Comparing Public Transportation Services for Rural States in the Upper Midwest and Great Plains Region

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ABSTRACT

The objective of this research is to compare the level of public transportation services provided in North Dakota to those of surrounding states. The study focuses on North Dakota, South Dakota, Montana, Wyoming, Nebraska (excluding the Omaha metro area), and Minnesota (excluding the Twin Cities metro area). This involves an analysis of the level of service provided, measured in terms of geographic coverage, service availability, number of vehicles in use, and vehicle hours and miles of service; the amount of service consumed, measured in terms of ridership; the level of investment from different sources; and measures that evaluate the effectiveness and efficiency of service. The analysis also considers the varying levels of need throughout the region. The scope of the project includes all rural transit agencies receiving Section 5311 funding and small urban systems receiving Section 5307 funds. Overall, North Dakota performs well by some measures and not as well by others, but the level of service in the state is generally comparable to what is found in surrounding states. Statewide averages show how the states compare to each other, but there are significant variations within states regarding the level of service provided, for both rural and urban transit.

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1. INTRODUCTION

Investments in public transportation services in rural and small urban areas provide numerous benefits to users, communities, and the state. Many residents in smaller communities rely on transit to meet their daily needs, and these services can have significant impacts on the quality of life for older adults, people with disabilities, and those without access to an automobile (Mattson et al. 2020). Previous research by Mattson et al. (2020) analyzed transit and personal mobility options in North Dakota. The study identified service gaps by comparing service levels across the state to benchmarks. However, the study did not compare service levels in North Dakota to those of surrounding states. The neighboring states of South Dakota, Montana, Wyoming, Nebraska, and Greater Minnesota are most similar to North Dakota in terms of geographic and demographic characteristics. This region is largely rural with a few small urban areas. Transit agencies across the region face similar challenges and similar service demands. Comparing service levels across these states, therefore, is useful for understanding how well each state is meeting the transportation needs of its residents.

The objective of this research is to compare the level of public transportation services provided in North Dakota to those of surrounding states. The study focuses on North Dakota, South Dakota, Montana, Wyoming, Nebraska (excluding the Omaha metro area), and Minnesota (excluding the Twin Cities metro area). The study examines how well public transportation is serving the citizens in these mostly rural states. This involves an analysis of the level of service provided, measured in terms of geographic coverage, service availability, number of vehicles in use, and vehicle hours and miles of service; the amount of service consumed, measured in terms of ridership; the level of investment from different sources; and measures that evaluate the effectiveness and efficiency of service. The analysis also considers the varying levels of need throughout the region.

The scope of the project includes all public transportation in North Dakota, South Dakota, Montana, and Wyoming, as well as all transit in Minnesota and Nebraska excluding the Twins Cities and Omaha metro areas. This includes all rural agencies receiving section 5311 funding and small urban systems receiving section 5307 funds.

The report is organized as follows. Section 2 examines population density and demographic characteristics of the region, as well as trends in population growth and demographics. This is important for understanding the needs for transit services and challenges faced by operators. Section 3 provides an analysis of the rural transit services across the six states. This includes an examination of geographic coverage and span of service, operating statistics, financial statistics, fleet statistics, and efficiency measures over the previous 5-10 years. An analysis of urban transit services is provided in Section 4. This includes an analysis of the availability of fixed-route and demand-response services in the urban areas, and an examination of operating statistics and performance measures. Results are summarized and conclusions presented in Section 5.

2. DEMOGRAPHIC CHARACTERISTICS OF REGION

2.1 Population and Demographic Data

Rural transit agencies in the six-state region serve many highly rural areas with low population densities. Figures 2.1 and 2.2 show the population and population densities of counties in this region. The data in Section 2 are from the 2016-2020 five-year American Community Survey (ACS), and the seven-county Twin Cities metro area in Minnesota and Douglas County in Nebraska are excluded from these maps, since they are larger urban areas. Many counties in the region have very low population densities. Low density areas are more difficult to serve with public transit, as trip origins and destinations are geographically dispersed, resulting in longer trip distances and greater costs per trip. Higher densities are found in the counties with larger towns or cities, though the rural parts of these counties can be very rural. Minnesota, overall, has higher population densities, especially in areas closer to the Twin Cities.
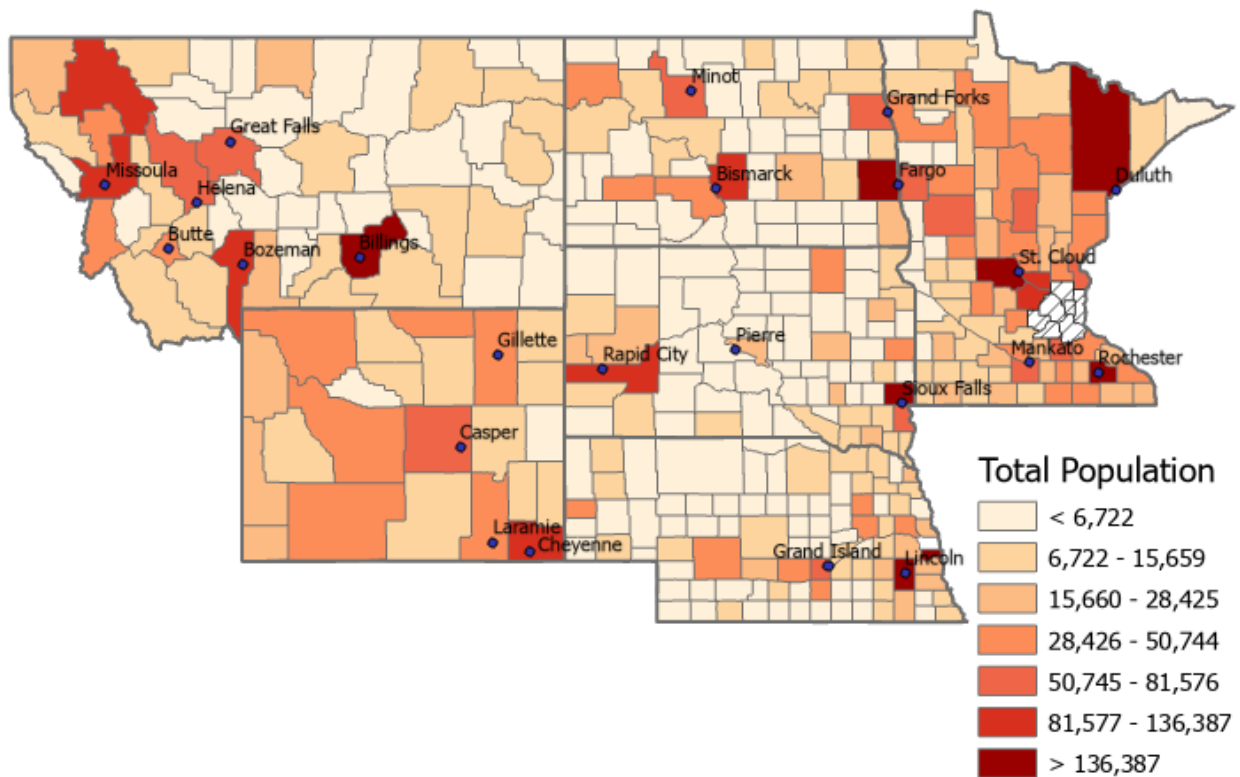
Figure 2.1 County Population Data
Source: 2016-2020 5-year American Community Survey
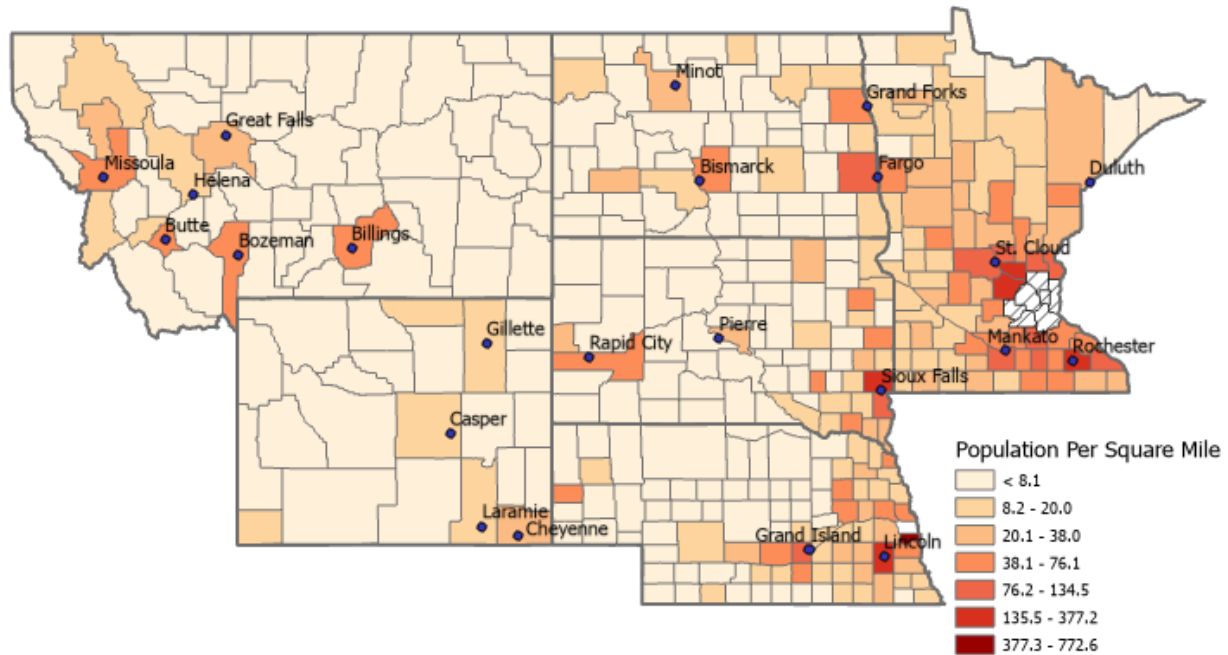
Figure 2.2 County Population Density
Source: 2016-2020 5-year American Community Survey

Demographics are an important indicator of need for services in rural areas. While many counties are highly rural with stagnant populations, the demographics indicate a high need for transit services. Figures 2.3 – 2.5 show the percentages of population in each county that are aged 65 or older, with a disability, or living below the poverty level, and Figure 2.6 shows the percentage of households without a vehicle. High percentages of older adults are found in some of the most rural counties in the region. High instances of poverty are found in some of the counties with high Native American populations. As shown in the Rural Transit Fact Book, the highest rates of poverty in the country are found in several South Dakota counties (Mattson and Mistry 2022). The counties with higher poverty rates also tend to have lower vehicle ownership rates. Disability also often tends to be related with age or poverty.
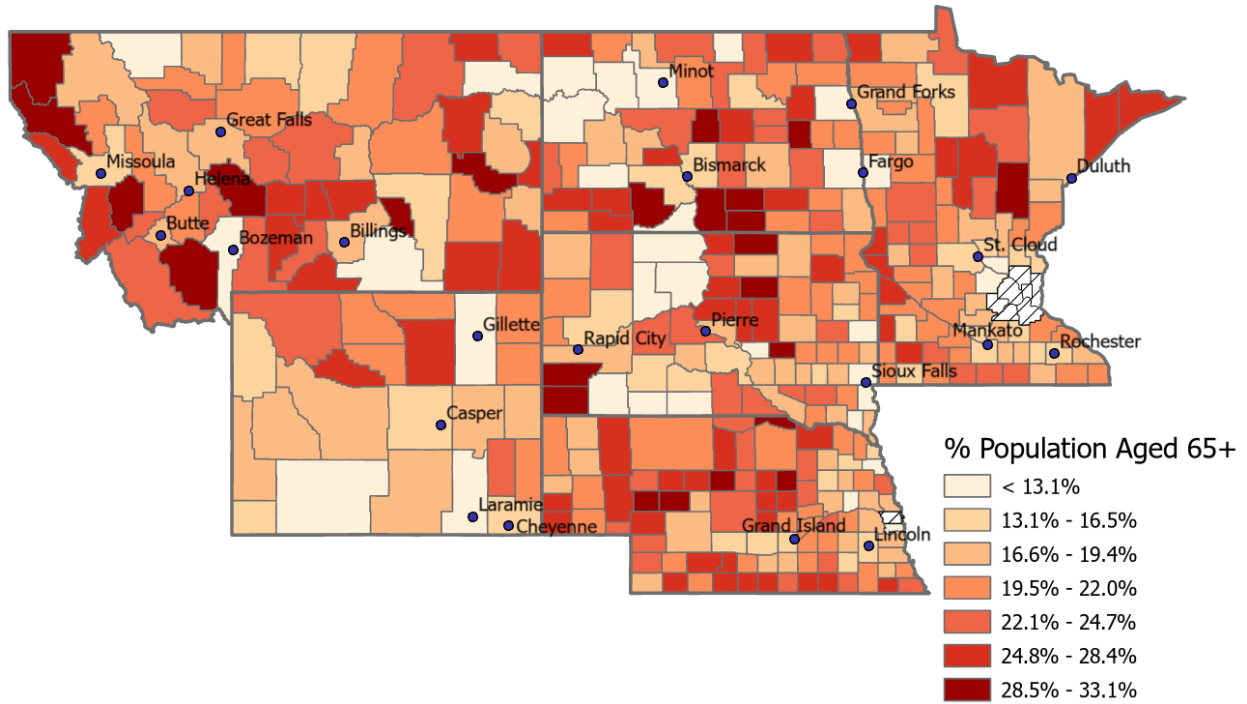
Figure 2.3 Percentage of Population Aged 65 or Older
Source: 2016-2020 5-year American Community Survey
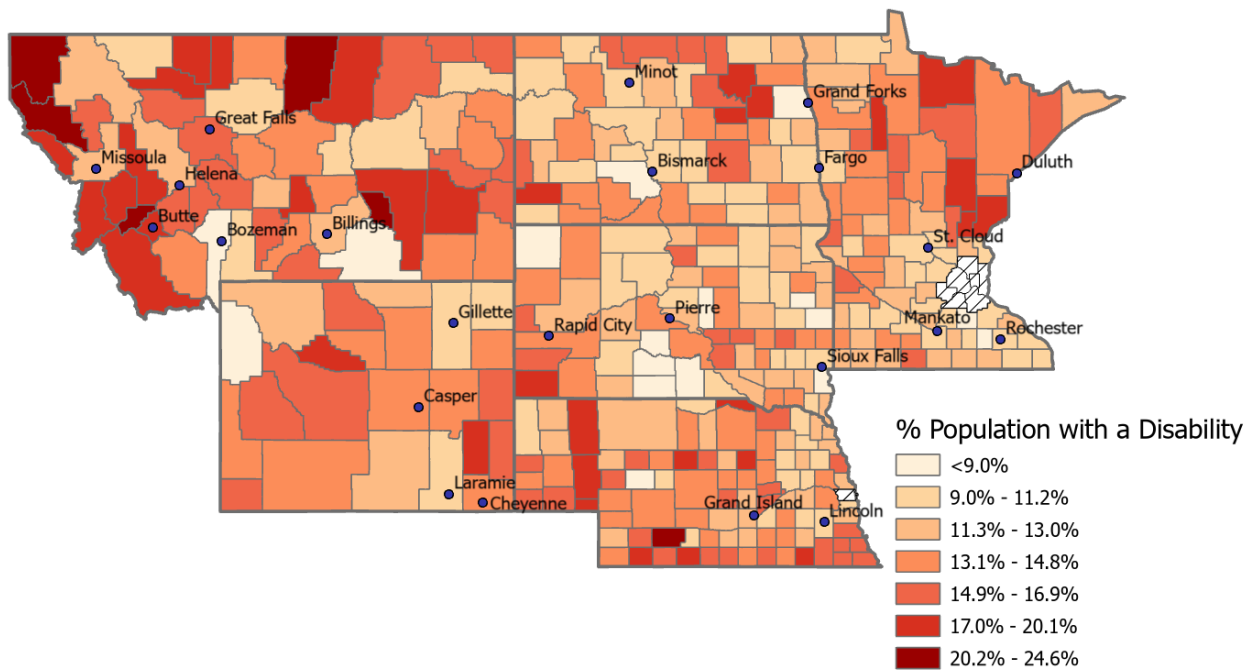
Figure 2.4 Percentage of Population with a Disability
Source: 2016-2020 5-year American Community Survey

