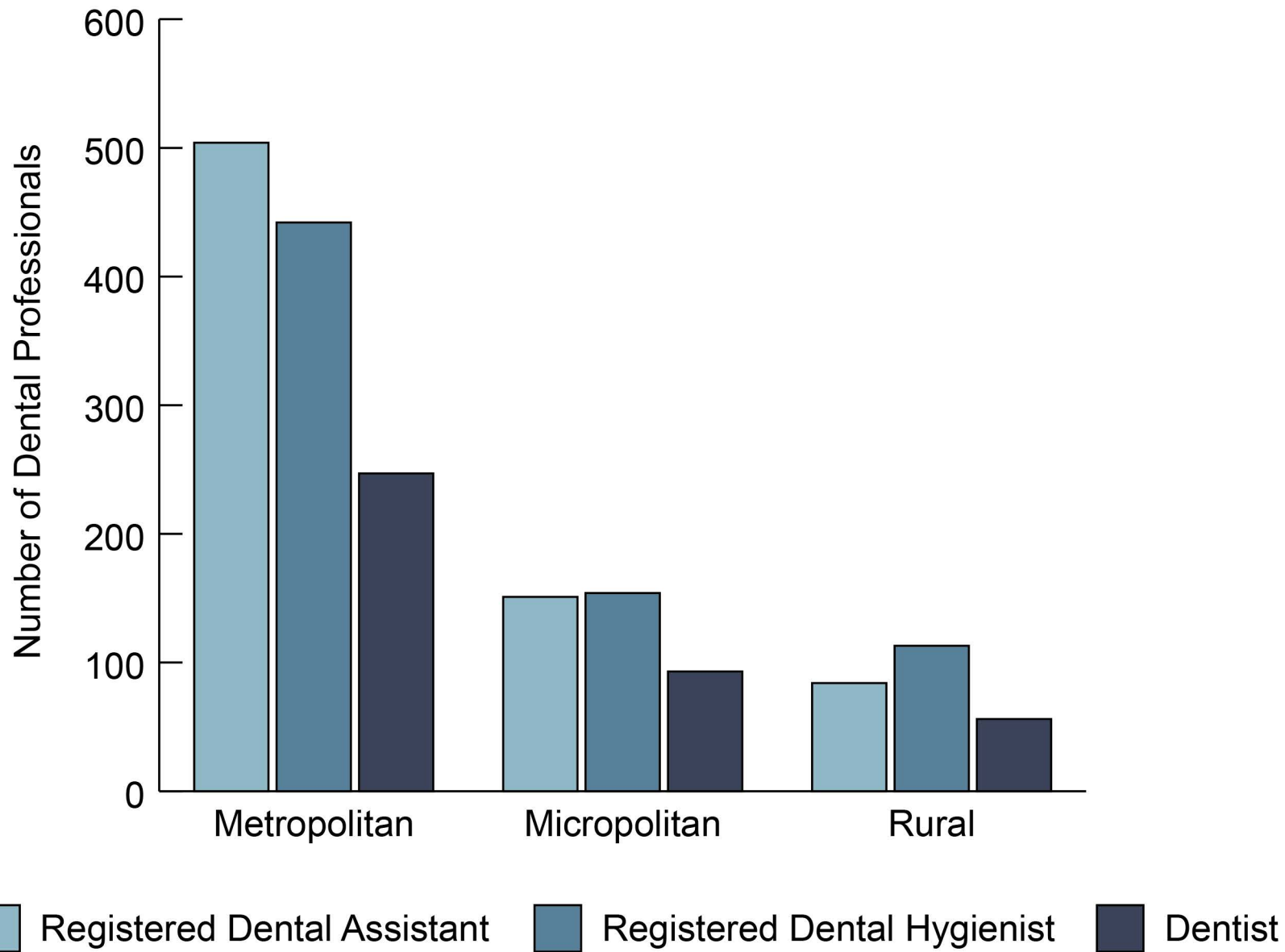


Figure 9.26. Number of dental professionals in North Dakota by metropolitan-rural designation, 2024.²² Data used for this graphic represent those dental professionals with a valid location in North Dakota.

Table 9.1***Educational attainment for North Dakota physical therapists and physical therapist assistants, 2024.¹⁴***

Degree	PT		PTA		All	
	N	%	N	%	N	%
Associate's	1	0.1	179	96.8	180	14.5
Bachelor's	121	11.5	3	1.6	124	10.0
Certificate	5	0.5	1	0.5	6	0.5
Master's	209	19.8	2	1.1	211	17.0
Doctor of Physical Therapy	718	68.1	0	0.0	718	58.0
Total	1,054	100.0	185	100.0	1,239	100.0

Table 9.2*Future plans for North Dakota physical therapists and physical therapist assistants, 2024.¹⁴*

Future Plans	PT		PTA		Total	
	N	%	N	%	N	%
Decrease my hours in the field of physical therapy	44	4.2	6	3.3	50	4.1
Decrease my hours of direct patient care	23	2.2	0	0.0	23	1.9
Increase my hours in the field of physical therapy	36	3.4	17	9.2	53	4.3
Increase my hours of direct patient care	13	1.2	0	0.0	13	1.1
No planned change	924	88.0	157	85.3	1,081	87.6
Stop working in the field of physical therapy	10	1.0	4	2.2	14	1.1
Total	1,050	100.0	184	100.0	1,234	100.0

CHAPTER TEN:

PUBLIC HEALTH PLANNING FOR THE FUTURE

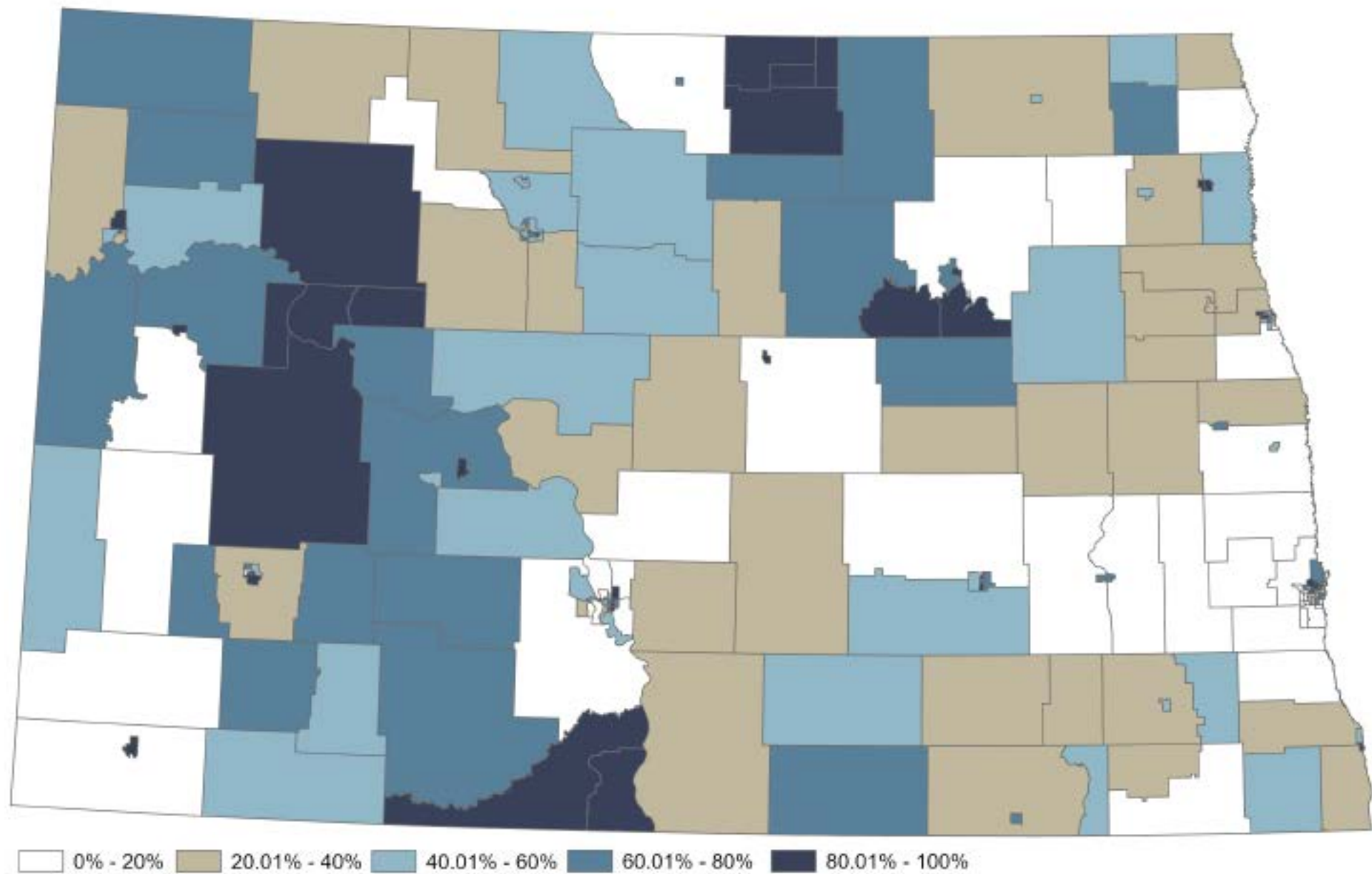


Figure 10.1. Social Vulnerability Index Quintiles for North Dakota Census Tracts, 2022.⁵