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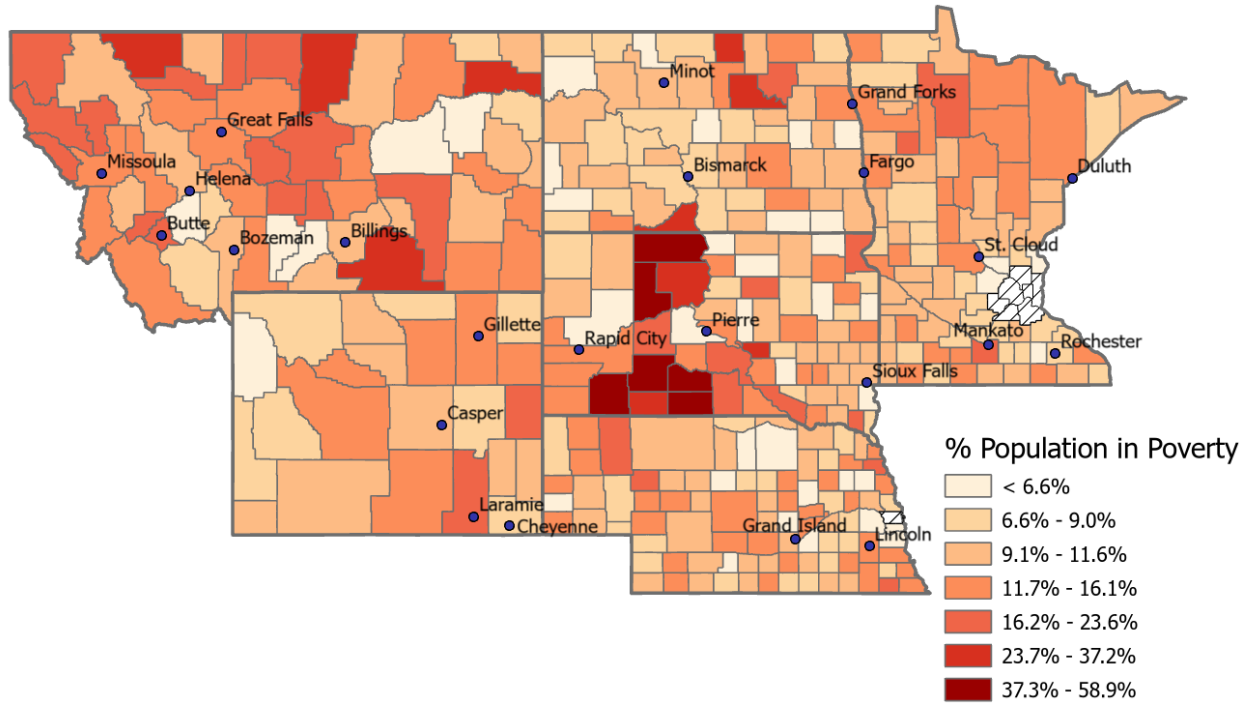
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Source: 2016-2020 5-year American Community Survey
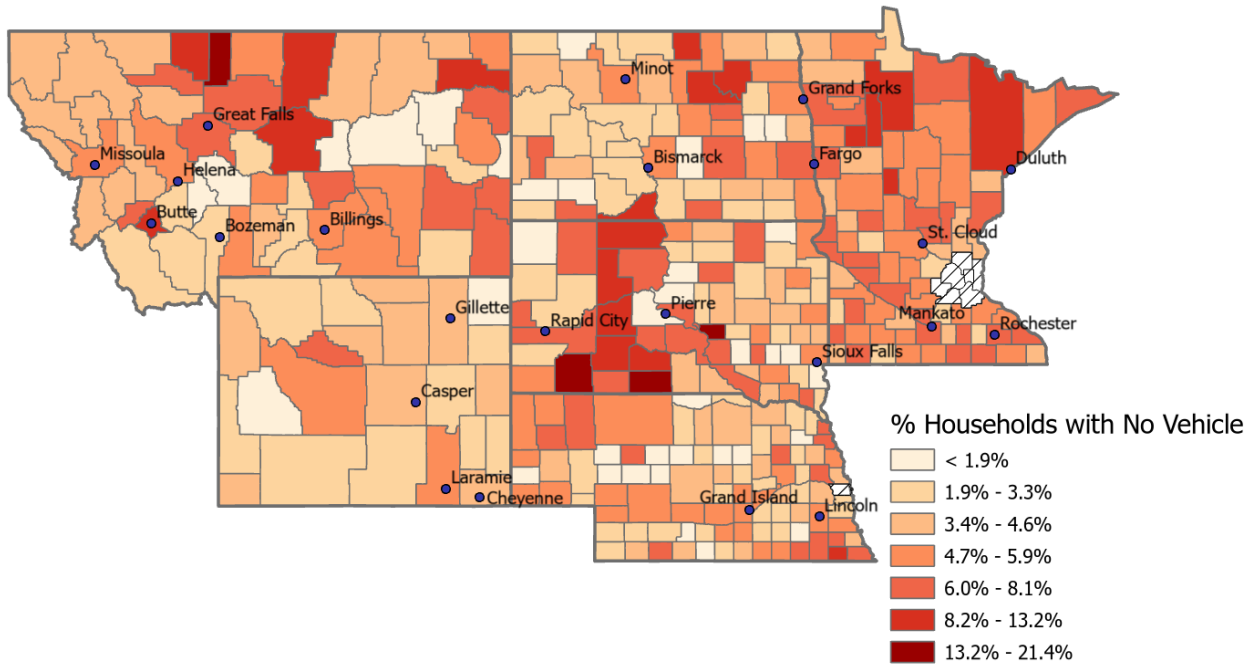
Figure 2.6 Percentage of Households with No Vehicle
Source: 2016-2020 5-year American Community Survey

2.2 Trends

Some areas of the region have experienced significant population growth, while others have seen declining or stagnant population, as shown in Figure 2.7. The counties shown in red and orange lost population from 2010 to 2020. This includes many of the most rural counties, and several of them experienced decreases of more than 5%. On the other hand, the figure also shows some counties with significant increases. In North Dakota, the largest population increases occurred in urban areas and the northwest region, where the oil activity is located. Across the region, population increases tended to occur in areas with larger cities or places with natural amenities, such as the mountains of western Montana and Wyoming. The most notable increase in rural population across the region has been in the oil region of western North Dakota.
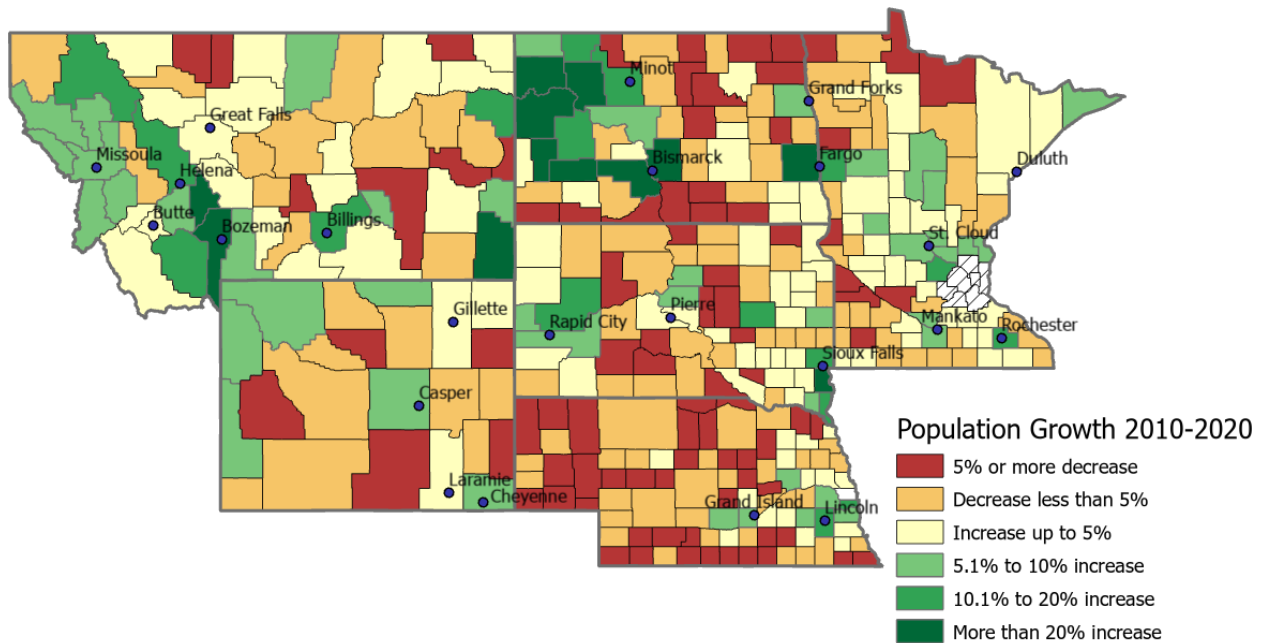
Figure 2.7 Population Change from 2010 to 2020
Source: 2010 and 2020 Decennial Census, U.S. Census

While several rural counties have experienced declining or stagnant population, it is important to examine the trends in the populations of transportation-disadvantaged groups, because those are the populations with the greatest need for public transportation. An aging population in rural areas could indicate a significant need for transit, despite the decline in overall population. Figure 2.8 shows the change in population aged 65 or older over the 10-year period, based on ACS five-year estimates for 2006-2010 and 2016-2020. This figure looks significantly different than Figure 2.7. There are still some rural counties, including a few counties in North Dakota, that experienced a decrease in the population of older adults, but the population of older adults increased in most counties, and in several counties, the population of older adults increased by more than 20%. This is true across the region, but it is especially the case in Wyoming, Montana, parts of western North Dakota and South Dakota and the urban areas in those states, and much of Minnesota. This shows an increasing need for public transportation across the region.
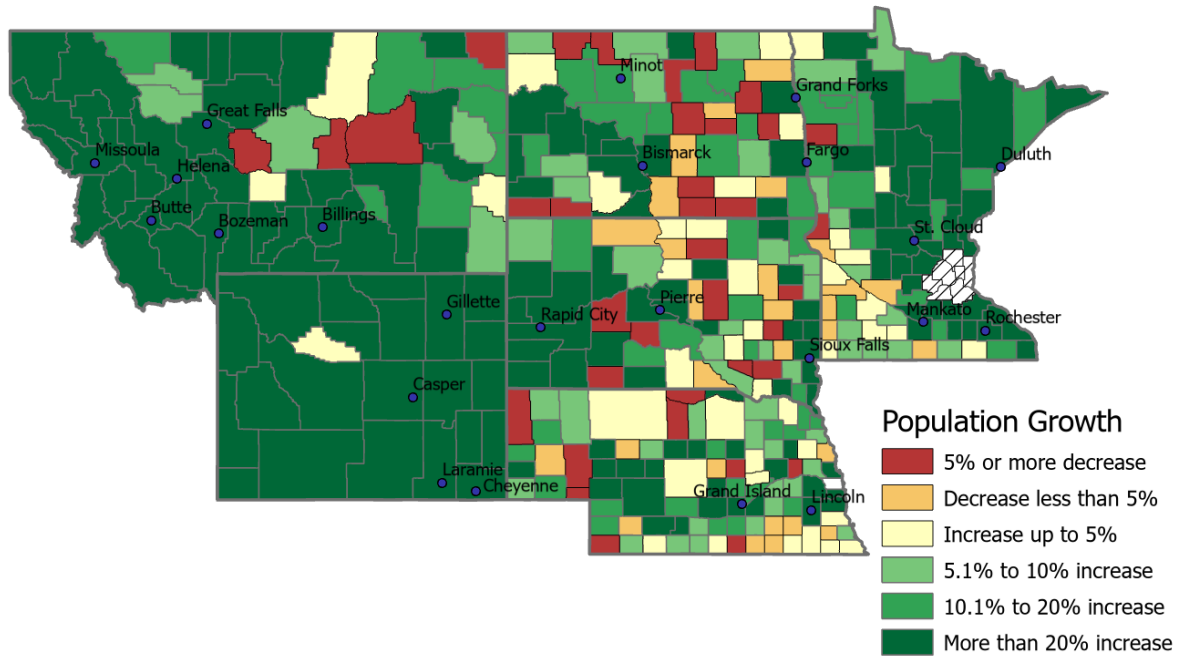
Figure 2.8 Change in Population Aged 65 or Older, 2010-2020
Source: American Community Survey, 2019 5-year estimates, 2010 5-year estimates

3. RURAL TRANSIT LEVEL OF SERVICE

There are 220 rural or tribal transit agencies operating in the six-state region, according to data from the 2021 National Transit Database. See Appendix A for a list of transit agencies in these states. This includes 30 rural and 6 tribal agencies in Minnesota, 35 rural and 7 tribal agencies in Montana, 54 rural and 4 tribal agencies in Nebraska, 22 rural and 3 tribal agencies in North Dakota, 12 rural and 6 tribal agencies in South Dakota, and 40 rural and 1 tribal system in Wyoming. Most of these agencies provide a demand-response service. Some are large, multi-county operators, while others serve a single county or city. Section 3.1 provides a description for how data were collected and analyzed to evaluate the level of rural transit services in each state, and the remainder of Section 3 describes the results.

3.1 Methodology

Rural transit services were evaluated across the six states based on service availability, operations, funding levels, fleet statistics, and efficiency measures. Most of the analysis was conducted using data from the National Transit Database (NTD), while additional data were collected to show the service availability.

To show the geographic coverage and span of service in each state, data were collected from websites of individual transit agencies and from state DOT websites. These data were collected to show where service is available and how the temporal availability, measured by days per week and hours per day, varies across the region. Data on advance reservation requirements were also collected, which is a measure of convenience and also temporal availability.

Remaining data were collected from the NTD. This includes state-level data for ridership, vehicle revenue miles, vehicle revenue hours, operating costs, operating funds by source, fare revenues, capital funds by source, number of vehicles in operation, and fleet characteristics. Rural and tribal data were collected for each state over the 2012-2021 period. With 10 years of data, the analysis shows trends in each state, as well as data before and during the COVID-19 pandemic.

To make a proper comparison between states, several metrics were calculated per capita. For each state, the rural population was calculated by subtracting the metro-area populations from the total population. Ridership, vehicle revenue miles, vehicle revenue hours, operating and capital funds, and number of vehicles were divided by the rural population to show per capita differences between states.

Because rural transit provides many trips to older adults, people with disabilities, and those with low-income, it is important to show how many trips rural agencies are providing and the level of service that is available in relation to the size of those populations. Areas with higher populations of transportation-disadvantaged groups would be expected to have a greater need for transit services. This study estimated the population of two transportation-disadvantaged groups in each state. The first is a combination of older adults and people with disabilities. It includes the population aged 65 or older plus the population aged 18-64 with a disability. The second group is the low-income population, which is measured as the population of those living in poverty. Several metrics, including ridership, vehicle miles and hours, and funding levels, were divided by the population of these two transportation-disadvantaged groups to show the level of service provided in comparison to the population of transportation-disadvantaged individuals.

Wyoming stands out as having very high ridership per capita. The reason for this is that two high-ridership systems account for a majority of rural transit trips in the state. Southern Teton Area Rapid Transit (START), which is a resort area service that serves many visitors and skiers, was providing more than 1 million rides per year before the pandemic. The University of Wyoming also operates a transit

system that is classified as rural, providing more than 700,000 rides per year at its peak. These two systems are not typical of most rural transit providers, but they have accounted for about 70-85% of total rural transit ridership in the state. Therefore, including these two systems in the state totals provides a misleading description of the level of service across most of the state. Therefore, calculations were also made for Wyoming that excluded these two systems and the areas they serve. This provides a description of the level of service across the rest of the state.

3.2 Geographic Coverage and Span of Service

Most counties within the six-state region have some level of rural transit service. Every county in North Dakota has service, while a few counties in the other states lack service (Table 3.1). Montana has the most counties without any public transportation.

Table 3.1 Counties with Transit Service

State	Number of Counties in State	Number of Counties with Transit Service				
		2017	2018	2019	2020	2021
Minnesota	87	86	86	86	86	86
Montana	56	30	38	38	38	39
Nebraska	93	84	84	84	86	88
North Dakota	53	53	53	53	53	53
South Dakota	66	59	59	59	60	60
Wyoming	23	14	14	11	23	23

Source: National Transit Database, 2017–2021

Figure 3.1 shows the number of days per week that rural public transit service is available in each county. The majority of rural transit operators provide service five days per week. Some counties have service on the weekends, while a few counties have service fewer than five days per week, or not at all. Service five days per week allows transit to be used for traditional weekday employment and education trips and provides access to medical services on weekdays. Six or seven days of service per week allows for transit to be used for those who work on the weekend and for more "life-fulfilling" types of trips, such as social and recreational trips (Kittelson & Associates et al. 2013). If service is not available at least five days per week, it cannot be regularly used for full-time work trips. Such a service can provide access for shopping, medical trips, and other activities, but access is more limited, and pre-planning is required so that trips are made when the service is available.
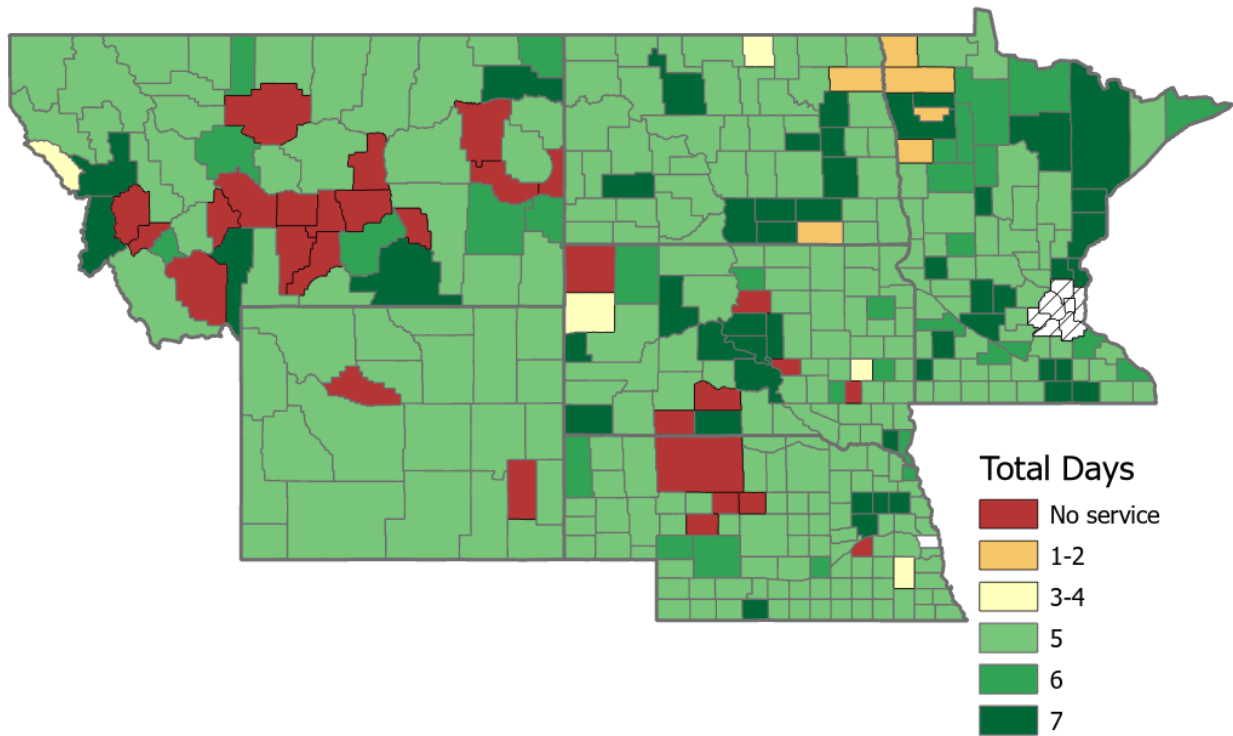
Figure 3.1 Days Per Week that Rural Public Transit Service is Available in Each County

The other measure of service span is the number of hours per day that service is available. Figure 3.2 shows the number of hours on a typical weekday (for a day in which service is available). TCRP Report 165 (Kittelson & Associates et al. 2013) explains how the number of hours per day affects the usefulness and quality of the service. The highest level of service is in those counties with 16 or more hours of service per day. This level of service allows for transit to be used for all trip purposes and can serve many work trips that begin earlier in the morning or end later in the evening. Only a few rural counties have this level of service. The next highest level is at least 12 hours but less than 16, which is provided in some rural counties. This allows for transit to be used during typical business hours, covering most work and medical trips. Most counties, however, have service less than 12 hours per day. Many counties have service at least 9 hours per day but less than 12. This level of service can be used for full-time work trips for those with traditional work hours, and it allows transit to be used for most medical trips and daytime activities. There are also several counties with less than 9 hours but at least 5 hours. This level of service is more limiting. It provides trips for essential services and some part-time jobs, but it likely will not serve most full-time jobs and it requires pre-planning to ensure that the entire round-trip can be scheduled during service hours. There are very few counties that have less than 5 hours of service, other than those with no service. Most counties in North Dakota have at least 5 hours of service but less than 12.
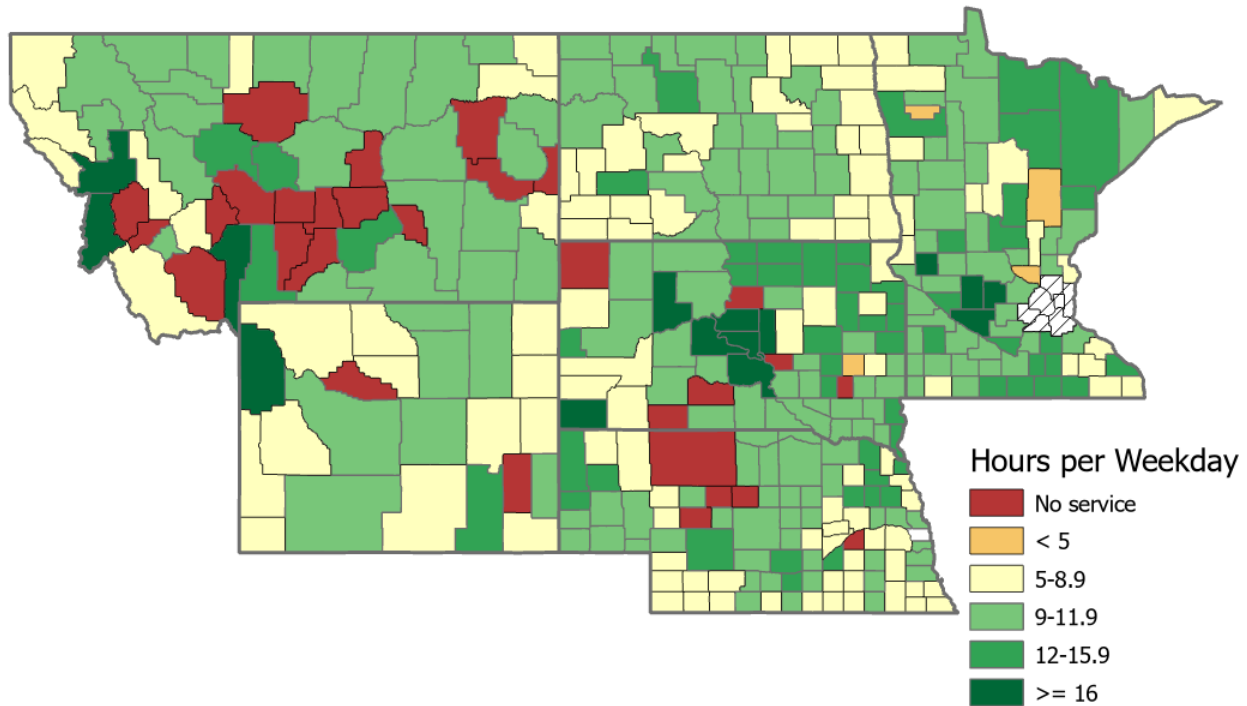
Figure 3.2 Hours of Service Per Weekday in Each County

These maps, however, do not convey the variability of service that may exist within a county. For example, in some counties, the service may be primarily in one or two cities, and the outlying areas have limited or no service. More detailed analysis is needed to determine the variation in service levels within counties. Another caveat is that the data were primarily collected from the websites of each transit agency, so the accuracy is dependent on the accuracy of the information reported on their websites. Furthermore, service levels may vary in some areas depending on demand.

Another measure of service availability is the advance reservation requirement. This indicates how long a rider must reserve a ride in advance, and it is important because it determines the degree of pre-planning that is required and the amount of spontaneity that can be accommodated. Most transit agencies in the region require that reservations be made one day in advance. A few require that a reservation be made two or three days in advance.

3.3 Operating Statistics

Data for ridership, vehicle revenue miles, and vehicle revenue hours over the previous 10 years show trends in rural transit operations. The trends tend to show that operations have been fairly steady over the last several years in these states, with some year-to-year variations. One exception is Minnesota, which experienced more significant increases from 2013 to 2018, before leveling off. The data also show that, because of the COVID-19 pandemic, operations dropped significantly in 2020, although the decrease was smaller in North Dakota compared to neighboring states. The data in this section show total ridership, vehicle revenue miles, and vehicle revenue hours across each state for rural and tribal systems, and the data are examined on a per capita basis.

3.3.1 Ridership

Figure 3.3 shows trends in ridership for rural and tribal transit systems in each state over the 2012-2021 period. In most states, ridership had been fairly stable for a number of years, before dropping in 2020 as a result of the COVID-19 pandemic. One exception is Minnesota, which had several years of increasing ridership until peaking in 2018. In North Dakota, total rural and tribal ridership ranged between 600,000 and 650,000 in most years, until dropping 17% in 2020 to 496,033. While ridership declined in 2020, North Dakota experienced a smaller drop than its neighboring states, both in absolute numbers and percentage terms. The largest percentage decreases were in South Dakota (36%) and Wyoming (34%). However, ridership rebounded somewhat in South Dakota in 2021, but continued to drop in the other states. Ridership dropped 18% in North Dakota in 2021 to 404,876.
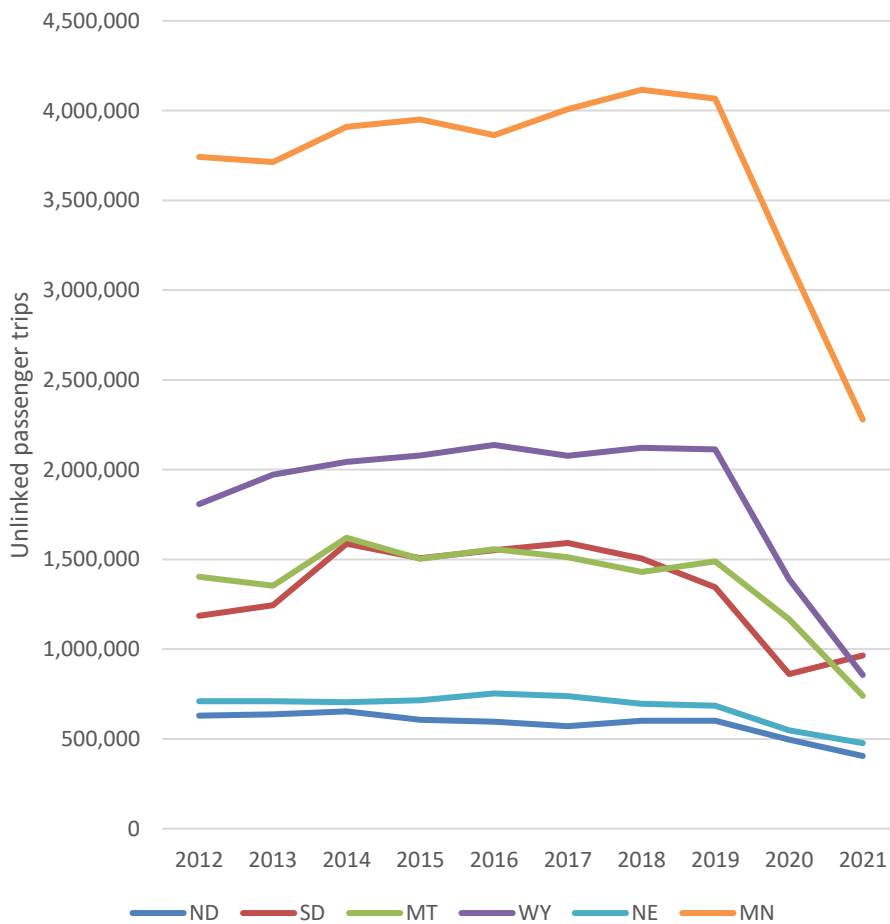
Figure 3.3 Rural and Tribal Ridership Trends, 2012-2021

Note that agencies report data according to their fiscal year, not the calendar year, and transit providers do not all use the same fiscal year. Data reported for 2020 are data for the fiscal year ending in 2020. The rural systems in Minnesota, Nebraska, Montana, and North Dakota use June 30 as the end of the fiscal year; the rural systems in South Dakota and Wyoming and many of the tribal systems across the region use September 30; and most urban systems and a few tribal operators use December 31. Therefore, depending on an agency's fiscal year, the data reported for 2020 could cover four months of the pandemic, which started in March 2020, or as many as 10 months, so their annual reports could be affected differently. The differences between states is partly because of these reporting differences

(ridership dropped more in South Dakota and Wyoming in 2020 because the period covered more of the pandemic). In many states, fiscal year 2020 only included the beginning of the pandemic, and ridership dropped further for fiscal year 2021 because the entire year was affected by the ongoing pandemic.

Ridership is expectedly the highest in Greater Minnesota, because its population is greater than the other states in the region. Rural and tribal ridership divided by rural population for each state is shown in Table 3.2.

Table 3.2 Rural and Tribal Transit Ridership Per Capita

	2017	2018	2019	2020	2021
North Dakota	1.30	1.37	1.36	1.07	0.87
South Dakota	2.42	2.27	2.01	1.27	1.42
Montana	1.90	1.76	1.83	1.39	0.88
Wyoming	4.45	4.59	4.59	3.02	1.86
Wyoming (exc. START, UW)	0.87	0.89	0.83	0.63	0.53
Nebraska	0.74	0.69	0.67	0.52	0.45
Minnesota	1.82	1.87	1.83	1.38	0.99

Wyoming stands out as having very high ridership per capita because of its two high-ridership systems (START and the University of Wyoming). However, if these two systems are not included, per capita ridership in Wyoming is among the lowest of these states, along with Nebraska. South Dakota provides the most trips per capita (if not including the two large systems in Wyoming), followed by Minnesota. Per capita ridership in North Dakota was about equal to that in Montana in 2021, though Montana had higher numbers in previous years.

Ridership divided by the rural population of the two transportation-disadvantaged groups are shown in Tables 3.3 and 3.4. Table 3.3 shows how many trips were made per older adult or person aged 18-64 with a disability, and Table 3.4 shows the number of trips per person in poverty.

Table 3.3 Rural and Tribal Transit Ridership per Population Aged 65 or Older or 18-64 with a Disability

	2017	2018	2019	2020	2021
North Dakota	6.85	7.20	7.15	5.63	4.59
South Dakota	12.05	11.30	10.01	6.33	7.09
Montana	8.48	7.86	8.16	6.21	3.94
Wyoming	22.54	23.28	23.25	15.32	9.44
Wyoming (exc. START, UW)	4.42	4.49	4.20	3.18	2.70
Nebraska	3.72	3.48	3.40	2.63	2.29
Minnesota	8.65	8.86	8.70	6.53	4.71

Table 3.4 Rural and Tribal Transit Ridership per Population in Poverty

	2017	2018	2019	2020	2021
North Dakota	13.47	14.16	14.06	11.07	9.04
South Dakota	18.34	17.19	15.24	9.64	10.79
Montana	15.03	13.93	14.46	11.01	6.99
Wyoming	40.32	41.66	41.60	27.41	16.89
Wyoming (exc. START, UW)	7.92	8.03	7.51	5.68	4.82
Nebraska	8.23	7.69	7.52	5.82	5.07
Minnesota	20.52	21.01	20.63	15.49	11.17

The trends in these two tables are similar to those in Table 3.2. Wyoming ranks the highest if the two large systems are included, but if those are not included, it ranks among the lowest, along with Nebraska. South Dakota provides the most trips per population of older adults or people with a disability, and Minnesota provides the most trips per population in poverty. In most years, North Dakota ranks behind South Dakota and Minnesota, ahead of Wyoming and Nebraska, and close to Montana.

3.3.2 Vehicle Revenue Miles

Figure 3.4 shows trends in vehicle revenue miles (VRM) for rural and tribal transit. Most states experienced annual increases in vehicle miles before dropping in 2020. However, VRM peaked in South Dakota in 2012 and in Montana in 2015, before leveling off or declining. In North Dakota, VRM had increased to 3.5 million miles in 2019, before decreasing 17% in 2020. The largest percentage decrease in VRM in 2020 occurred in South Dakota (27%). VRM rebounded in several states in 2021, increasing the most in South Dakota but also in Wyoming, Nebraska, and slightly in North Dakota. VRM was still below 2019 levels in each state, as of 2021.
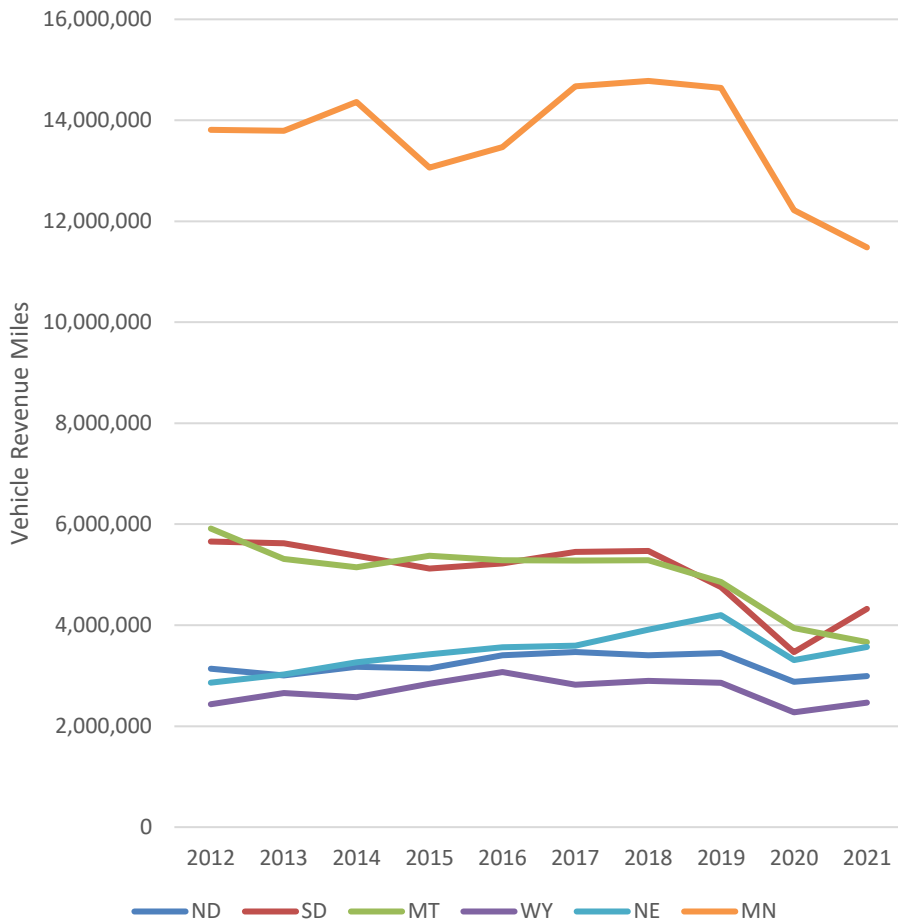
Figure 3.4. Trends in Vehicle Revenue Miles for Rural and Tribal Transit, 2011-2020

VRM per capita is highest in North Dakota and South Dakota and lowest in Wyoming (excluding START and UW), and Nebraska (Table 3.5). North Dakota also provides the most VRM in comparison to populations of older adults and people with disabilities (Table 3.6) and those living in poverty (Table 3.7).