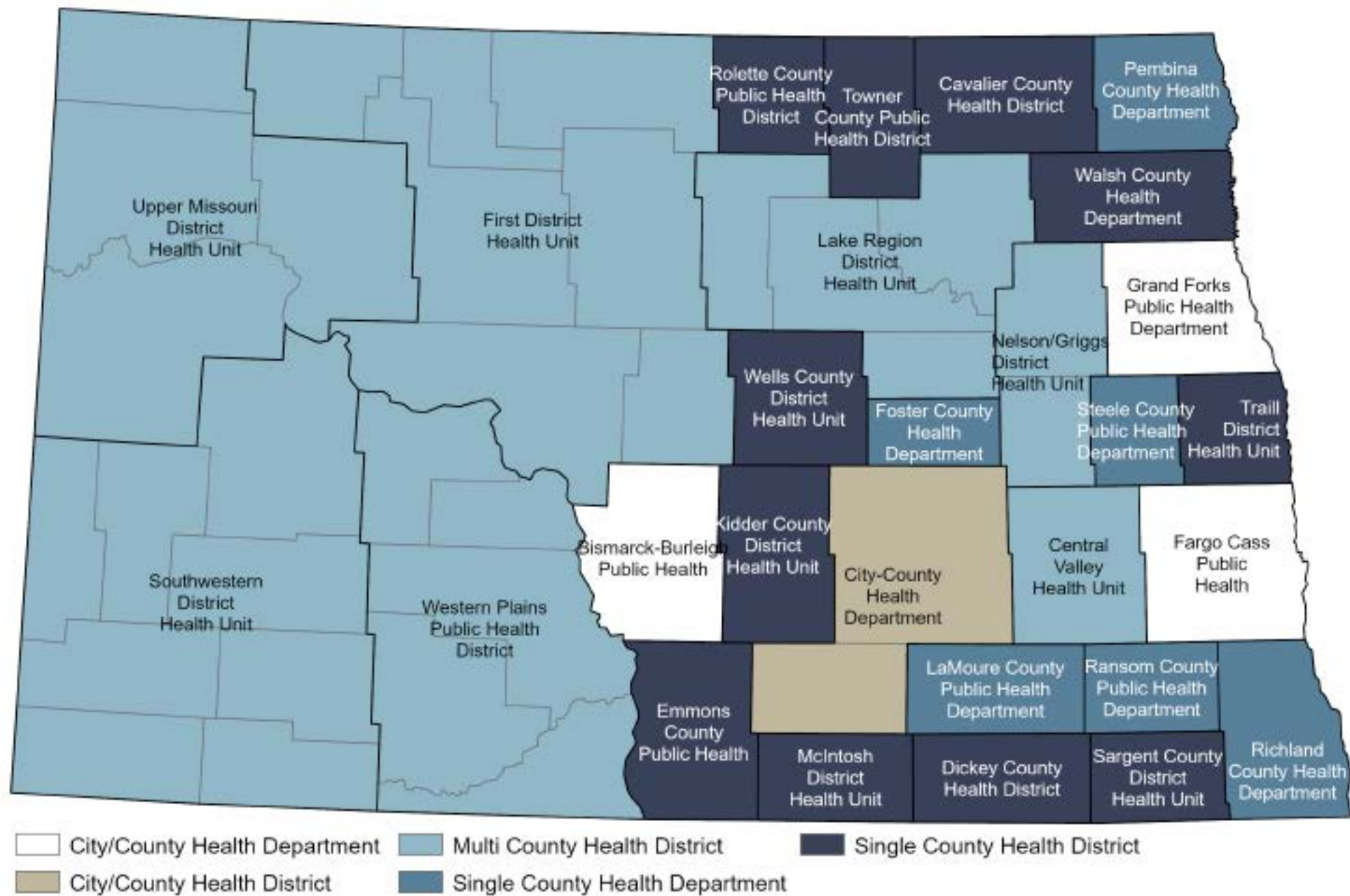


Figure 10.2. Public Health Units in North Dakota, 2024.⁶

Table 10.1***Social Vulnerability Index variables and themes.***⁵

Theme	Variable
Socioeconomic Status	Below 150% Poverty
	Unemployed
	Housing Cost Burden
	No High School Diploma
	No Health Insurance
Household Characteristics	Aged 65 and Older
	Aged 17 and Younger
	Civilian with a Disability
	Single-Parent Households
	English Language Proficiency
Racial and Ethnic Minority Status	Hispanic or Latino (of any race); Black and African American, Not Hispanic or Latino; American Indian and Alaska Native, Not Hispanic or Latino; Asian, Not Hispanic or Latino; Native Hawaiian and Other Pacific Islander, Not Hispanic or Latino; Two or More Races, Not Hispanic or Latino; Other Races, Not Hispanic or Latino
Housing Type and Transportation	Multi-Unit Structures
	Crowding
	Mobile Homes
	Group Quarters

Table 10.2**Public Health Units in North Dakota, 2024.^{6, 11}**

Local Public Health Unit Name	Counties	2022 Population	Area (Square Miles)	Population Per Square Mile
Bismarck-Burleigh Public Health	1	98,443	1,633	60.3
Cavalier County Health District	1	3,691	1,489	2.5
Central Valley Health Unit	2	23,458	3,215	7.3
City-County County Health District	1	10,826	1,492	7.3
Dickey County Health District	1	5,003	1,131	4.4
Emmons County Public Health	1	3,297	1,508	2.2
Fargo Cass Public Health	1	186,328	1,765	105.6
First District Health Unit	7	96,854	10,619	9.1
Foster County Health Dept.	1	3,388	634	5.3
Grand Forks Public Health Dept.	1	72,927	1,436	50.8
Kidder County District Health Unit	1	2,391	1,351	1.8
Lake Region District Health Unit	4	23,917	4,222	5.7
Lamoure County Public Health Dept.	1	4,135	1,146	3.6
McIntosh District Health Unit	1	2,529	975	2.6
Nelson/Griggs District Health Unit	2	5,334	1,691	3.2
Pembina County Health Dept.	1	6,853	1,119	6.1
Ransom County Public Health Dept.	1	5,663	862	6.6
Richland County Health Dept.	1	16,548	1,436	11.5
Rolette County Public Health District	1	12,292	903	13.6
Sargent County District Health Unit	1	3,828	858	4.5
Southwestern District Health Unit	8	48,090	9,990	4.8
Steele County Public Health Dept.	1	1,774	712	2.5
Towner County Public Health District	1	2,152	1,025	2.1
Traill District Health Unit	1	8,004	862	9.3
Upper Missouri District Health Unit	4	65,000	7,924	8.2
Walsh County Health District	1	10,553	1,282	8.2
Wells County District Health Unit	1	3,990	1,271	3.1
Western Plains Health Unit	5	49,606	6,444	7.7

CHAPTER ELEVEN:

HEALTHCARE ORGANIZATION AND INFRASTRUCTURE IN NORTH DAKOTA

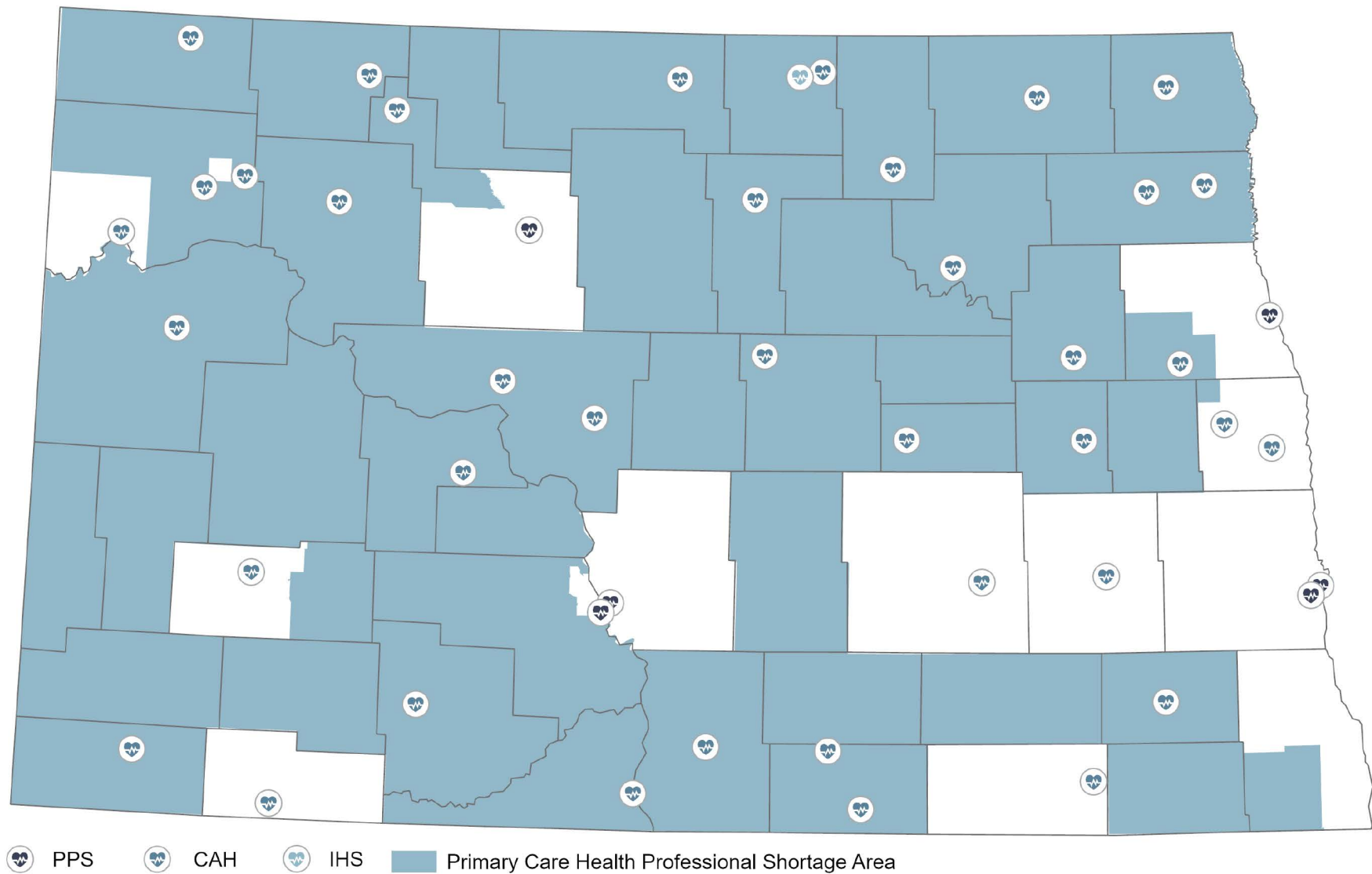


Figure 11.1. North Dakota hospitals and Health Professional Shortage Areas, 2024.¹