Table 3.5 Rural and Tribal Transit Vehicle Revenue Miles per Capita

	2017	2018	2019	2020	2021
North Dakota	7.91	7.76	7.81	6.22	6.46
South Dakota	8.29	8.25	7.10	5.12	6.38
Montana	6.64	6.52	5.97	4.71	4.38
Wyoming	6.04	6.27	6.21	4.95	5.36
Wyoming (exc. START, UW)	3.56	3.83	3.61	3.00	3.15
Nebraska	3.59	3.88	4.14	3.16	3.40
Minnesota	6.68	6.71	6.61	5.33	5.00

Table 3.6 Rural and Tribal Transit Vehicle Revenue Miles per Population Aged 65 or Older or 18-64 with a Disability

	2017	2018	2019	2020	2021
North Dakota	41.57	40.78	41.01	32.66	33.95
South Dakota	41.27	41.07	35.37	25.49	31.78
Montana	29.59	29.06	26.62	21.00	19.52
Wyoming	30.60	31.78	31.46	25.06	27.17
Wyoming (exc. START, UW)	18.04	19.39	18.29	15.19	15.94
Nebraska	18.09	19.57	20.86	15.92	17.14
Minnesota	31.68	31.82	31.33	25.26	23.73

Table 3.7 Rural and Tribal Transit Vehicle Revenue Miles per Population in Poverty

	2017	2018	2019	2020	2021
North Dakota	81.79	80.24	80.69	64.26	66.80
South Dakota	62.82	62.50	53.83	38.79	48.37
Montana	52.44	51.50	47.18	37.21	34.60
Wyoming	54.75	56.87	56.29	44.85	48.62
Wyoming (exc. START, UW)	32.28	34.70	32.72	27.18	28.53
Nebraska	40.01	43.26	46.12	35.19	37.90
Minnesota	75.12	75.45	74.27	59.88	56.27

3.3.3 Vehicle Revenue Hours

Vehicle revenue hours (VRH) ranged between 201,000 and 233,000 in North Dakota during the 2012-2021 period (Figure 3.5). VRH was at its lowest level during that period in 2021, after decreases of 9% in 2020 and 4% in 2021. Other states experienced greater drops in VRH in 2020, especially South Dakota and Minnesota, though VRH in South Dakota rebounded in 2021.
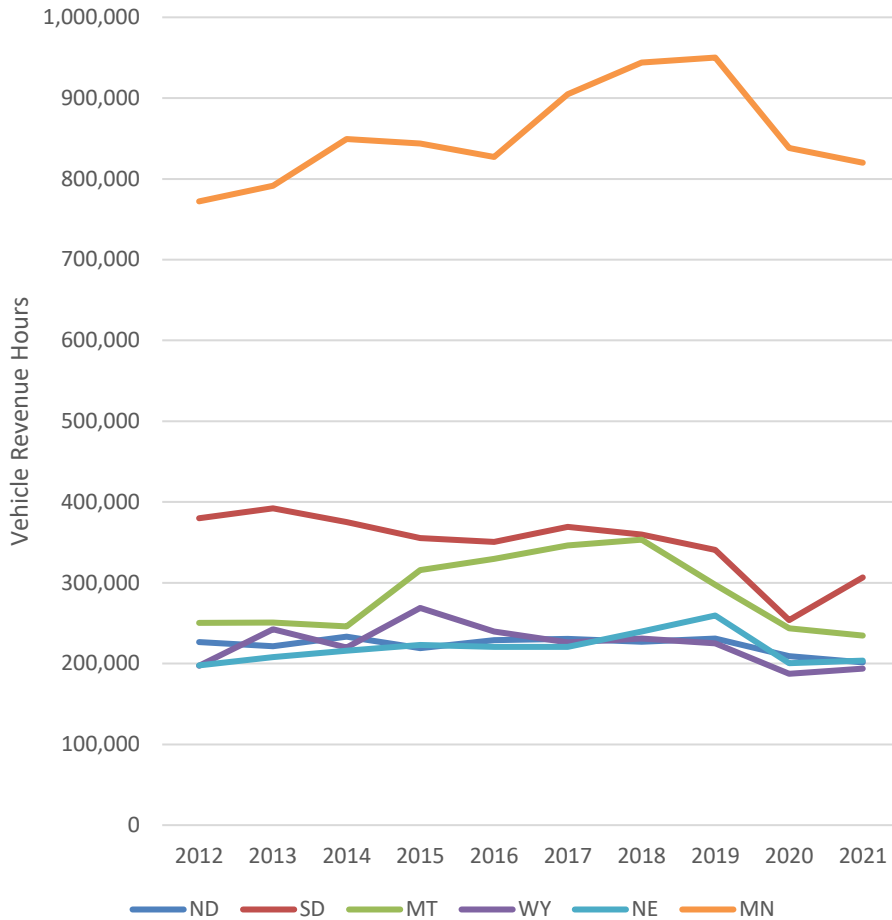
Figure 3.5 Trends in Vehicle Revenue Hours for Rural and Tribal Transit, 2011-2020

Measured on a per capita basis, VRH is highest in North Dakota and South Dakota and lowest in Nebraska (Table 3.8). North Dakota and South Dakota also provide the most VRH per population of older adults and people with disabilities, and North Dakota provides the most VRH per person living in poverty.

Table 3.8 Rural and Tribal Transit Vehicle Revenue Hours per Capita

	2017	2018	2019	2020	2021
North Dakota	0.53	0.52	0.52	0.45	0.44
South Dakota	0.56	0.54	0.51	0.37	0.45
Montana	0.44	0.44	0.37	0.29	0.28
Wyoming	0.48	0.50	0.49	0.41	0.42
Wyoming (exc. START, UW)	0.29	0.30	0.29	0.25	0.26
Nebraska	0.22	0.24	0.26	0.19	0.19
Minnesota	0.41	0.43	0.43	0.37	0.36

Table 3.9 Rural and Tribal Transit Vehicle Revenue Hours per Population Aged 65 or Older or 18-64 with a Disability

	2017	2018	2019	2020	2021
North Dakota	2.76	2.72	2.74	2.38	2.29
South Dakota	2.79	2.70	2.54	1.87	2.26
Montana	1.94	1.94	1.63	1.30	1.25
Wyoming	2.45	2.53	2.48	2.07	2.13
Wyoming (exc. START, UW)	1.47	1.50	1.46	1.29	1.34
Nebraska	1.11	1.20	1.29	0.96	0.98
Minnesota	1.95	2.03	2.03	1.73	1.69

Table 3.10 Rural and Tribal Transit Vehicle Revenue Hours per Population in Poverty

	2017	2018	2019	2020	2021
North Dakota	5.44	5.35	5.40	4.67	4.50
South Dakota	4.25	4.11	3.86	2.84	3.43
Montana	3.44	3.44	2.89	2.30	2.22
Wyoming	4.39	4.53	4.43	3.70	3.82
Wyoming (exc. START, UW)	2.62	2.69	2.62	2.30	2.39
Nebraska	2.46	2.65	2.85	2.13	2.16
Minnesota	4.63	4.82	4.82	4.11	4.02

3.4 Financial Statistics

3.4.1 Operating Funds by Source

Figure 3.6 shows the amount of operating funding for rural transit in each state, by source, for 2012-2021. Tribal transit is not included in this figure. Differences between states can be seen regarding the total level of funding, trends in funding amounts, and reliance on different sources of funding. Funding in each state has generally been trending upward during this period. North Dakota, Montana, and Minnesota experienced steady growth in funding. Funding in South Dakota was fairly level for several years before starting to increase in 2019. Funding in Wyoming has leveled off in recent years. Funding spiked in Nebraska in 2013, then dropped, and has since been steadily growing. Overall, Minnesota has the highest level of investment in rural transit, which is expected because it is more populated. Funding in North Dakota is similar to that in Wyoming and less than the level of funding in each of the other states.
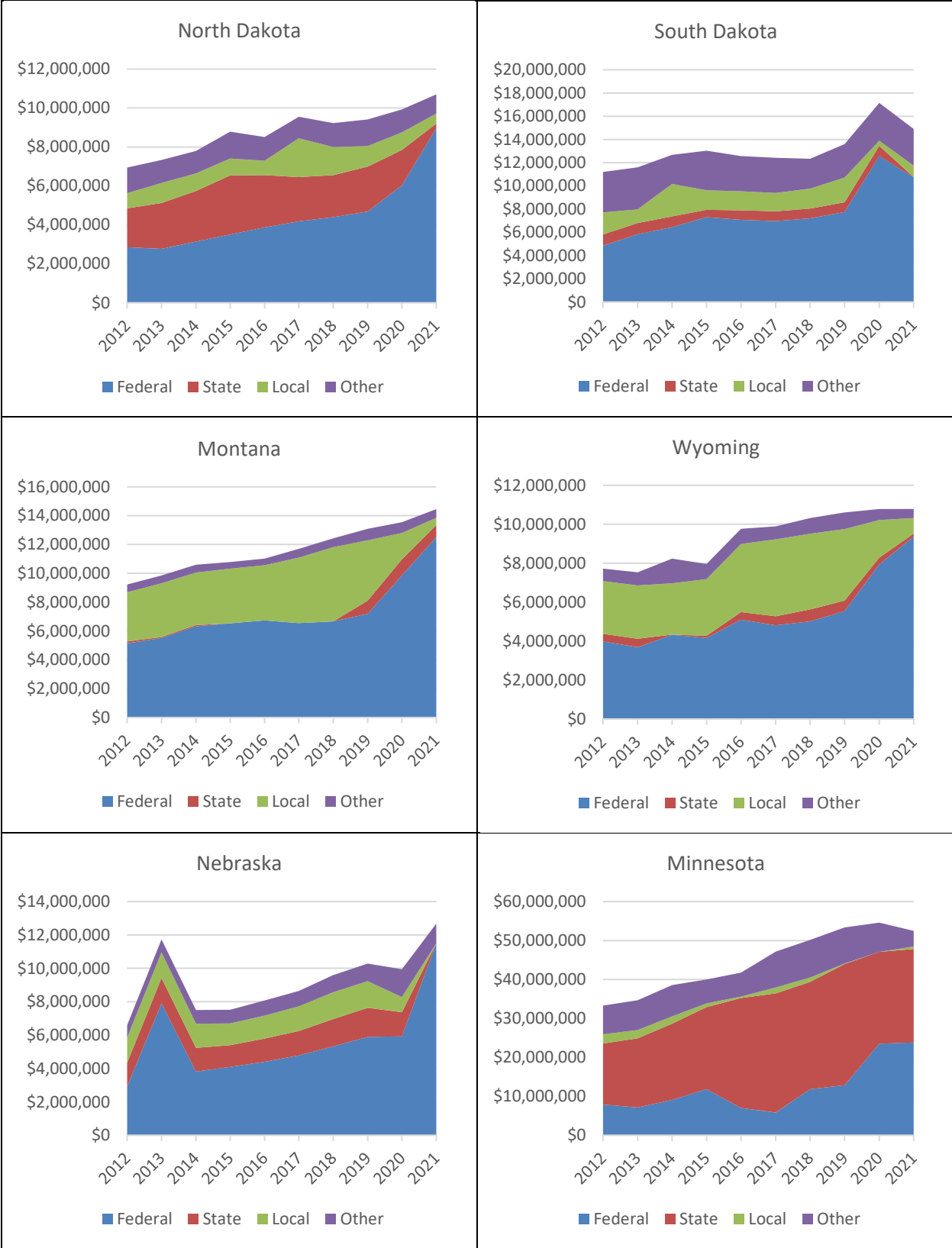
Figure 3.6 Rural Transit Operating Funding, by Source, 2012-2021

Prior to the pandemic, the federal government accounted for about half of the rural transit operating funding in most of these states, with the exception of Minnesota, which has had a greater reliance on state funding. In response to the pandemic, the federal government increased investment in rural transit in 2020 and 2021. This resulted in either an increase in total funding for rural transit or a shift in funding sources to a greater reliance on federal funds, or a combination of both. In North Dakota, total operating funding increased for rural transit, and there was also a decrease in operating funds from the state. In Wyoming, total funding remained relatively the same, and the federal funds were used to replace local sources.

Figure 3.7 shows the shares of operating funding by source, averaged over the 2017-2021 period. Again, funding shares are greater than typical for the federal government because of the pandemic spending. In the years prior to the pandemic, federal funds accounted for 50% of operating expenses in North Dakota, 20% in Minnesota, and slightly more than half in the other states. Minnesota relies on state funding the most, by a large margin. State funding is the least significant in South Dakota, Montana, and Wyoming, where there is a greater reliance on local funds or directly generated funds. The "Other" funds denoted in Figures 3.6 and 3.7 include directly generated funds, such as fare revenues, advertising, contract revenues, donations, etc. North Dakota relies on a balance of state, local, and directly generated funds to accompany the federal funding, with a greater reliance on state funds.
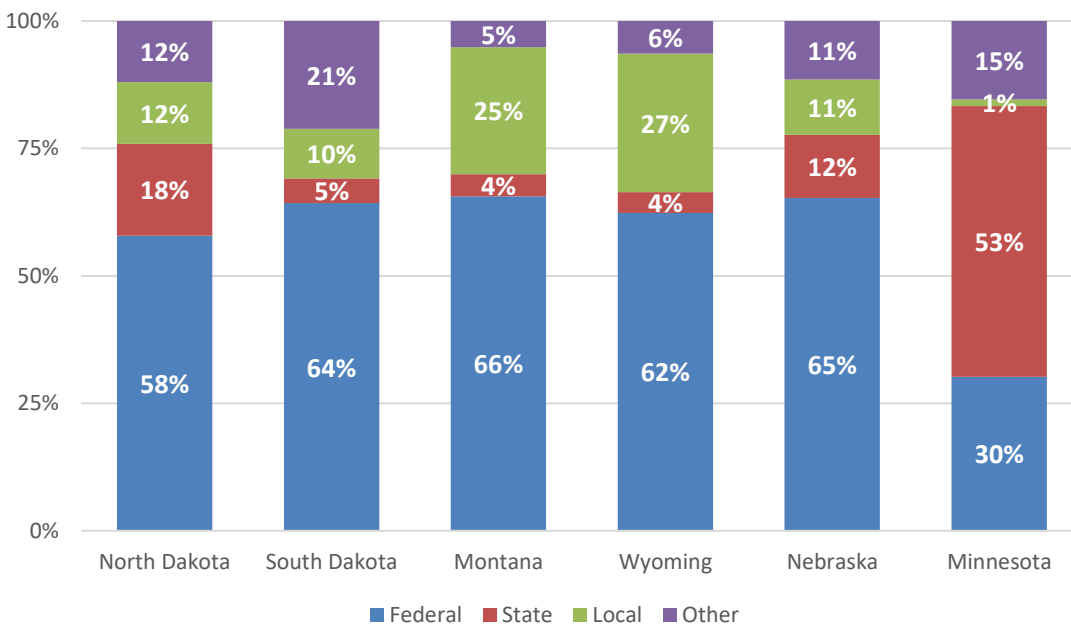
Figure 3.7 Share of Rural Transit Operating Funding by Source, 2017-2021

Figure 3.8 shows tribal transit operating funding in each state, by source, for 2012-2021. Tribal transit funding is the greatest in Montana, Minnesota, and South Dakota and the lowest in Wyoming. Funding in North Dakota followed a general upward trend before declining in 2021. In each state, federal funding accounts for a large share of tribal transit operating funds.
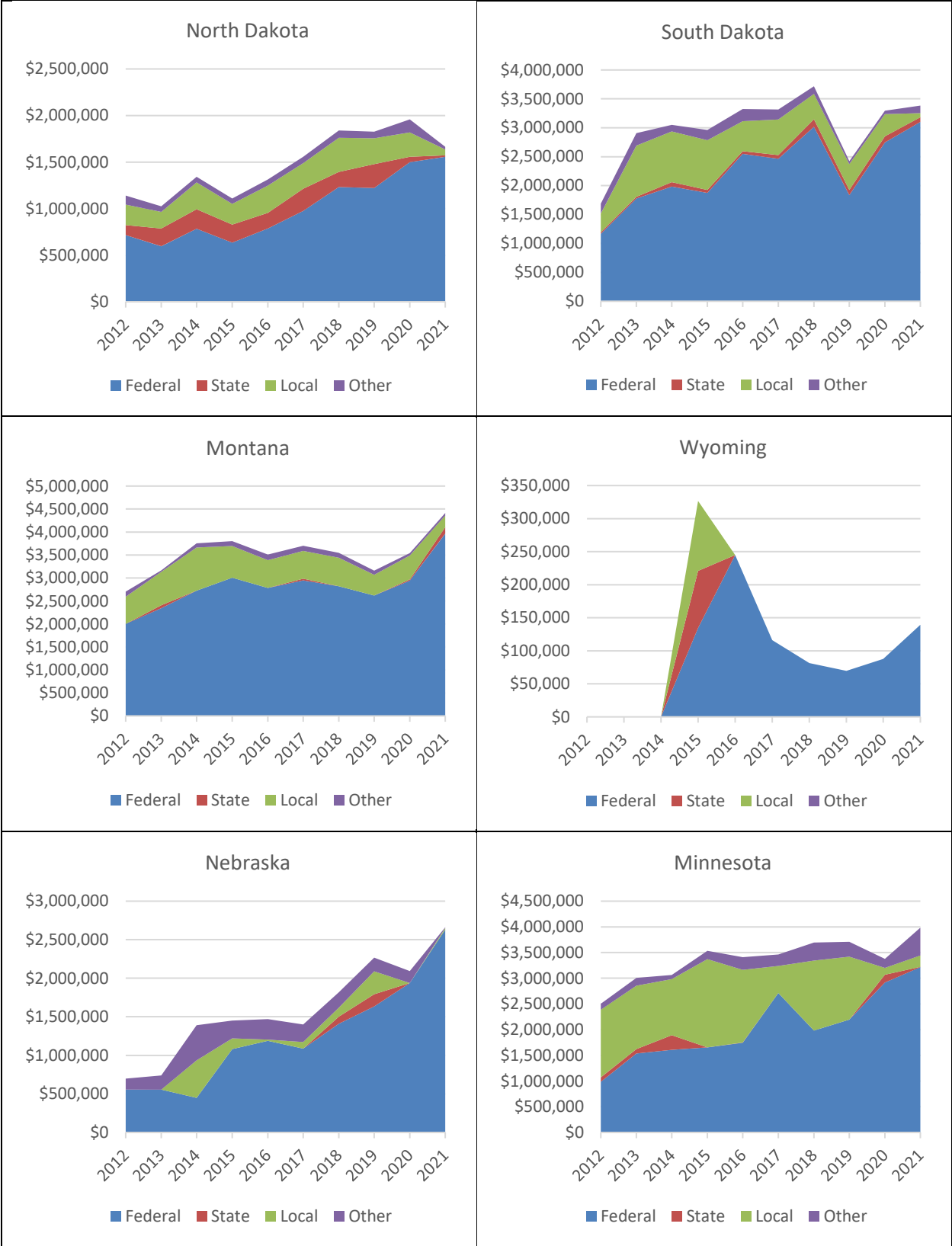
Figure 3.8 Tribal Transit Operating Funding, by Source, 2012-2021

The level of transit investment in each state can be compared by calculating per capita funding, which is shown in Table 3.11. This is calculated as the total operating funding for rural and tribal transit, averaged over the 2017-2021 period, divided by the rural population in each state. Per capita funding in North Dakota is similar to that in South Dakota and Minnesota and greater than the per capita levels in the other states. Per capita state funding is higher than the per capita levels in the other states, with the exception of Minnesota, which has much higher state spending levels. Total operating funds divided by the population of older adults or people with a disability is shown in Table 3.1, and Table 3.13 provides operating funds divided by the population in poverty.

Table 3.11 Rural and Tribal Transit Operating Funds Per Capita, Average 2017-2021

	North Dakota	South Dakota	Montana	Wyoming	Wyoming (exc. START and UW)	Nebraska	Minnesota
Federal	$15.47	$17.47	$14.19	$14.36	$6.22	$8.22	$8.11
State	$4.24	$1.15	$0.75	$0.92	$1.00	$1.28	$12.22
Local	$3.19	$2.64	$4.56	$6.16	$2.68	$1.19	$0.61
Other	$2.78	$4.61	$0.92	$1.45	$0.59	$1.29	$3.68
Total	$25.68	$25.87	$20.42	$22.90	$10.48	$11.99	$24.63

Table 3.12 Rural and Tribal Transit Operating Funds Per Population Aged 65 or Older or 18-64 with a Disability, Average 2017-2021

	North Dakota	South Dakota	Montana	Wyoming	Wyoming (exc. START and UW)	Nebraska	Minnesota
Federal	$81.27	$86.99	$63.24	$72.80	$31.50	$41.45	$38.48
State	$22.29	$5.73	$3.33	$4.64	$5.07	$6.45	$57.95
Local	$16.76	$13.13	$20.33	$31.25	$13.57	$6.01	$2.91
Other	$14.59	$22.98	$4.11	$7.37	$2.98	$6.52	$17.45
Total	$134.91	$128.83	$91.02	$116.06	$53.12	$60.43	$116.79

Table 3.13 Rural and Tribal Transit Operating Funds Per Population in Poverty, Average 2017-2021

	North Dakota	South Dakota	Montana	Wyoming	Wyoming (exc. START and UW)	Nebraska	Minnesota
Federal	$159.89	$132.40	$112.06	$130.27	$56.37	$91.65	$91.23
State	$43.85	$8.72	$5.91	$8.31	$9.06	$14.26	$137.40
Local	$32.98	$19.99	$36.03	$55.91	$24.28	$13.28	$6.89
Other	$28.71	$34.97	$7.29	$13.19	$5.34	$14.42	$41.38
Total	$265.43	$196.08	$161.29	$207.67	$95.05	$133.61	$276.90

3.4.2 Capital Funds by Source

Capital funding in each state varies from year to year, as shown in Figure 3.9. Except for Minnesota, which has a greater reliance on state funds, a substantial majority, usually about 80%, of capital funding is provided by the federal government (Figure 3.10). Capital funding for tribal transit projects in each state largely comes from federal funds, with small local shares.
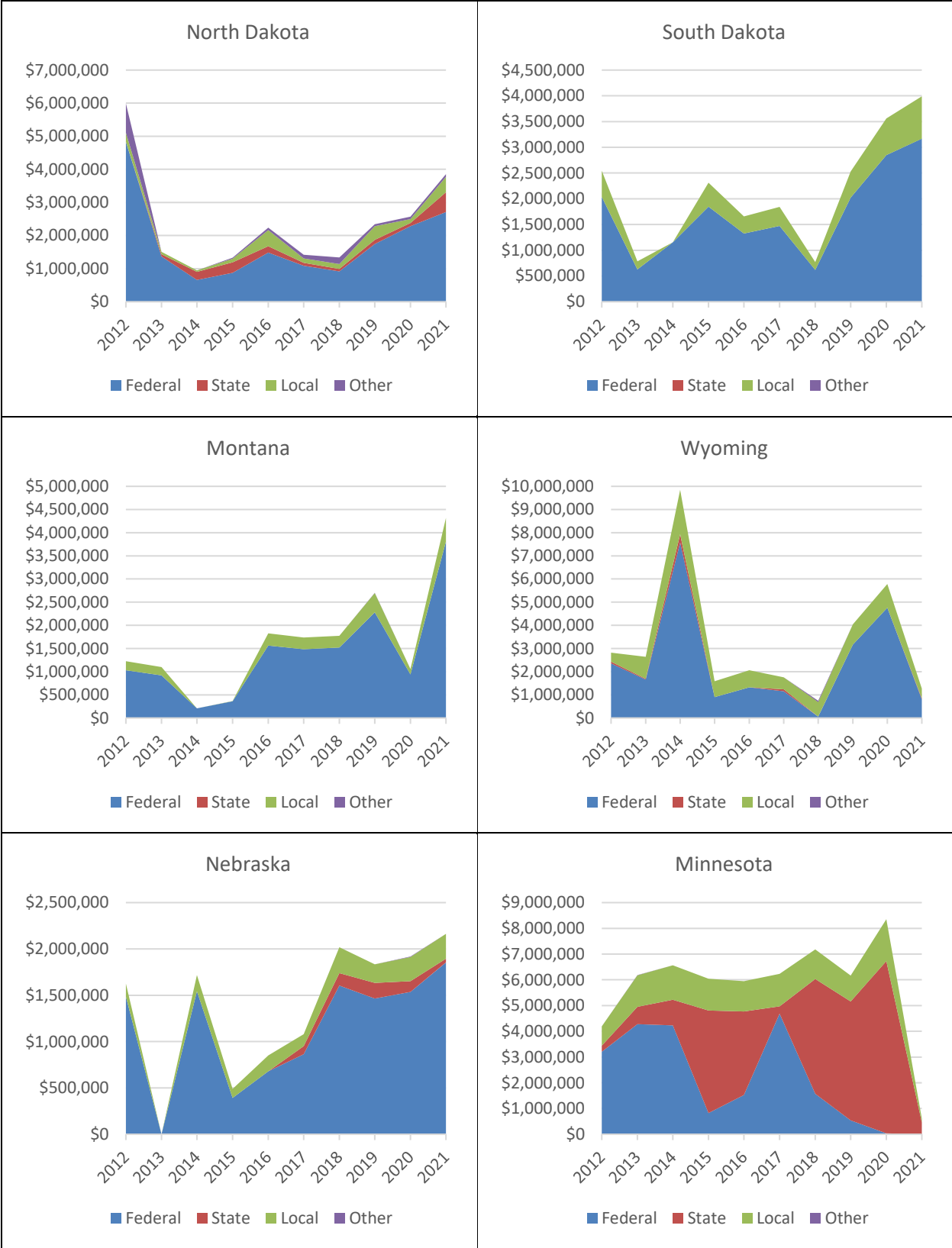
Figure 3.9 Rural Transit Capital Funding, by Source, 2012-2021
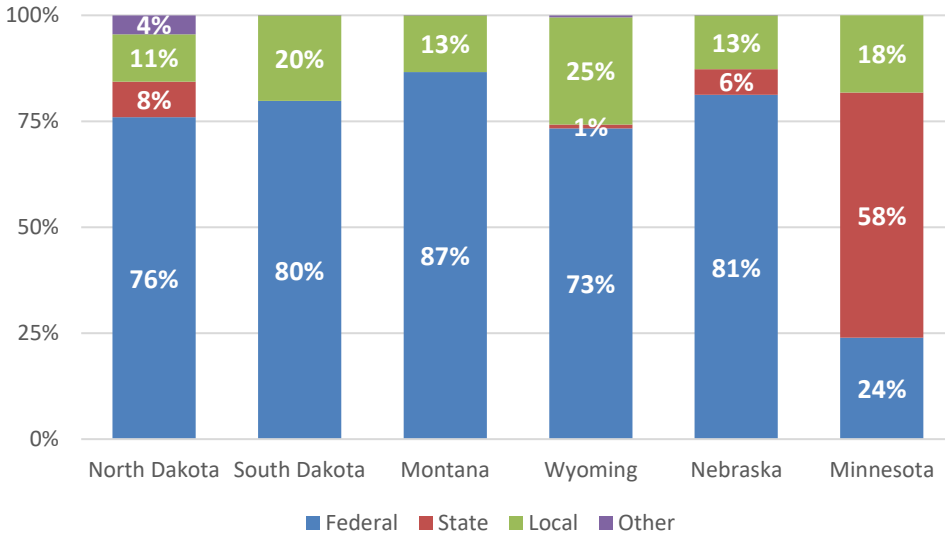
Figure 3.10 Share of Rural Transit Capital Funding by Source, 2017-2021

Per capita capital funding for rural and tribal transit, averaged over 2017-2021, is shown in Table 3.14. Tables 3.15 and 3.16 show capital funding per population of older adults and people with a disability and per population of those living in poverty. Each table shows per capita capital funding in North Dakota to be among the highest in this group of states.

Table 3.14 Rural and Tribal Transit Capital Funds Per Capita, Average 2017-2021

	North Dakota	South Dakota	Montana	Wyoming	Wyoming (exc. START and UW)	Nebraska	Minnesota
Federal	$4.38	$3.39	$3.01	$4.31	$0.78	$1.63	$0.74
State	$0.43	$0.00	$0.00	$0.05	$0.06	$0.11	$1.47
Local	$0.64	$0.79	$0.39	$1.49	$0.46	$0.23	$0.48
Other	$0.23	$0.00	$0.00	$0.03	$0.03	$0.00	$0.00
Total	*$5.69*	*$4.18*	*$3.40*	*$5.88*	*$1.33*	*$1.97*	*$2.70*

Table 3.15 Rural and Tribal Transit Capital Funds Per Population Aged 65 or Older or 18-64 with a Disability, Average 2017-2021

	North Dakota	South Dakota	Montana	Wyoming	Wyoming (exc. START and UW)	Nebraska	Minnesota
Federal	$23.04	$16.90	$13.43	$21.86	$3.97	$8.22	$3.53
State	$2.28	$0.00	$0.00	$0.26	$0.29	$0.54	$6.99
Local	$3.37	$3.92	$1.74	$7.56	$2.33	$1.16	$2.27
Other	$1.21	$0.00	$0.00	$0.14	$0.15	$0.00	$0.00
Total	*$29.90*	*$20.82*	*$15.17*	*$29.82*	*$6.73*	*$9.92*	*$12.79*

Table 3.16 Rural and Tribal Transit Capital Funds Per Population in Poverty, Average 2017-2021

	North Dakota	South Dakota	Montana	Wyoming	Wyoming (exc. START and UW)	Nebraska	Minnesota
Federal	$45.32	$25.72	$23.79	$39.12	$7.10	$18.18	$8.37
State	$4.48	$0.00	$0.00	$0.47	$0.51	$1.19	$16.58
Local	$6.64	$5.96	$3.08	$13.53	$4.17	$2.56	$5.39
Other	$2.39	$0.00	$0.01	$0.24	$0.26	$0.01	$0.00
Total	*$58.82*	*$31.68*	*$26.87*	*$53.36*	*$12.04*	*$21.94*	*$30.33*

3.5 Fleet Statistics

The total number of vehicles operated in maximum service for rural and tribal transit operators is shown in Figure 3.11. In several states, total fleet size changed little during this period. In North Dakota, fleet size ranged between 194 and 203, with no trend. Fleet size decreased in Montana and increased in Wyoming. The number of vehicles in Minnesota fluctuated from year to year. The large variations in Minnesota, especially the spike in 2019, appear unusual and could be due to reporting errors or differences in the way data were reported each year. The data show that while ridership and service levels decreased during the pandemic of 2020 and 2021, the number of vehicles in service remained mostly the same, with the exception of Minnesota.
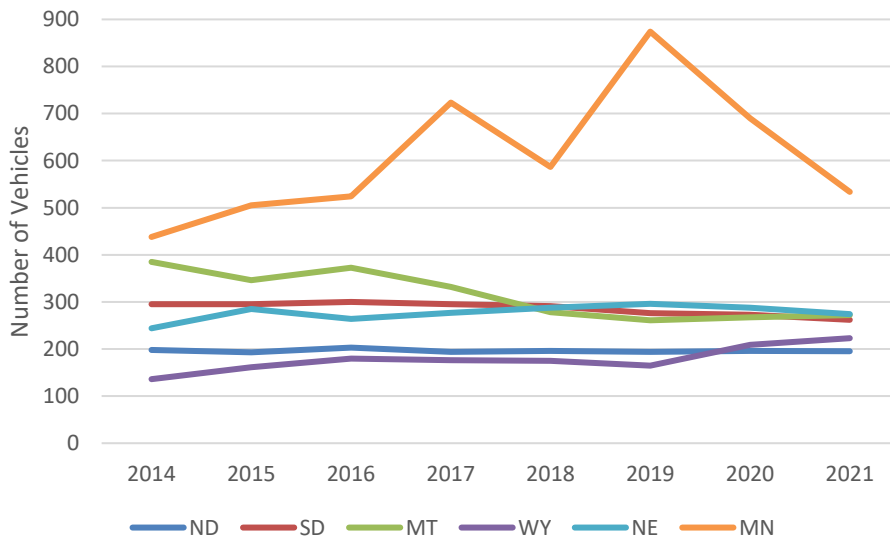
Figure 3.11 Rural and Tribal Transit Vehicles Operated in Maximum Service

The number of vehicles in each state per capita is shown in Table 3.17. North Dakota has a similar number of vehicles per capita as South Dakota and Wyoming, and a slightly greater number of vehicles per population of older adults or people with a disability or per population of those in poverty.