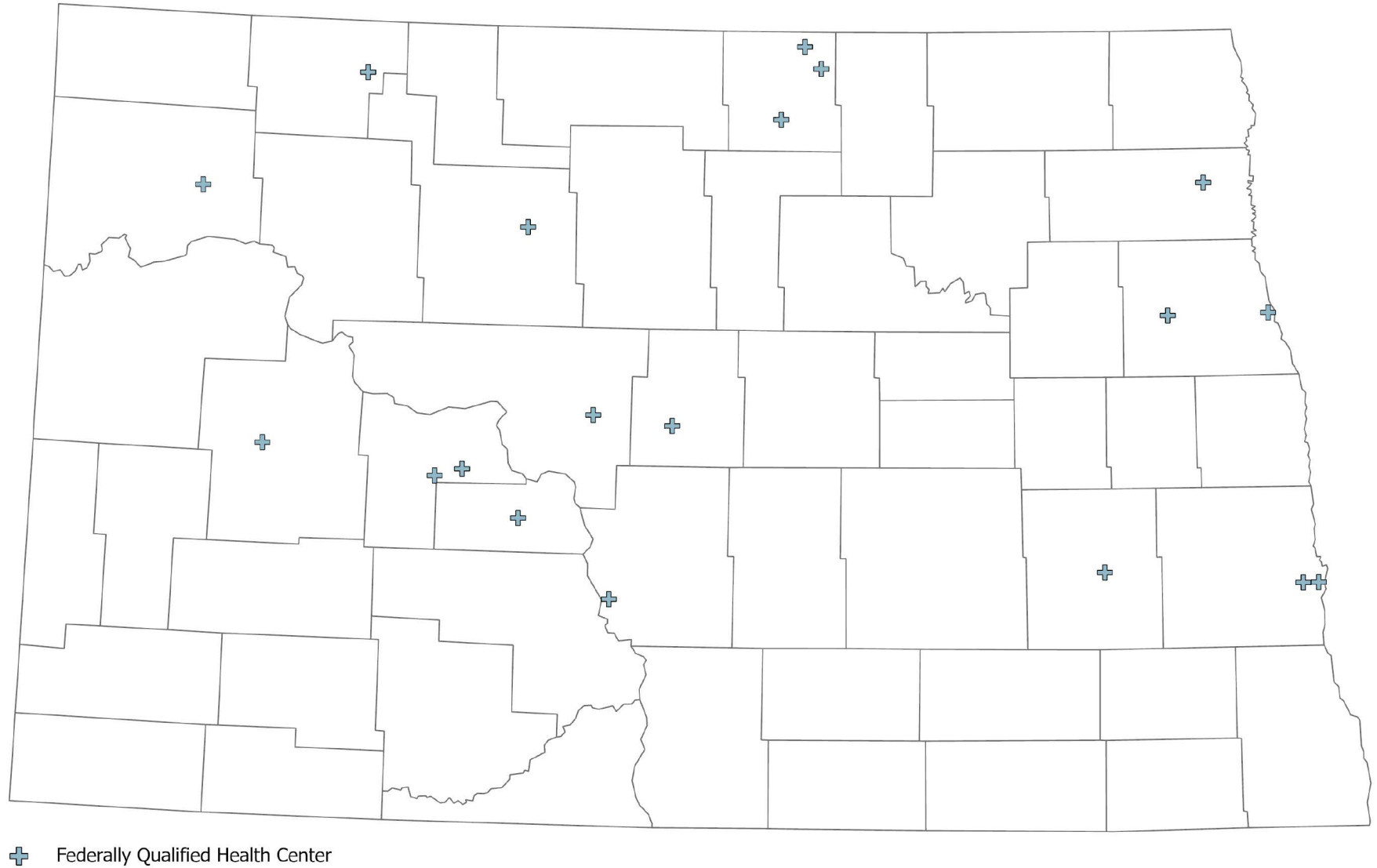
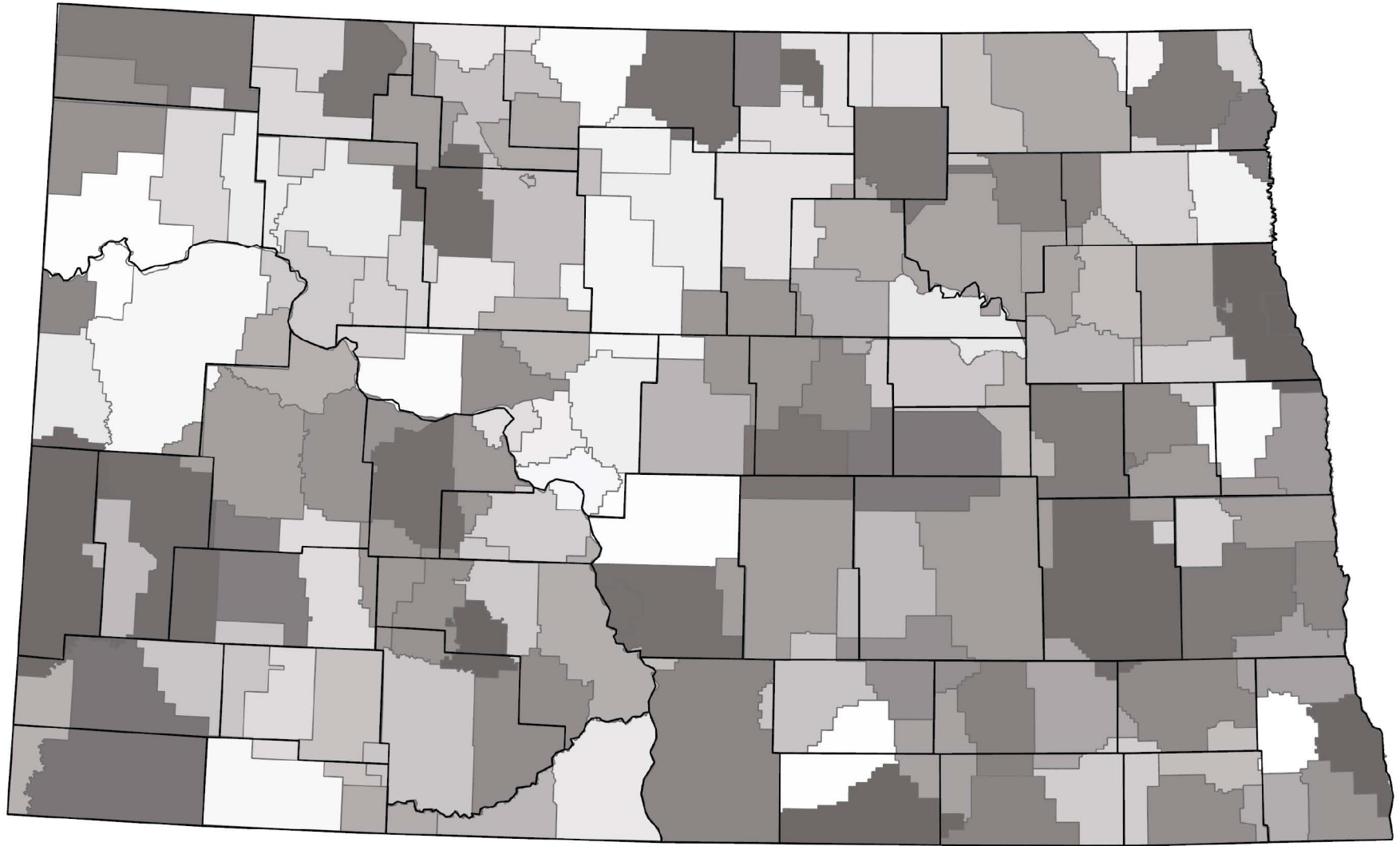


Figure 11.3. Federally Qualified Health Centers in North Dakota, 2024.¹



Grayscale used to differentiate service areas only.