Table 3.17 Rural and Tribal Transit Vehicles Operated in Maximum Service Per Capita, Average 2017-2021

	Vehicles per 1,000 population	Vehicles per 1,000 population aged 65+ or 18-64 with a disability	Vehicles per 1,000 population in poverty
North Dakota	0.43	2.28	4.49
South Dakota	0.42	2.08	3.17
Montana	0.35	1.54	2.73
Wyoming	0.41	2.08	3.72
Wyoming (exc. START, UW)	0.34	1.74	3.11
Nebraska	0.28	1.40	3.10
Minnesota	0.30	1.44	3.43

Minnesota and North Dakota have the highest percentage of vehicles that meet ADA requirements for accessibility, including nearly all vehicles in Minnesota and 91% in North Dakota, as of 2020 (Table 3.18). About a quarter or more of vehicles in other states were found to not meet ADA requirements. On average, vehicles were found to be newest in Minnesota and oldest in Wyoming and South Dakota. Minnesota was also found to use larger vehicles, on average, with a greater capacity, and Nebraska uses the most small vehicles. On average, rural transit vehicles in North Dakota are slightly larger than those in Nebraska and smaller than those in other states. Rural transit agencies typically operate either cutaways, vans, or minivans, or some mix of those vehicles. Cutaways are the largest among these and minivans the smallest, so average vehicle length and capacity will depend on the mix of the types of vehicles in use. Some agencies may also operate larger municipal buses or smaller automobiles. Agencies in Minnesota operate mostly cutaways, while many minivans are used in Nebraska and North Dakota (Figure 3.12).

Table 3.18 Rural Transit Fleet Characteristics, 2020

	ADA Vehicles (%)	Average Vehicle Age	Average Vehicle Length (ft)	Average Vehicle Capacity
North Dakota	91%	7.3	20.9	11.0
South Dakota	76%	8.8	22.9	13.2
Montana	69%	7.4	22.5	13.2
Wyoming	76%	9.1	22.6	14.7
Nebraska	71%	7.7	18.9	9.4
Minnesota	99%	5.6	26.1	20.6

Source: 2022 Rural Transit Fact Book

Supply chain delays during the pandemic created difficulties in procuring new vehicles for transit agencies. Even if an agency had funding for a new vehicle, they could not replace old vehicles when needed because of long delays. Such delays could result in an increase in the average vehicle age, as agencies needed to continue using older vehicles until newer ones arrived, and difficulties in expanding fleet size.
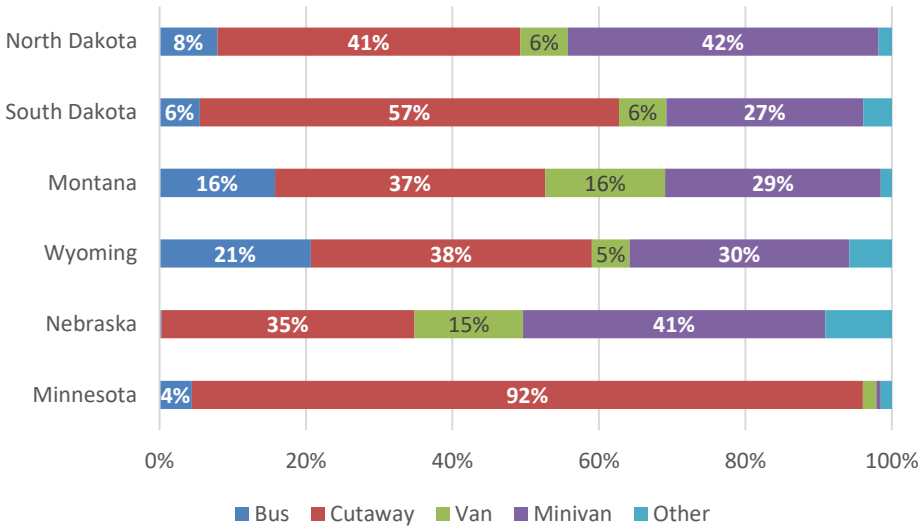
Figure 3.12 Composition of Rural Transit Fleets, 2020

3.6 Efficiency Measures

Tables 3.19 through 3.21 show data on operating cost per trip, per VRM, and per VRH. Operating cost per trip is shown to be highest in North Dakota and Nebraska. Cost per trip increased in all states during the pandemic because ridership declined. Cost per trip is lowest in Wyoming if the two high-ridership systems are included, but if those are excluded, cost per trip is similar to those in other states. The tribal systems in each state experience higher costs per trip.

While North Dakota has higher costs per trip, cost per VRM or per VRH are similar to those in surrounding states. Cost per VRM is highest in Minnesota and South Dakota, and cost per VRH is highest in Minnesota and Montana.

Tables 3.22 and 3.23 show trips per VRM and per VRH. Rural transit agencies in North Dakota averaged 0.18 trips per VRM during 2017-2021, which was the lowest among the six states. Excluding the two high-ridership systems in Wyoming, trips per VRM was the highest in Montana and South Dakota. North Dakota also had the fewest trips per VRH, with Montana again having the most. Tribal transit systems were shown to have fewer trips per VRM and VRH.

Table 3.19 Operating Cost Per Trip

	2017	2018	2019	2020	2021	Average 2017-2021
Rural Transit						
North Dakota	17.93	16.42	16.62	20.83	27.73	19.91
South Dakota	8.71	9.33	10.56	21.54	16.87	13.40
Montana	8.74	9.79	9.60	12.41	20.97	12.30
Wyoming	4.77	4.87	5.03	7.77	12.63	7.01
Wyoming (exc. START, UW)	11.18	11.85	12.50	16.39	20.32	14.45
Nebraska	13.34	14.91	16.37	19.29	28.25	18.43
Minnesota	12.17	12.54	13.53	17.67	23.68	15.92
Tribal Transit						
North Dakota	40.18	46.43	52.08	101.04	87.77	65.50
South Dakota	20.01	20.31	42.21	49.98	41.68	34.84
Montana	21.02	21.93	22.70	46.88	86.89	39.88
Wyoming	39.77	23.43	25.46	37.73	64.54	38.19
Nebraska	15.37	34.89	40.46	65.24	94.92	50.18
Minnesota	25.78	31.32	30.48	47.33	63.30	39.64

Table 3.20 Operating Cost Per Vehicle Revenue Mile

	2017	2018	2019	2020	2021	Average 2017-2021
Rural Transit						
North Dakota	3.22	3.26	3.20	3.92	4.06	3.53
South Dakota	3.05	3.10	3.60	6.21	4.41	4.07
Montana	3.08	3.25	3.56	4.23	4.98	3.82
Wyoming	3.55	3.59	3.74	4.80	4.49	4.04
Wyoming (exc. START, UW)	2.78	2.76	2.90	3.48	3.58	3.10
Nebraska	3.05	3.04	3.07	3.64	4.33	3.43
Minnesota	3.56	3.70	3.99	4.80	5.04	4.22
Tribal Transit						
North Dakota	3.08	3.19	3.60	5.71	4.64	4.04
South Dakota	2.41	2.49	2.47	4.63	3.57	3.12
Montana	2.49	2.43	2.41	4.79	5.80	3.58
Wyoming	3.65	3.51	2.68	2.98	2.14	2.99
Nebraska	1.83	2.42	2.69	3.61	4.19	2.95
Minnesota	2.43	3.00	2.91	3.94	3.73	3.20

Table 3.21 Operating Cost Per Vehicle Revenue Hour

	2017	2018	2019	2020	2021	Average 2017-2021
Rural Transit						
North Dakota	45.85	46.21	45.57	52.67	59.23	49.91
South Dakota	39.16	40.59	44.76	77.46	57.49	51.89
Montana	42.38	45.14	52.11	65.40	71.47	55.30
Wyoming	44.30	45.24	47.55	58.22	56.86	50.43
Wyoming (exc. START, UW)	34.24	35.87	36.24	40.91	42.12	37.88
Nebraska	44.24	44.82	44.34	54.31	70.45	51.63
Minnesota	55.95	56.50	60.07	68.52	67.93	61.80
Tribal Transit						
North Dakota	69.83	66.83	75.07	93.88	79.92	77.10
South Dakota	63.85	66.40	65.34	100.60	70.96	73.43
Montana	52.25	45.49	61.56	96.33	136.23	78.37
Wyoming	41.33	29.89	33.79	39.62	34.97	35.92
Nebraska	55.21	70.88	82.79	120.25	112.55	88.34
Minnesota	55.57	65.70	59.90	80.93	83.88	69.20

Table 3.22 Trips Per Vehicle Revenue Mile

	2017	2018	2019	2020	2021	Average 2017-2021
Rural Transit						
North Dakota	0.18	0.20	0.19	0.19	0.15	0.18
South Dakota	0.35	0.33	0.34	0.29	0.26	0.31
Montana	0.35	0.33	0.37	0.34	0.24	0.33
Wyoming	0.74	0.74	0.74	0.62	0.36	0.64
Wyoming (exc. START, UW)	0.25	0.23	0.23	0.21	0.18	0.22
Nebraska	0.23	0.20	0.19	0.19	0.15	0.19
Minnesota	0.29	0.30	0.30	0.27	0.21	0.27
Tribal Transit						
North Dakota	0.08	0.07	0.07	0.06	0.05	0.06
South Dakota	0.12	0.12	0.06	0.09	0.09	0.10
Montana	0.12	0.11	0.11	0.10	0.07	0.10
Wyoming	0.09	0.15	0.11	0.08	0.03	0.09
Nebraska	0.12	0.07	0.07	0.06	0.04	0.07
Minnesota	0.09	0.10	0.10	0.08	0.06	0.09

Table 3.23 Trips Per Vehicle Revenue Hour

	2017	2018	2019	2020	2021	Average 2017-2021
Rural Transit						
North Dakota	2.56	2.81	2.74	2.53	2.14	2.56
South Dakota	4.50	4.35	4.24	3.60	3.41	4.02
Montana	4.85	4.61	5.43	5.27	3.41	4.71
Wyoming	9.29	9.29	9.46	7.49	4.50	8.01
Wyoming (exc. START, UW)	3.06	3.03	2.90	2.50	2.07	2.71
Nebraska	3.32	3.01	2.71	2.82	2.49	2.87
Minnesota	4.60	4.50	4.44	3.88	2.87	4.06
Tribal Transit						
North Dakota	1.74	1.44	1.44	0.93	0.91	1.29
South Dakota	3.19	3.27	1.55	2.01	1.70	2.34
Montana	2.49	2.07	2.71	2.06	1.57	2.18
Wyoming	1.04	1.28	1.33	1.05	0.54	1.05
Nebraska	3.59	2.03	2.05	1.84	1.19	2.14
Minnesota	2.16	2.10	1.97	1.71	1.33	1.85

State averages can be skewed by a small number of agencies. Therefore, the median agency values are useful for understanding the performance of a typical system. Table 3.24 shows the median agency values for these performance measures for 2020 for rural transit agencies (excluding tribal). It also shows the differences between demand-response and fixed-route services for some measures.

Table 3.24 Median Agency Values for Performance Measures, 2020

	Trips Per Vehicle Revenue Mile			Trips Per Vehicle Revenue Hour			Operating Expense Per Trip	Operating Expense Per VRM	Operating Expense Per VRH	Farebox Recovery Ratio
	Total	Fixed-Route	Demand-Response	Total	Fixed-Route	Demand-Response				
Minnesota	0.29	0.22	0.32	3.83	3.32	3.77	16.92	4.94	62.67	0.08
Montana	0.23	0.32	0.19	2.66	5.90	2.39	18.09	4.03	52.60	0.05
Nebraska	0.17	0.26	0.17	2.86	2.31	2.86	22.28	4.00	63.17	0.09
North Dakota	0.18	0.46	0.17	2.10	7.07	2.08	24.97	4.53	52.93	0.08
South Dakota	0.40	-	0.40	3.90	-	3.90	20.72	7.34	82.02	0.10
Wyoming	0.22	0.28	0.20	2.22	3.68	2.09	17.41	3.89	36.60	0.04

Note: VRM = Vehicle Revenue Miles, VRH = Vehicle Revenue Hours; Source: National Transit Database, 2020

3.7 Regional Data

The previous sections provided statewide data, but service levels can vary significantly within each state. It is not possible to show county-level data for each county, because several transit agencies serve multiple counties, and data are not reported to the NTD at the county level. However, measures can be calculated at a regional level. To do so, counties were grouped together if a single agency serves each of those counties. Regions were created based on the service areas of each agency. In some cases, a region is a single county, and in other cases, it is several counties. Further, some regions have more than one transit agency, so data were aggregated for the agencies within the region. For example, Arrowhead Transit serves several counties within northeast Minnesota. Within these counties are five additional transit providers that serve individual cities or tribal areas. The data for these transit agencies were aggregated over a 10-county region. The regions were constructed so that no agency would be in more than one

region. Unlike the Arrowhead region, most regions consist of just one or two rural transit agencies. Urban transit agencies were not included in this analysis.

Figures 3.13 - 3.15 show ridership, VRM, and VRH per capita for each region. Data are shown at the county level, but for multi-county regions, the data are averaged over the region. The figures show annual data averaged over a five-year period, from 2017 to 2021. Population was calculated using the ACS 2017-2021 five-year data, and urban population data were subtracted. Therefore, these figures show rural transit ridership, rural transit VRM, and rural transit VRH divided by rural population.
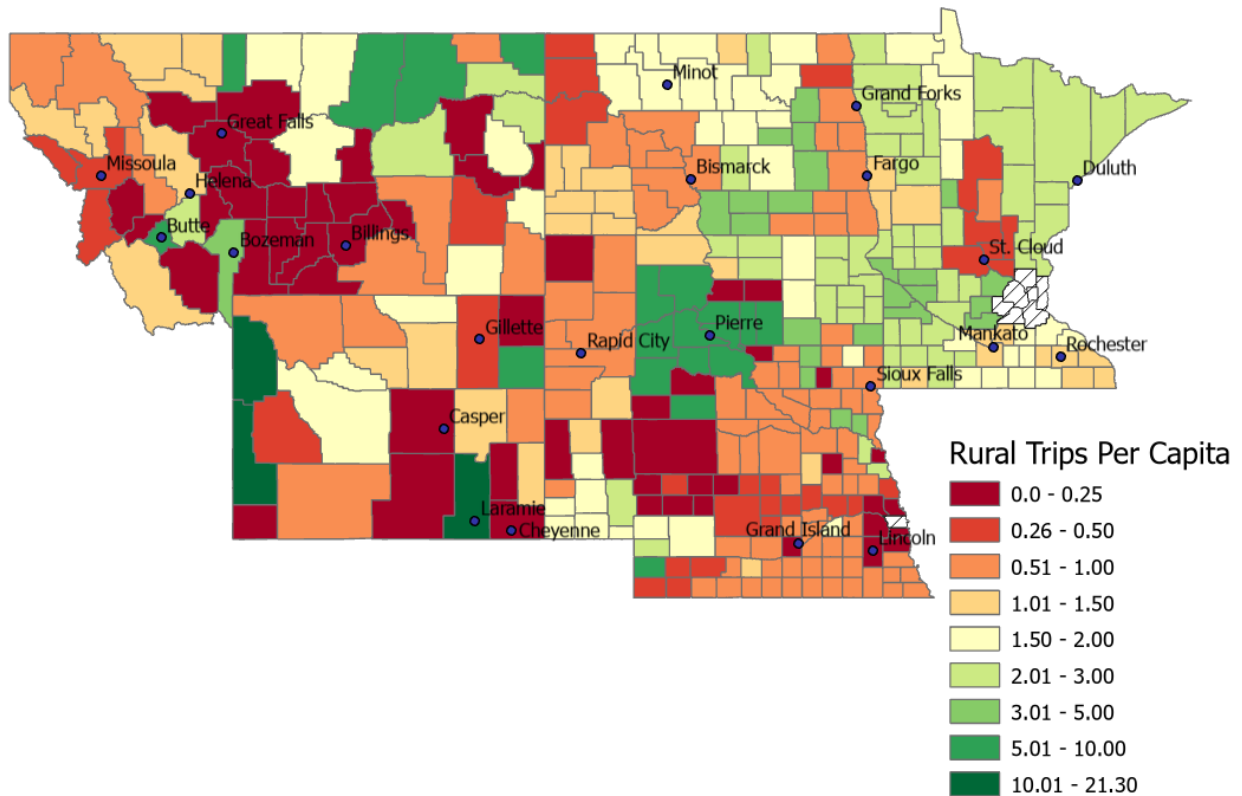
Figure 3.13 Annual Rural Transit Ridership Per Capita, by County of Region, Averaged 2017-2021

Figure 3.13 shows the two outlier regions in Wyoming that have substantially higher ridership per capita. Each state has significant variation in ridership per capita. South Dakota's higher level of per capita ridership is primarily because of River Cities Public Transit, which serves several counties in the central part of the state and has a very high level of per capita ridership. Per capita ridership in North Dakota is highest in the counties served by South Central Transit. Montana has a few counties or regions with high levels of per capita ridership, but several other counties have low ridership or no service at all. Minnesota has the most consistent level of per capita ridership, except for several counties in the central part of the state with low ridership. Nebraska consistently has the lowest levels of per capita ridership.