Figure 11.4. Ambulance service areas in North Dakota, 2024.⁸

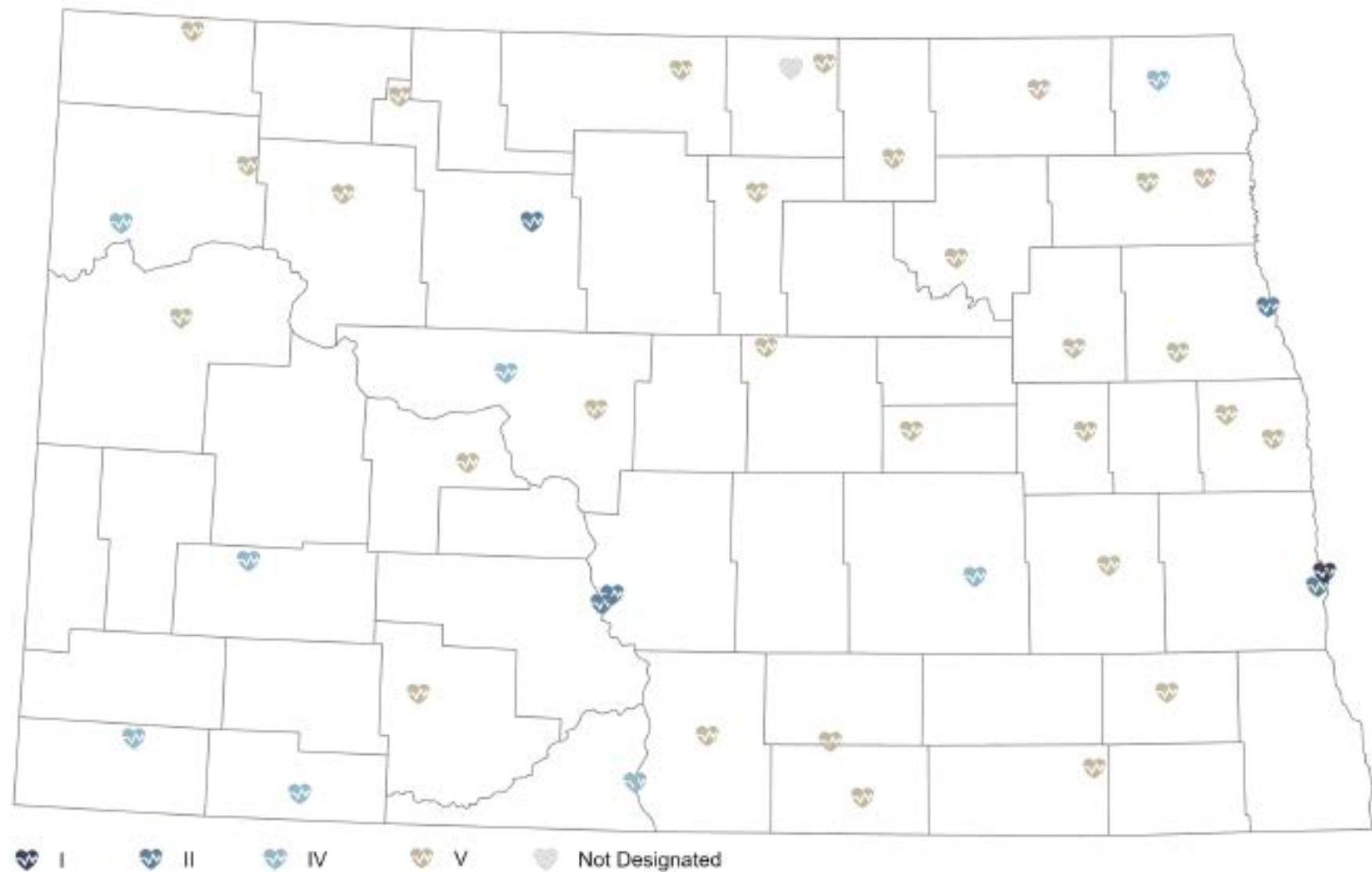


Figure 11.5. Trauma centers in North Dakota, 2024.¹¹

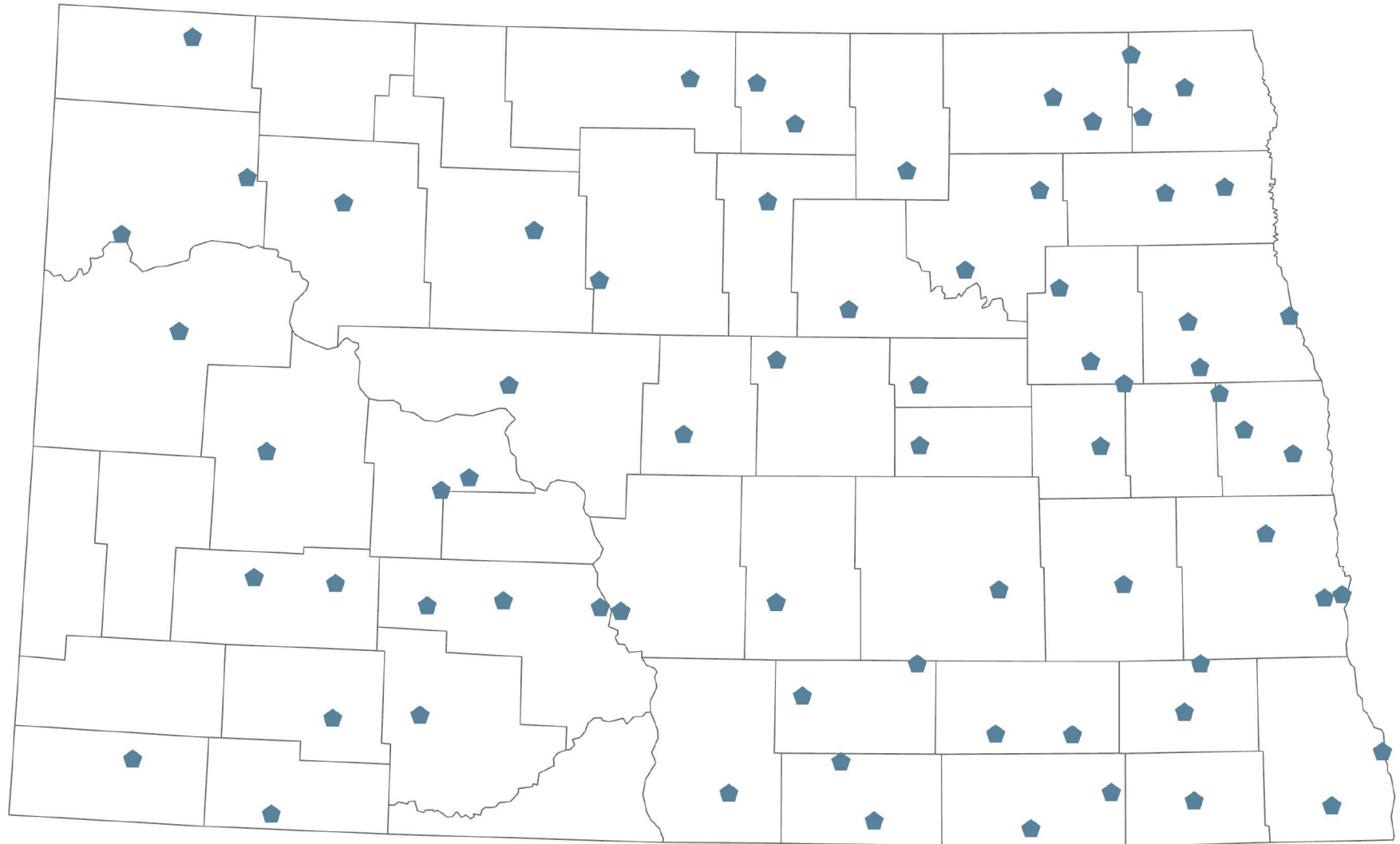


Figure 11.6. Long term care facilities in North Dakota, 2024.¹³

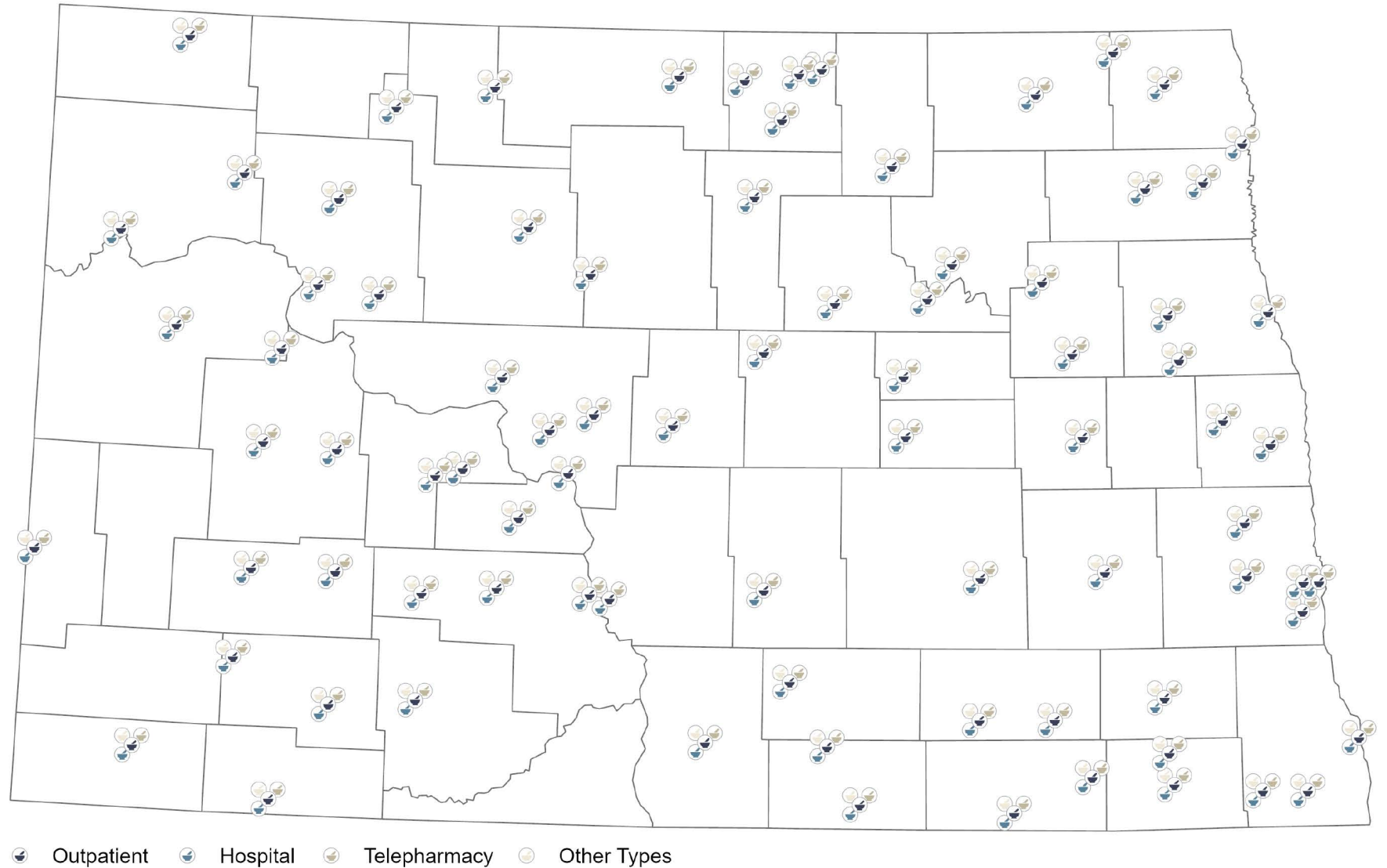


Figure 11.7. Pharmacies in North Dakota, 2024.¹⁵

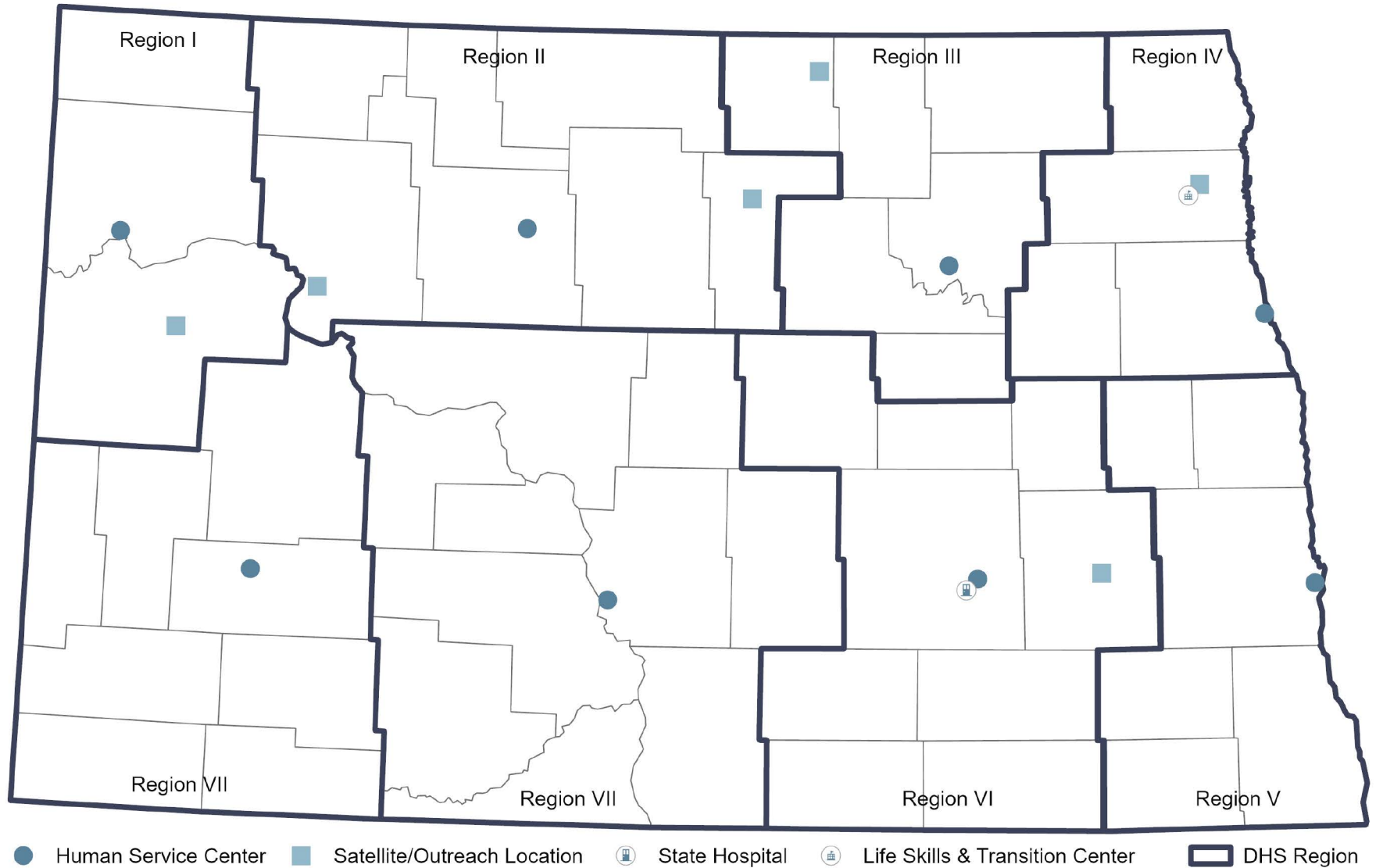


Figure 11.8. Human service locations in North Dakota, 2024.¹⁷

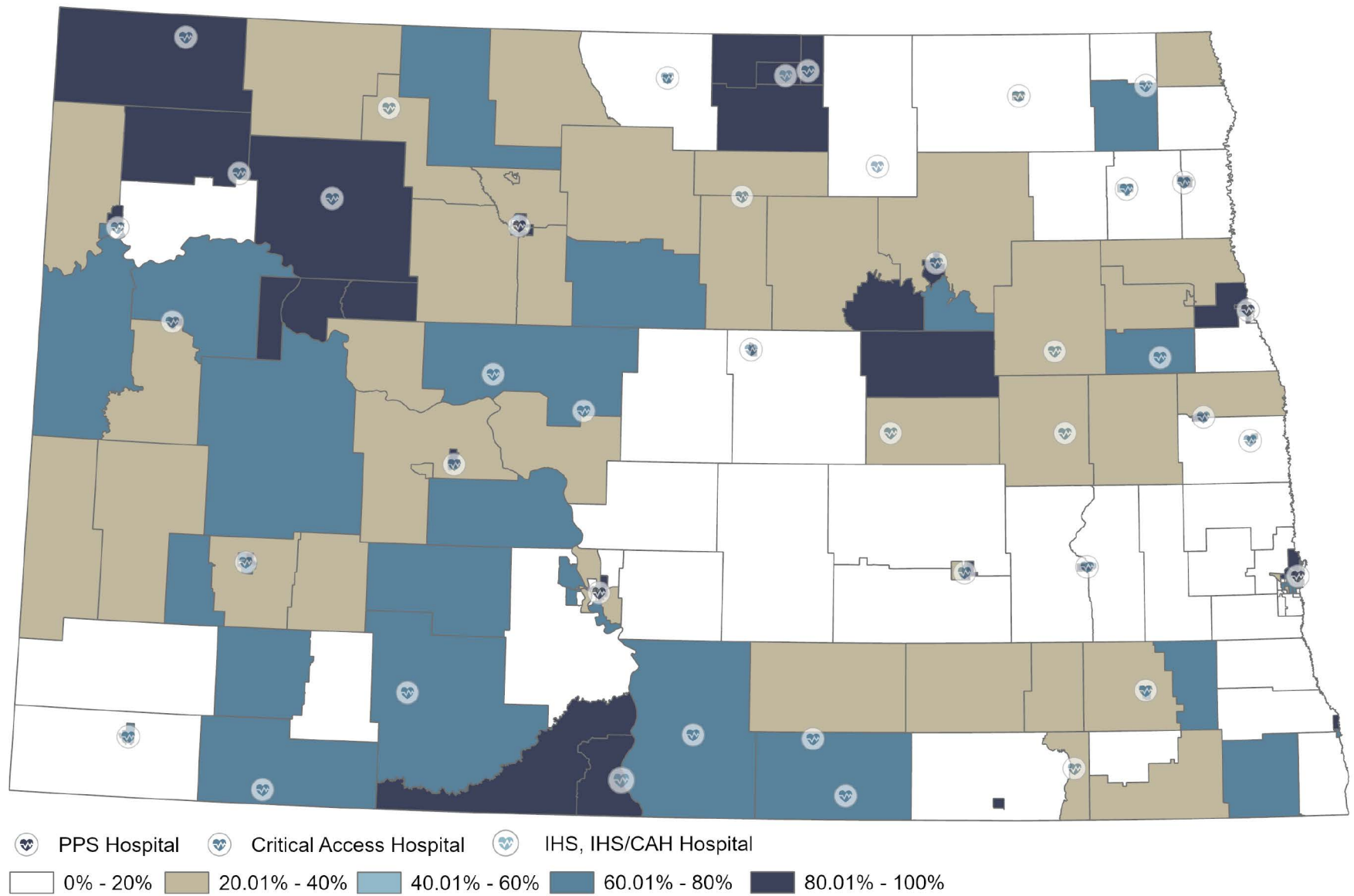


Figure 11.9. Social Vulnerability Index (SVI) housing type and transportation theme by Census Tract and North Dakota hospitals, 2024.^{1, 22}