Figures 3.14 and 3.15 show similar variations within each state for VRM and VRH per capita. The measures tend to vary as much or more within states as they do between states. Therefore, a state that ranks poorly overall may have some areas with high levels of service, and vice versa.
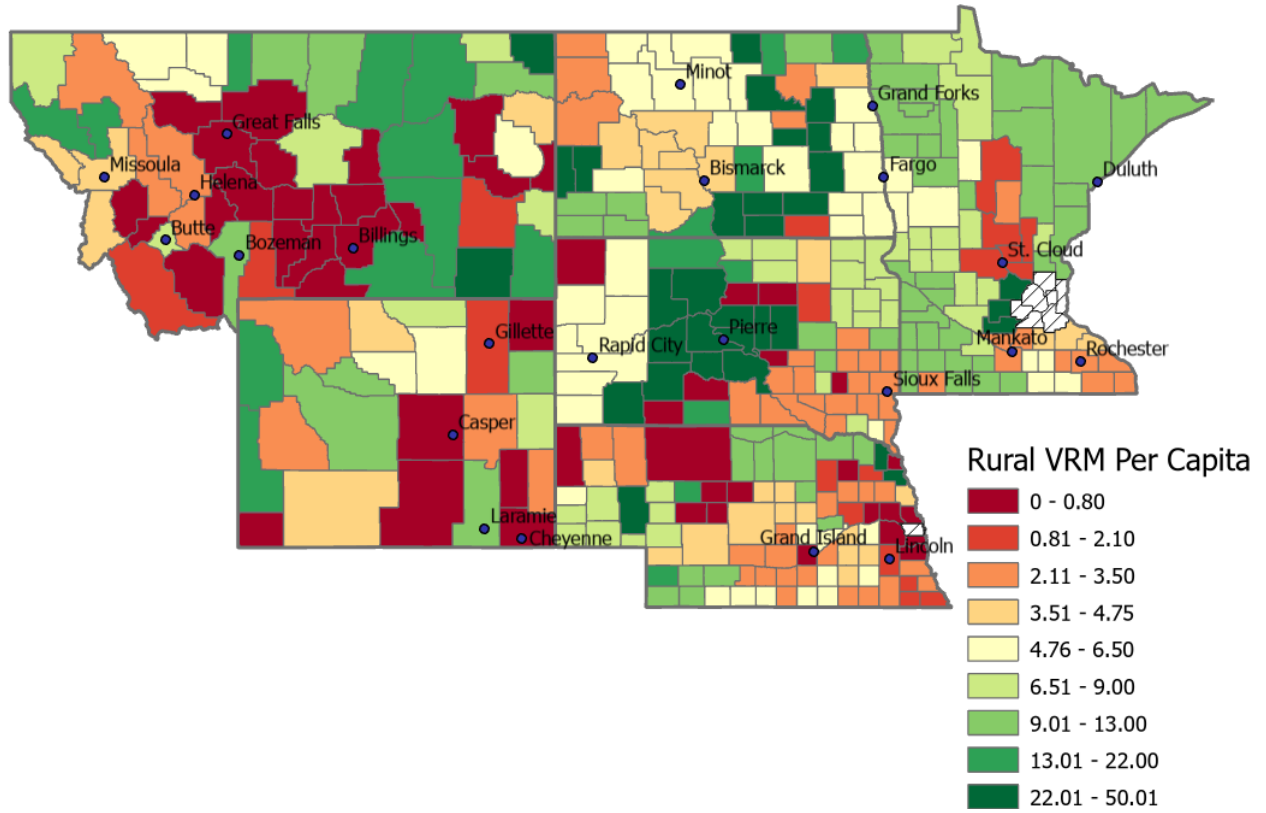
Figure 3.14 Annual Rural Transit Vehicle Revenue Miles Per Capita, by County or Region, Averaged 2017-2021
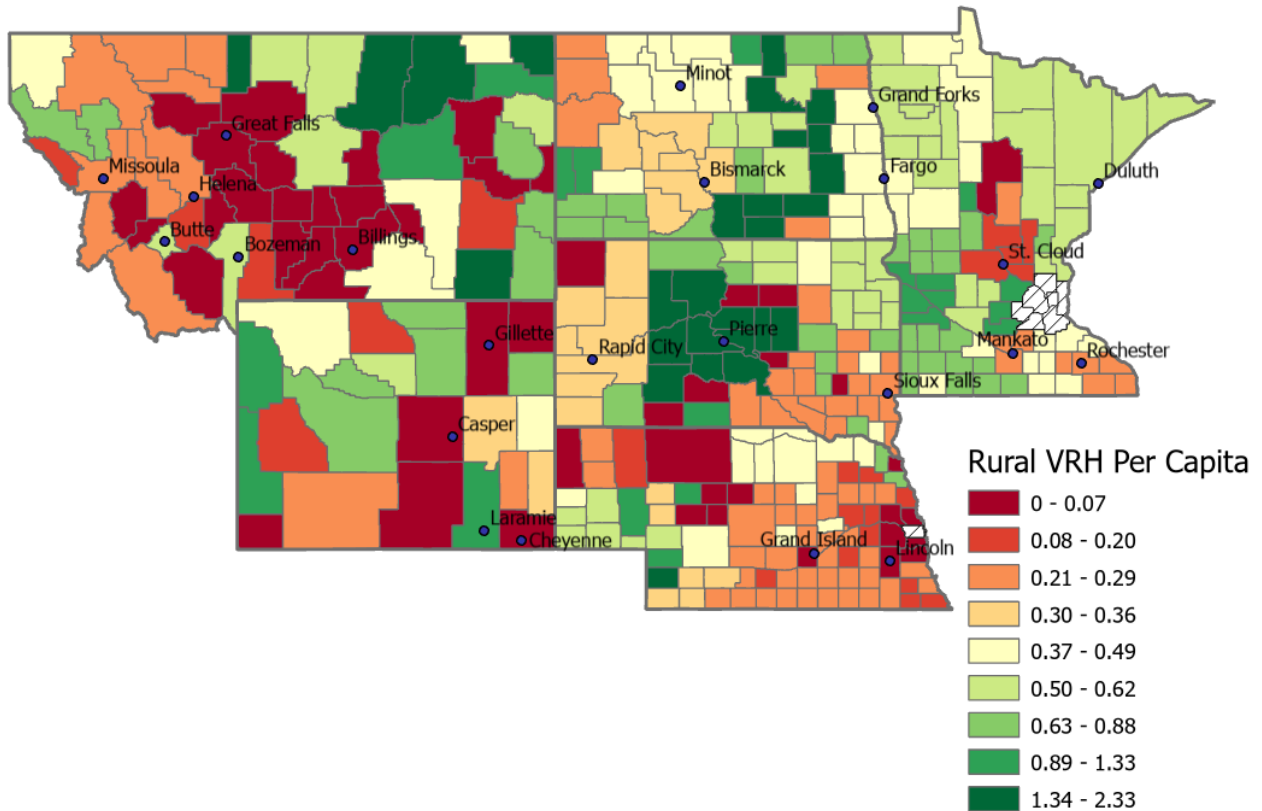
Figure 3.15 Annual Rural Transit Vehicle Revenue Hours Per Capita, by County or Region, Averaged 2017-2021

3.8 Summary and Discussion

North Dakota has good coverage of rural transit service, with some level of service available in each county. Other states, such as South Dakota, Nebraska, and Montana, have some counties with no service. The span of service in North Dakota is typical to that in neighboring states. Services are typically available five days a week and at least five but less than 12 hours a day, though there are variations across the state. There are few areas with weekend service or with 12 or more hours of service per day. Although North Dakota has good coverage, service could be improved by expanding the hours of service or adding weekend service. Weekend service and longer hours of service were the two needs most identified in surveys of North Dakota transit agencies and stakeholders conducted by Mattson et al. (2020).

Ridership dropped in every state because of the pandemic. From 2019 to 2021, ridership decreased 33% in North Dakota. Other states experienced greater declines, including Wyoming and Montana, which saw drops of 50% or more. As noted, different states use different fiscal years for reporting data to the NTD, so year-to-year changes could differ between states based simply on which month they use as the end of the fiscal year. Therefore, the year-to-year changes in ridership during the pandemic should be interpreted with the understanding that states do not all use the same fiscal year, so the results might not be directly comparable.

Because of the ridership decreases, many performance measures, such as operating cost per trip or trips per VRM, were worse during the pandemic. Nationally, there had been a decreasing trend in transit ridership in both urban and rural areas during the years prior to the pandemic, and then ridership dropped

substantially in 2020. Regionally, the decreasing trend prior to the pandemic was not as evident. There had been some decreases in some states, along with year-to-year variations, but overall, rural transit ridership had been fairly stable. Whether ridership will rebound to previous levels following the pandemic, and how long it takes for that to occur, is uncertain. The decrease in ridership could partly be explained by reductions in service levels, as shown by the decreases in VRM and VRH in 2020. However, these decreases were not as great as the ridership declines, and service levels began to rebound in 2021.

Level of service in each state can be compared by analyzing the per capita quantity of service supplied and consumed. The quantity of service supplied is shown by the per capita VRM and VRH. As shown in Table 3.24, North Dakota provides a relatively high level of VRM and VRH per capita compared to surrounding states. During the 2017-2021 period, it had the highest VRM per capita and among the highest VRH per capita. However, this did not translate into a high level of ridership per capita. Compared to North Dakota, ridership per capita is higher in South Dakota, Minnesota, and Montana, though it is lower in Nebraska and Wyoming, if the two large systems serving a resort area and a university are not included.

Table 3.25 Rural and Tribal Transit Per Capita Service Supplied and Consumed, Average 2017-2021

	Vehicle Revenue Miles Per Capita	Vehicle Revenue Hours Per Capita	Ridership Per Capita
North Dakota	7.23	0.49	1.20
South Dakota	7.03	0.49	1.88
Montana	5.65	0.36	1.56
Wyoming	5.76	0.46	3.70
Wyoming (exc. START, UW)	3.43	0.28	0.75
Nebraska	3.63	0.22	0.62
Minnesota	6.07	0.40	1.58

Areas with low population densities and long travel distances often require additional vehicle miles and hours of service to provide the same number of trips. This can explain why a state such as Minnesota, with its higher population density, can have greater ridership per capita while providing fewer VRM and VRH per capita. On the other hand, South Dakota and Montana are also very rural states, but they have higher ridership levels per capita. However, even though South Dakota and Montana have higher total ridership per capita, per capita ridership varies substantially within these states. There are some areas in South Dakota and Montana that have high per capita ridership but other areas that have ridership levels lower than anywhere in North Dakota, including areas with no service. There tends to be more variation within states than between states, and individual agencies can significantly influence the state averages. Further analysis is needed to understand variations in per capita ridership.

Per capita investment levels in North Dakota are similar to those in South Dakota and Minnesota and greater than the levels in other states. Minnesota provides a much higher level of state funding per capita, but per capita state funding is higher in North Dakota than other states. North Dakota also has a similar number of vehicles per capita as South Dakota, and more vehicles per capita than other states. A higher number of vehicles per capita may be needed in states with low population densities, where agencies serve large areas.

Operating cost per VRM and per VRH is similar in North Dakota to surrounding states, but because of a lower number of trips per VRM and per VRH, operating cost per trip is higher. Again, trips per VRM and per VRH are expected to be lower in rural areas with longer travel distances and a greater geographic dispersion of trip origins and destinations. Trips per VRM and per VRH are much higher in Wyoming because of two large systems that serve a concentrated demand, one being a resort area and the other a

university. If these two systems are excluded, trips per VRM and VRH in Wyoming are much lower and are similar to those in North Dakota. It is interesting that trips per VRM and per VRH are significantly higher in South Dakota and Montana than in North Dakota. This difference may require additional analysis to understand.

4. URBAN TRANSIT LEVEL OF SERVICE

This analysis examines the transit agencies receiving Section 5307 funding in the six states, excluding the Twin Cities and Omaha metro areas. Table 4.1 provides a list of these agencies. Section 4 provides data on the availability and accessibility of service provided in each of these cities; statewide trends in ridership, vehicle revenue miles (VRM), and vehicle revenue hours (VRH), including per capita measures; statewide efficiency measures; and agency-level operating data and performance measures. The analysis of individual transit systems includes a description of the quality of service provided, as measured by span of service and the frequency and geographic coverage of the fixed-route network.

Table 4.1 List of Urban Transit Agencies

State	Agency	City	Service Area Population
Minnesota	Duluth Transit Authority	Duluth	102,334
	City of Moorhead, Metro Area Transit (MATBUS)	Moorhead	48,039
	St. Cloud Metropolitan Transit Commission	St. Cloud	104,501
	Rochester Public Transit	Rochester	104,230
	Mankato Transit System	Mankato	58,375
Montana	Billings MET Transit	Billings	109,002
	Mountain Line	Missoula	73,089
	Great Falls Transit	Great Falls	64,155
Nebraska	StarTran	Lincoln	286,537
	CRANE Public Transit	Grand Island	61,492
North Dakota	City of Fargo, Metro Area Transit (MATBUS)	Fargo	155,620
	Cities Area Transit	Grand Forks	70,438
	Bis-Man Transit Board	Bismarck - Mandan	99,731
	Valley Senior Services (Metro Senior Ride)	Fargo	155,620*
South Dakota	Sioux Area Metro	Sioux Falls	140,580
	Rapid Transit System	Rapid City	69,305
	River Cities Public Transit	Sioux Falls	140,580
Wyoming	Casper Area Transit	Casper	57,561
	Cheyenne Transit Program	Cheyenne	59,466

*Valley Senior Services provides trips for only the senior population in the Fargo metro area.

4.1 Quality of Service

The Transit Capacity and Quality of Service Manual (TCQSM) presents a quality-of-service framework based on different measures of service availability and comfort and convenience (Kittelson & Associates et al. 2013). For fixed-route transit, availability is measured based on frequency, service span, and access. Comfort and convenience are measured based on passenger load, reliability, and travel time. For demand-response transit, availability is measured based on response time, service span, and service coverage, while comfort and convenience are measured based on reliability, travel time, and no-shows. Data on comfort and convenience are difficult to obtain, so this analysis is based on transit availability.

4.1.1 Fixed-Route Transit Availability

Service span, frequency, and access to transit are the three measures of availability for urban fixed-route transit. Table 4.2 shows span of service data for the urban fixed-route systems in the region. Most commonly, these systems provide service six days per week, with no service on Sunday. Exceptions are Duluth, St. Cloud, Rochester, and Mankato, where service is available every day.

Table 4.2 Urban Fixed-Route Span of Service

| | | Service Span | | | |
Transit Agency	City	Days per week	Hours per weekday	Hours Saturday	Hours Sunday
Minnesota					
Duluth Transit Authority	Duluth	7	20	18.5	16
City of Moorhead, Metro Area Transit (MATBUS)	Moorhead	6	17	16	0
St. Cloud Metropolitan Transit Commission	St. Cloud	7	18	12	10
Rochester Public Transit	Rochester	7	17.5	13	13
Mankato Transit System	Mankato	7	11	7	6
Montana					
Billings MET Transit	Billings	6	13	10	0
Mountain Line	Missoula	6	16	8.75	0
Great Falls Transit	Great Falls	6	12.5	8	0
Nebraska					
StarTran	Lincoln	6	16.5	13	0
North Dakota					
City of Fargo, Metro Area Transit (MATBUS)	Fargo-West Fargo	6	17	16	0
Cities Area Transit	Grand Forks	6	16.25	14.25	0
Bis-Man Transit Board	Bismarck-Mandan	6	12	11	0
South Dakota					
Sioux Area Metro	Sioux Falls	6	15.5	7.25	0
Rapid Transit System	Rapid City	6	11.5	6.75	0
Wyoming					
Casper Area Transit	Casper	6	12	8	0
Cheyenne Transit Program	Cheyenne	6	13	7	0

Another important measure of service span is the number of hours per day that service is available. More service hours allow for more types of trips to be made by transit and provide riders greater flexibility. The highest level of service identified in the TCQSM is more than 18 hours of service. Only the system in Duluth provides this level of service. The next highest level is 15-18 hours, which is provided by many of the agencies in the region, including those in Fargo and Grand Forks. This level of service allows a broad range of trip purposes, including service late into the evening or early in the morning. The system in Bismarck falls into the next category, which is 12-14 hours of service. This level of service is long

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enough to serve work trips with traditional work hours, but it offers less flexibility and does not serve early morning or late evening trips. All agencies reduce their service hours on the weekend. The agencies in North Dakota reduce service hours on Saturday by just one or two hours, which is less of a reduction compared to many agencies in the region.