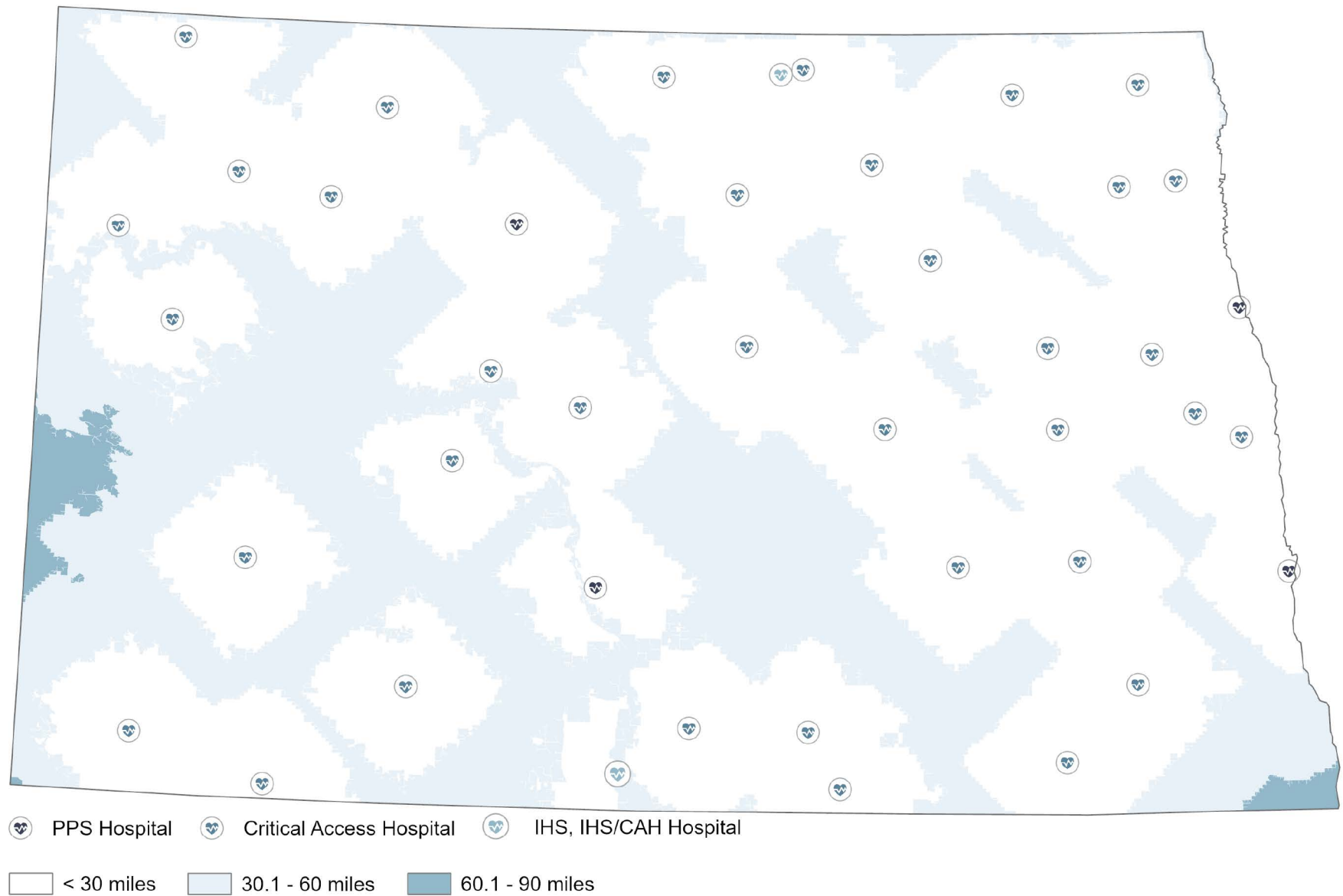


Figure 11.10. North Dakota hospital distance buffers, 2024.¹ Data note: The spatial software uses a road network that may not be adequately representative of roads on Tribal Nations.

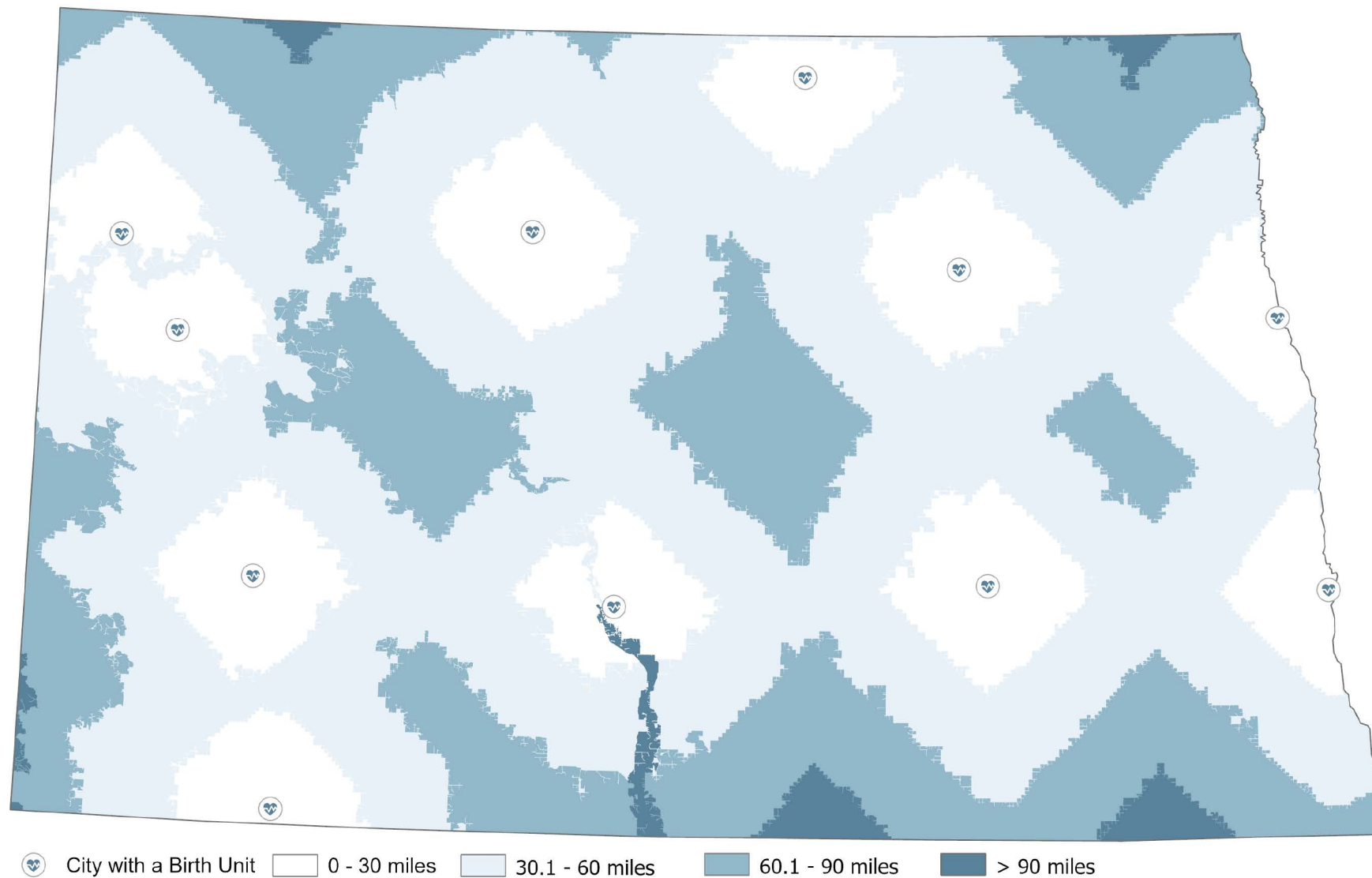


Figure 11.11. North Dakota cities with a birth unit and associated distance buffers, 2024.¹
Data note: The spatial software uses a road network that may not be adequately representative of roads on Tribal Nations.

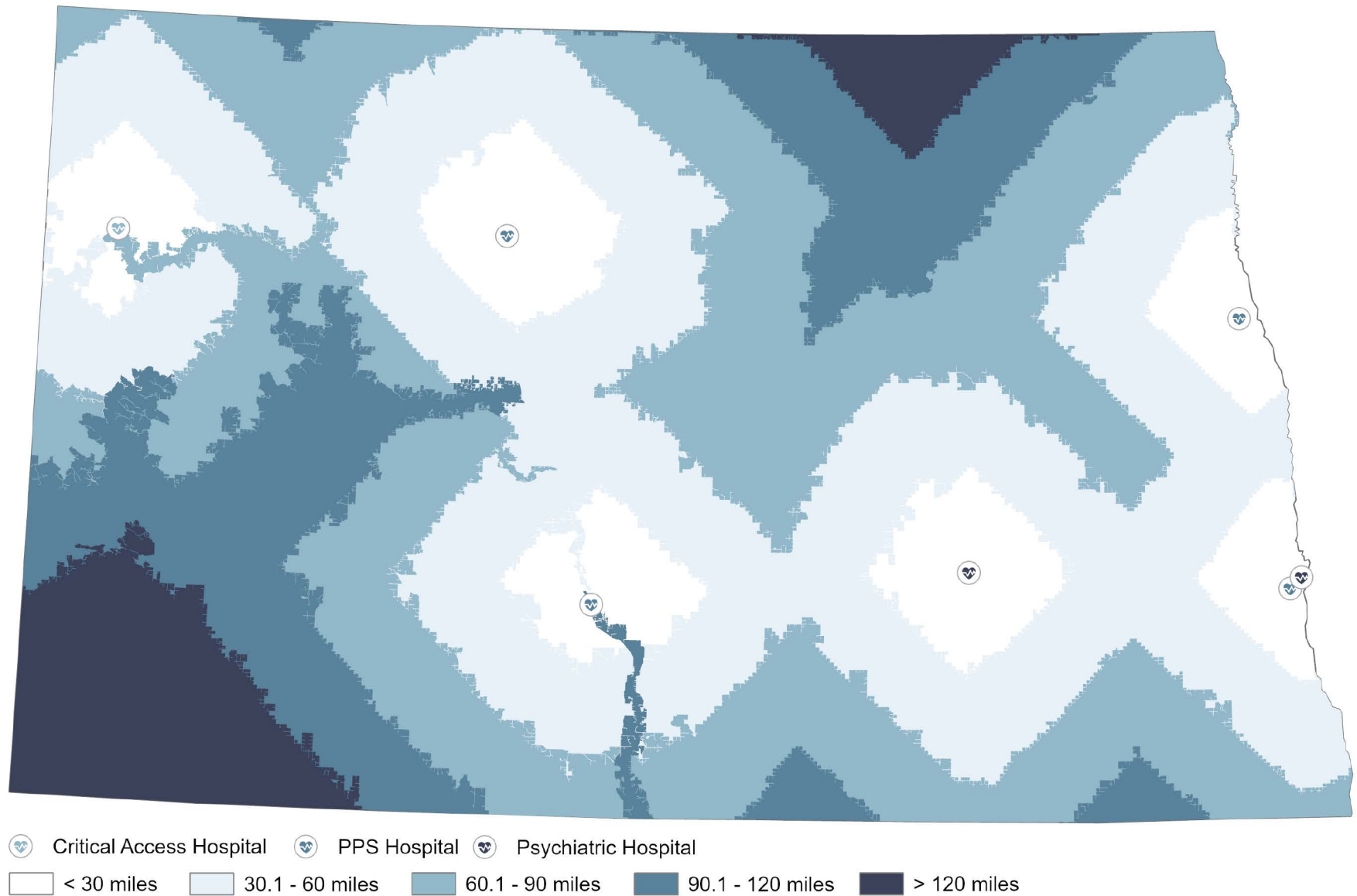


Figure 11.12. North Dakota hospitals with inpatient psychiatric beds and associated distance buffers, 2024.¹ Data note: The spatial software uses a road network that may not be adequately representative of roads on Tribal Nations.

CHAPTER TWELVE:

**UND SCHOOL OF MEDICINE AND HEALTH
SCIENCES COMMUNITY IMPACTS**

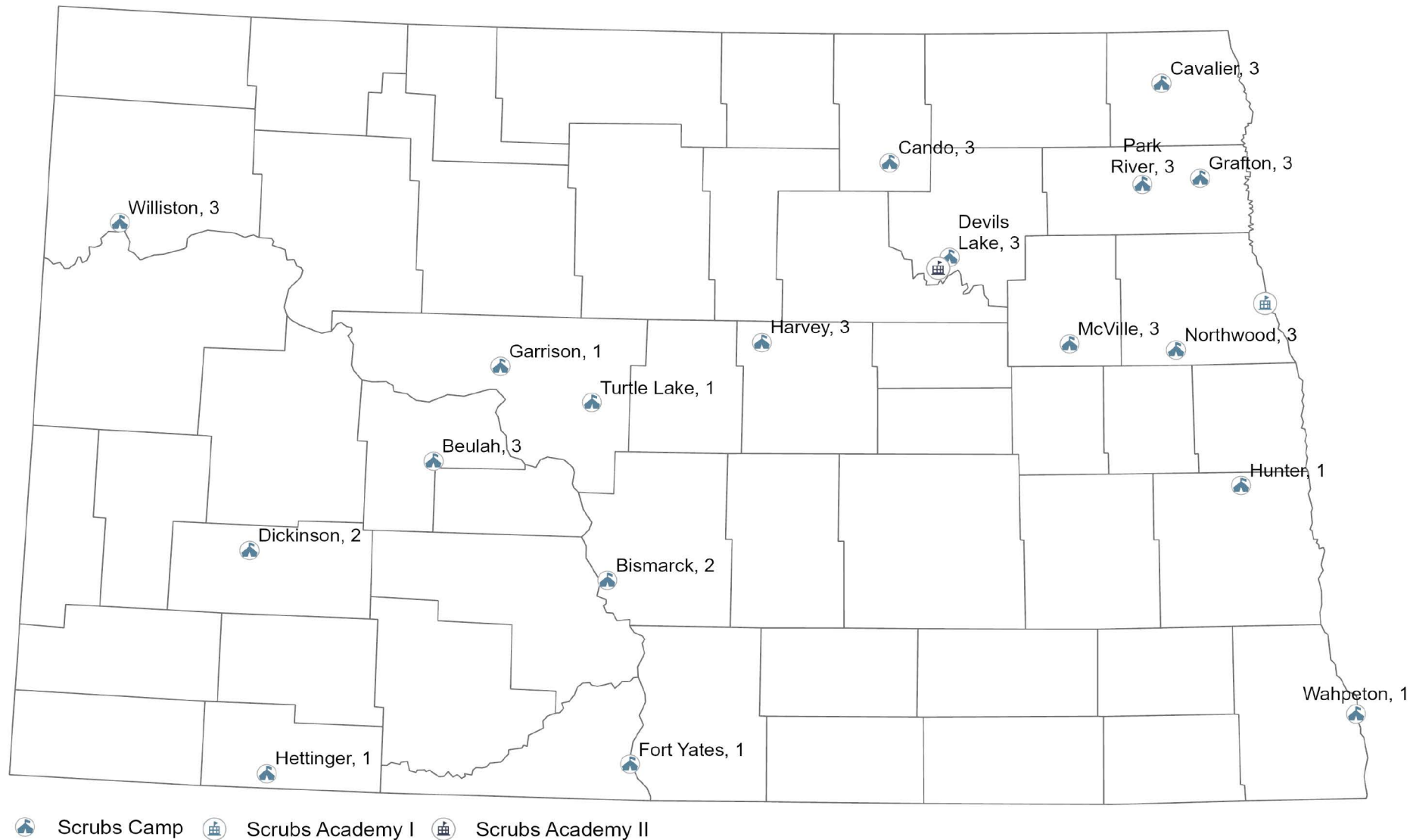


Figure 12.1. R-COOL Scrubs locations, 2022 - 2025.^{1, 2, 3}

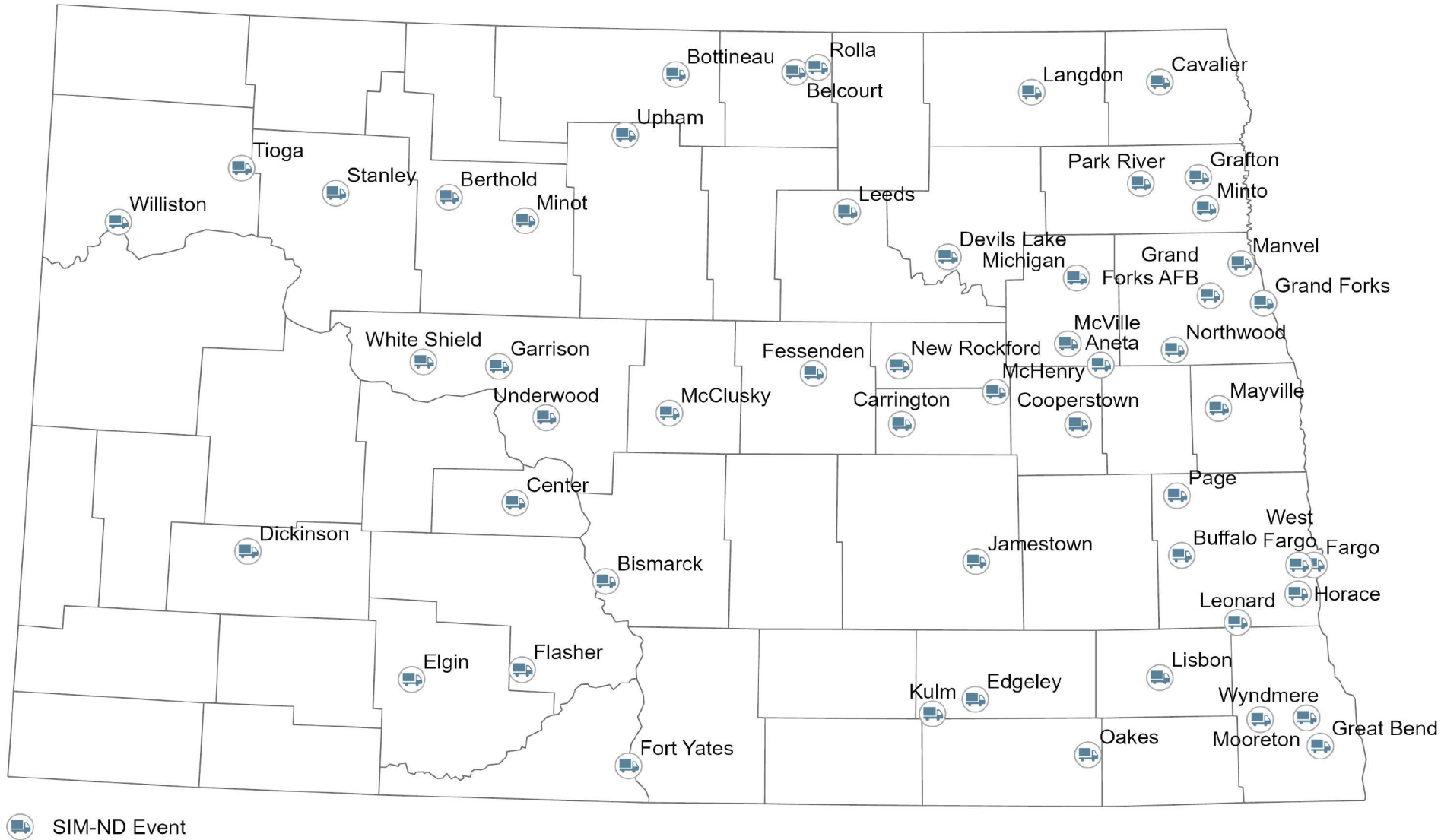


Figure 12.2. Cities with a SIM-ND event, 2023 - 2024.⁵

Table 12.1
R-COOL Scrubs Camps statistics.⁴

Year	Camps Funded	Communities Involved	Students Involved	Volunteers Involved
2009/2010	14	61	1,016	292
2010/2011	9	36	441	239
2011/2012	9	56	407	211
2012/2013	9	57	682	286
2013/2014	9	56	635	197
2014/2015	8	56	699	263
2015/2016	9	57	830	382
2016/2017	10	70	891	363
2017/2018	10	57	931	419
2018/2019	9	64	953	240
2019/2020	8*	28	381	158
2020/2021	7*	86	1,226	202
2021/2022	9*	121	1,048	302
2022/2023	13	134	1,406	411

**In 2019/2020 an additional 8 canceled due to COVID-19; in 2020/2021 an additional 2 canceled due to COVID-19; and in 2021/2022 an additional 1 canceled due to COVID-19*

Table 12.2***R-COOL Scrubs Academy statistics.***⁴

Year	Students Involved	Communities Involved
2011	38 (25 rural)	21
2012	45 (34 rural)	22
2013	56 (45 rural)	27
2014	51 (33 rural)	25
2015	56 (44 rural)	25
2016	55 (35 rural)	26
2017	56 (44 rural)	21
2018	80 (52 rural)	38
2019	84 (63 rural)	27
2020	<i>Canceled due to COVID-19</i>	
2021	<i>Canceled due to COVID-19</i>	
2022	<i>Canceled due to COVID-19</i>	
2023	77 (58 rural)	32

Table 12.3***Learners by type for SIM-ND events, January 2023 through November 2024.⁶***

Learner Types	Learners
Correctional Officers	8
CRNA Students	18
DNP Students	39
DOCR Staff, Nursing	24
EMS	717
EMS Students	126
EMS/Law Enforcement	160
EMS/Nursing	37
EMS/Nursing Students	40
EMS/Nursing/APP/MD	66
Fire/EMS	839
Flight (EMS/Nursing)	116
High School Students	123
Industry/First Responder	434
MD/DO	60
Military	78
Nursing	1,022
Nursing Students	136
Nursing/Anxillary Staff	8
Nursing/APP	21
Nursing/APP/MD	295
UND SMHS Students	48
Learners - Total	4,415

APP - Advanced Practice Providers, CRNA - Certified Registered Nurse Anesthetist, DNP - Doctor of Nursing Practice, DO - Doctor of Osteopathy, DOCR - Department of Corrections and Rehabilitation, EMS - Emergency Medical Services, MD - Medical Doctor

CHAPTER THIRTEEN:

QUALITY & VALUE OF HEALTHCARE

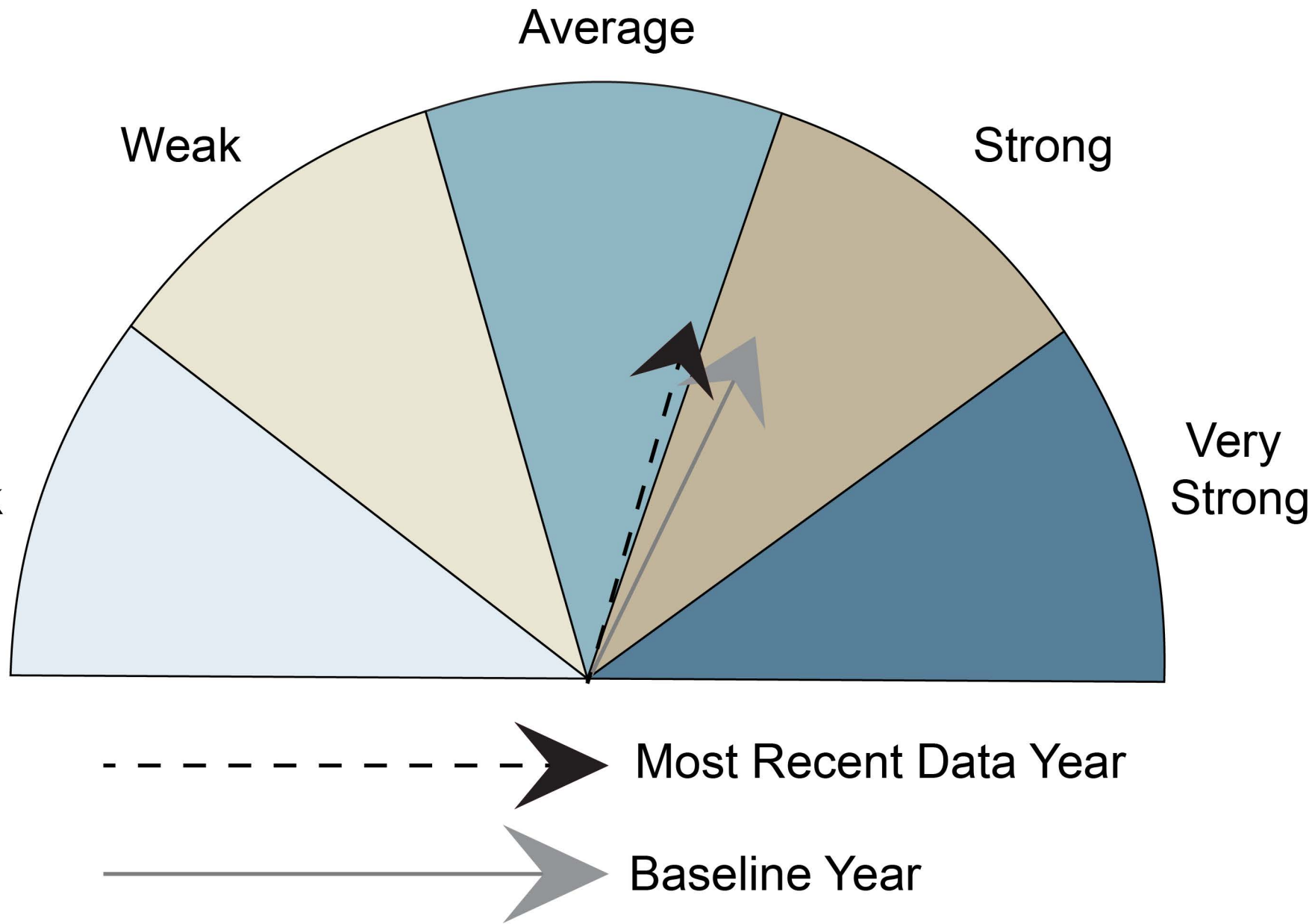


Figure 13.1. AHRQ state snapshot, 2022.⁸

Table 13.1***North Dakota rankings associated with the Commonwealth Fund******State Scorecard, 2023.^{9, 10}***

Category	2020	2022	2023
Access and Affordability	23 rd	23 rd	24 th
Prevention and Treatment	20 th	38 th	30 th
Avoidable Hospital Use and Costs	11 th	16 th	19 th
Racial and Ethnic Health Equity	11 th	32 nd	43 rd
Healthy Lives	15 th	25 th	21 st
Income Disparity	-	11 th	25 th
Reproductive and Women's Health	-	-	17 th

Table 13.2**Healthcare expenses.**^{12, 13}

Location	Per Capita Expenses by State of Residence	Private Insurance Spending Growth
U.S.	\$10,191	4.5%
Minnesota	\$10,846	4.1%
Montana	\$10,212	4.6%
South Dakota	\$12,495	4.8%
North Dakota	\$11,301	5.3%

Table 13.3***Employer insurance coverage.¹⁴***

Location	Employer	Medicaid	Medicare	Military	Uninsured
U.S.	48.7%	21.2%	14.6%	1.3%	8.0%
Minnesota	55.8%	18.3%	15.4%	0.8%	4.3%
Montana	43.4%	21.3%	17.6%	1.9%	8.1%
South Dakota	51.8%	13.4%	16.3%	3.0%	8.0%
North Dakota	56.6%	12.0%	14.8%	2.2%	6.6%

Table 13.4**Birth rates.** ^{15, 16, 17, 18}

Location	Birth Rate	Teen Birth Rate	Infant Deaths	Life Expectancy
U.S.	56.1	13.6	5.6	77.0
Minnesota	58.2	8.2	4.5	79.1
Montana	53.2	12.2	4.7	76.8
South Dakota	66.5	17.4	7.8	76.7
North Dakota	62.0	11.7	4.4	76.9