Service frequency is an important measure of service quality because it determines how long a rider needs to wait and if the service is available at the time the individual wants to make the trip. Higher frequency provides increased flexibility and more opportunities for riders to make trips. Frequency can be measured based on headway, which is the amount of time between buses on the same route. Headways of 15 minutes or less are high frequency services that allow riders to make trips at nearly any time without long waits or needing to consult time schedules. Such high frequency routes are not very common in small urban areas, but they may exist for high-demand routes. Headways of 30 minutes or 60 minutes are more common in small urban transit systems. This level of frequency requires riders to check schedules to minimize their wait time, and they may need to adjust their schedule based on the transit schedule. Headways of 60 minutes offer less flexibility and are designed to meet basic travel needs. Headways longer than 60 minutes are undesirable because of long waits.

Table 4.3 provides service frequency data for urban agencies in the region. Overall, 60-minute headways are most common. In some cities, such as Grand Forks, Casper, and Cheyenne, all routes have 60-minute headways. In Bismarck-Mandan, most routes have 60-minute headways, and one route has a 2-hour headway. Most routes in Sioux Falls have 60-minute headways, and Rapid City has 70-minute headways. Headways of 30 minutes are also common among several agencies, and a few offer some higher-frequency routes. The city of Fargo provides a mix of some high-frequency routes, as well as routes with 30-minute and 60-minute headways.

Table 4.3 Urban Fixed-Route Transit Service Frequency

Transit Agency	City	Regular Weekday Headway				
		< 30 minutes	30 minutes	Between 30 and 60 minutes	60 minutes	> 60 minutes
		----------------percentage of routes----------------				
Minnesota						
Duluth Transit Authority	Duluth		29%	5%	67%	
City of Moorhead, Metro Area Transit (MATBUS)	Moorhead		71%		29%	
St. Cloud Metropolitan Transit Commission	St. Cloud		7%		93%	
Rochester Public Transit	Rochester	15%	35%		50%	
Mankato Transit System	Mankato	21%	50%		29%	
Montana						
Billings MET Transit	Billings		7%		47%	47%
Mountain Line	Missoula	17%	17%		67%	
Great Falls Transit	Great Falls		86%		14%	
Nebraska						
StarTran	Lincoln	24%	24%		53%	
North Dakota						
City of Fargo, Metro Area Transit (MATBUS)	Fargo-West Fargo	21%	21%		57%	
Cities Area Transit	Grand Forks				100%	
Bis-Man Transit Board	Bismarck-Mandan				83%	17%
South Dakota						
Sioux Area Metro	Sioux Falls			8%	75%	17%
Rapid Transit System	Rapid City					100%
Wyoming						
Casper Area Transit	Casper				100%	
Cheyenne Transit Program	Cheyenne				100%	

Note that some agencies provide higher frequencies during peak periods. Table 4.3 is not a perfect description of service frequencies because frequencies on some routes vary during the day. The table attempts to measure the most typical headways, but some routes in certain cities may be more frequent during peak periods. For example, the cities of Duluth and Moorhead have some high-frequency service during peak periods, and Rochester has more service with 30-minute headways during periods of peak demand. Alternatively, Great Falls has several routes that operate mostly with 30-minute headways, but switches to 60 minutes for a few hours midday.

Service span and frequency measure the temporal availability of transit. Access to transit is a measure of spatial availability. Fixed-route transit access was analyzed by calculating the percentage of the population in the city that lives within 0.25 miles of a bus stop. This was calculated by obtaining GTFS data for transit routes and bus stops and population data for Census blocks from the 2020 Census. Figure 4.1 illustrates how this calculation was done for MATBUS, which is the transit network serving the cities of Fargo and West Fargo in North Dakota and Moorhead and Dilworth in Minnesota. The map shows the locations of the transit routes and bus stops, and a quarter mile buffer was created around each bus stop. The area shaded in yellow is the area located within 0.25 miles of a bus stop. The rest of the areas shaded in light green are the areas of the cities served that are not within 0.25 miles of a bus stop. Using 2020 Census block population data, the population within the shaded yellow areas was estimated, and this population was divided by the total population of the cities served to determine the percentage of population living within 0.25 miles of a bus stop. For MATBUS, the analysis found that 62% of the population lives within 0.25 miles.
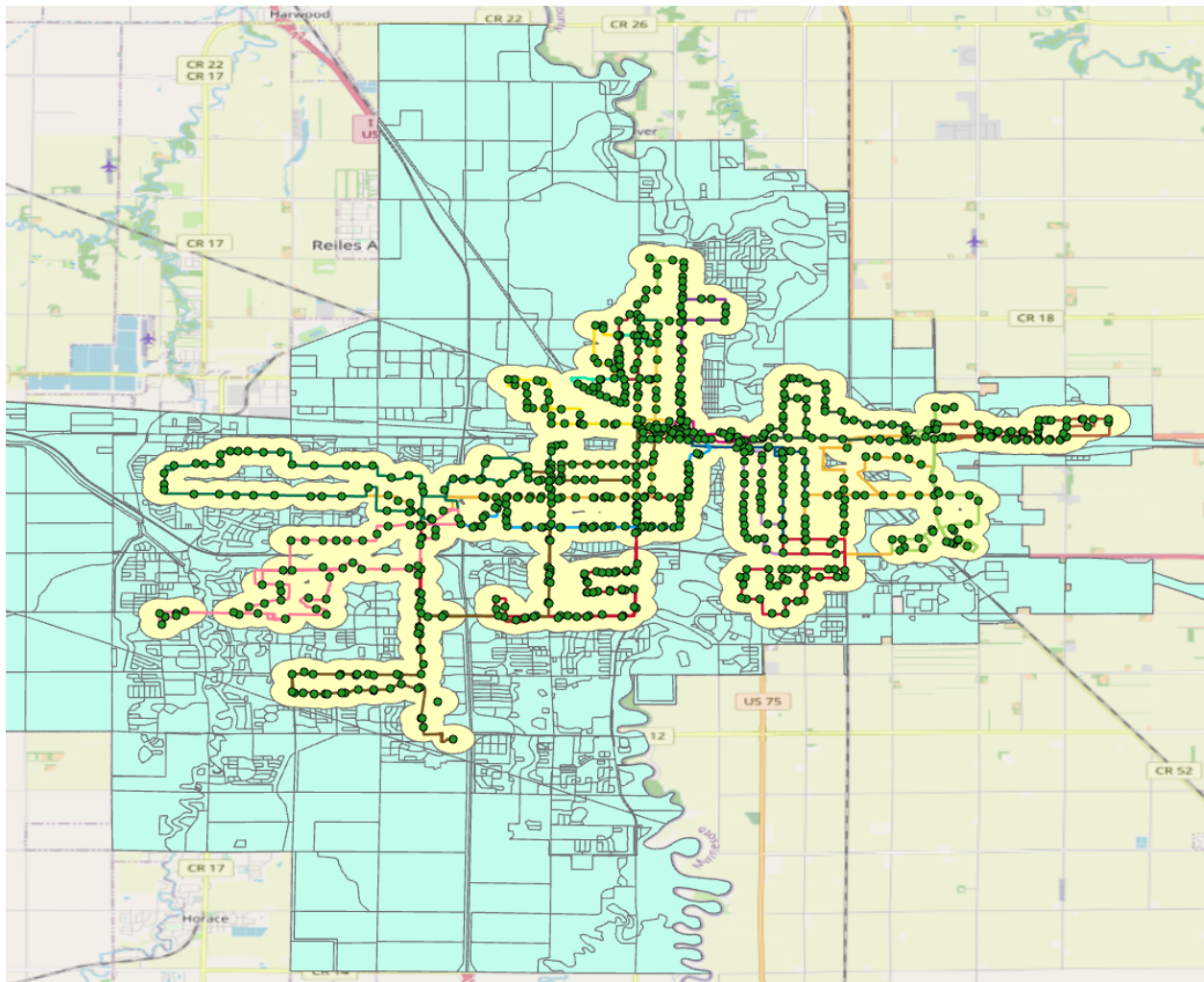
Figure 4.1 MATBUS Transit Network and Quarter Mile Buffer

A similar analysis was conducted for other urban transit systems in the region (Table 4.4). However, GTFS data were not available for many of the transit systems in the region, so the analysis was limited to the six transit systems shown in Table 4.4. Among these systems, Missoula (89%) has the highest percentage of its population with access to fixed-route transit, followed by Duluth and Grand Forks.

Sioux Falls has the lowest level of access, at about half of its population. Maps similar to the one shown in Figure 4.1 are provided for the other five transit systems in Appendix B.

Table 4.4 Urban Fixed-Route Transit Access

Transit Agency	City	Service Area Population	Population Within 1/4 Mile of Bus Stop	Percentage of Population with Access
MATBUS	Fargo-West Fargo, ND, Moorhead-Dilworth, MN	215,716	134,242	62%
Cities Area Transit	Grand Forks, ND, East Grand Forks, MN	67,915	55,585	82%
Duluth Transit Authority	Duluth, MN (Superior, WI, excluded)	91,836	78,033	85%
Mankato Transit System	Mankato, MN	61,137	41,982	69%
Sioux Area Metro	Sioux Falls, SD	195,996	95,223	49%
Mountain Line	Missoula, MT	73,489	65,529	89%

Access can be improved by increasing investment in transit and adding new routes, but land use development plays a role in how well transit agencies are able to improve accessibility to its fixed-route system. It is more difficult to provide fixed-route service in sprawling, low-density, auto-oriented developments. For example, the southern areas of Fargo and West Fargo are more difficult to serve with fixed-route transit because of the lower densities and more sprawling nature of the development. Fixed-route transit is also more effective in areas with a more linear geography, meaning multiple high-demand destinations can be connected along a reasonably straight line. The transit system in Duluth benefits by having a more linear development pattern along the shore of Lake Superior.

4.1.2 Demand-Response Transit Availability

Demand-response transit availability is measured based on response time, which is how far in advance a passenger needs to reserve a ride; the service span, measured in days per week and hours per day that service is available; and the geographic service coverage. Table 4.5 describes the availability of demand-response transit in urban areas. Most of these services are ADA complementary paratransit for people with disabilities, while some cities also have services specifically for seniors or for the general public where fixed-route service is not provided. Grand Island, NE, does not have a fixed-route service, so its demand-response system is for the general public. St. Cloud, MN, and Mankato, MN, provide an on-demand service for the general public in areas of the metro that are not served by fixed routes.

Riders are generally required to reserve a trip at least one day in advance, although some agencies also say they will provide same-day service based on availability. All paratransit service is available at least 6 days a week, while several cities provide the service 7 days a week. Weekday hours of service for paratransit range from 11.5 hours in Rapid City to 21 hours in Duluth, while many, including the agencies in North Dakota, provide about 16-18 hours of service. Transit agencies are required to provide ADA complementary paratransit within 3/4 of all fixed routes. This is the practice for some transit agencies in the region, but many go beyond this requirement to provide service throughout city limits.

Table 4.5 Urban Demand-Response Transit Availability

Transit Agency	City	Service Type	Response Time	Service Span				Service Coverage
				Days per week	Hours per weekday	Hours Saturday	Hours Sunday	
Minnesota								
Duluth Transit Authority	Duluth	Complementary Paratransit	Same day based on availability	7	21	17.67	14.75	City limits of Duluth, within 3/4 mile of routes in Superior, Proctor, Hermantown, and Rice Lake
City of Moorhead, Metro Area Transit (MATBUS)	Moorhead	Complementary Paratransit	At least 1 day in advance, same day based on availability	7	17	16	10	City limits of Moorhead and Dilworth
St. Cloud Metropolitan Transit Commission	St. Cloud	Complementary Paratransit	At least 1 day in advance	7	17.25	10.75	9	Within 3/4 mile of fixed routes
		On-demand service connecting areas without fixed routes	Same day	7	10.5	7	5	City of Sartell
Rochester Public Transit - ZIPS Paratransit	Rochester	Complementary Paratransit	At least 1 day in advance	7	17.5	13	13	City limits of Rochester
Mankato Transit System	Mankato	Complementary Paratransit	At least 1 day in advance	7	15.5	7.5	6	Entire urbanized area
		Flex service for residents living in zones without fixed routes		5	12	0	0	Areas where there is no fixed-route service
Montana								
Billings MET Transit	Billings	Complementary Paratransit		6	12.8	10	0	City limits and within 3/4 mile of fixed routes
Mountain Line	Missoula	Complementary Paratransit	At least 1 day in advance	7	17	14	12	Within 3/4 mile of fixed routes
		Shuttle van for seniors	At least 1 day in advance	6	8	4	0	Within 3/4 mile of fixed routes
Great Falls Transit	Great Falls	Complementary Paratransit	At least 1 day in advance	6	12.5	8	0	
Nebraska								
StarTran	Lincoln	Complementary Paratransit	At least 1 day in advance	6	16.2	13	0	City limits of Lincoln
		On-demand shared ride service	Same day	6	10	11.75	0	City limits of Lincoln
CRANE Public Transit	Grand Island	General public demand response	At least 1 day in advance, same day based on availability	6	11.5	6	0	City limits of Grand Island

Table 4.5 (continued)

Transit Agency	City	Service Type	Response Time	Service Span				Service Coverage
				Days per week	Hours per weekday	Hours Saturday	Hours Sunday	
North Dakota								
City of Fargo, Metro Area Transit (MATBUS)	Fargo-West Fargo	Complementary Paratransit	At least 1 day in advance, same day based on availability	7	17	16	10	City limits of Fargo and West Fargo
Valley Senior Services (Metro Senior Ride)	Fargo-West Fargo	Service for seniors aged 60+	At least 3-5 days in advance	5	9.5	0	0	Cities of Fargo, West Fargo, Moorhead, and Dilworth
Cities Area Transit	Grand Forks	Complementary Paratransit	At least 1 day in advance	6	16	12	0	City limits of Grand Forks and East Grand Forks
Bis-Man Transit Board	Bismarck-Mandan	Complementary Paratransit and seniors aged 70+	At least 1 day in advance	7	18.5	18.5	7	City limits of Bismarck, Mandan, Lincoln and within 3/4 mile of fixed routes
South Dakota								
Sioux Area Metro	Sioux Falls	Complementary Paratransit	At least 1 day in advance	6	14	11.5	0	Within 3/4 mile of fixed routes
River Cities Public Transit	Sioux Falls	Non-emergency medical transportation	At least 1 day in advance	5	3.5	0	0	Sioux Falls metro area
Rapid Transit System	Rapid City	Complementary Paratransit	At least 1 day in advance	6	11.5	9	0	City limits of Rapid City
Wyoming								
Casper Area Transit	Casper	General public demand response	At least 1 week in advance	6	11	8	0	City limits of Casper, Evansville, Mills, Bar Nunn
Cheyenne Transit Program	Cheyenne	Complementary Paratransit	At least 1 day in advance	6	13	7	0	Within 3/4 mile of fixed routes

4.2 Operating Statistics

4.2.1 Ridership

Table 4.6 shows trends in urban transit ridership in the six states. Among these states, Greater Minnesota has the largest number of urban systems and as expected, the most ridership. Among the other states, Montana and Nebraska have the highest urban ridership, followed by North Dakota. Wyoming has the least urban ridership, by a significant margin. North Dakota has consistently had greater urban ridership than South Dakota.

Table 4.6 Urban Transit Ridership

	2017	2018	2019	2020	2021	Average 2017-2021
North Dakota	2,119,224	2,094,342	1,953,735	1,236,797	1,235,301	1,727,880
South Dakota	1,330,455	1,350,531	1,387,506	769,816	668,533	1,101,368
Montana	2,865,046	2,824,732	2,751,074	2,178,787	1,410,950	2,406,118
Wyoming	399,577	382,971	374,924	327,133	203,102	337,541
Nebraska	2,417,065	2,501,644	2,469,689	1,969,693	1,797,589	2,231,136
Greater Minnesota	7,793,170	7,870,448	7,688,043	4,407,559	3,673,395	6,286,523

Prior to the pandemic, there had been a decreasing trend in urban transit ridership in several states across the country. Urban ridership in North Dakota dropped from 2.6 million in 2014 to 2.0 million in 2019, a decline of 24%. Wyoming experienced a similar percentage decline during that period, while Greater Minnesota had a 9% drop during the period. The other states experienced smaller changes. In 2020, urban transit ridership decreased in each state, ranging from a 9% decline in Wyoming to 43% in Greater Minnesota, and ridership dropped again in several states in 2021. In North Dakota urban ridership decreased 37% in 2020 and was unchanged in 2021.

Greater Minnesota still has the highest level of urban transit ridership after adjusting for population, as shown by the per capita ridership in Table 4.7. These per capita calculations are based on the metro area populations in each state, excluding the Twin Cities and Omaha metro areas. Montana and Nebraska also have higher per capita ridership than North Dakota, while South Dakota has slightly less, and Wyoming has the lowest per capita urban transit ridership.

Table 4.7 Urban Transit Ridership Per Capita

	2017	2018	2019	2020	2021	Average 2017-2021
North Dakota	6.7	6.6	6.2	3.9	3.9	5.5
South Dakota	6.5	6.5	6.6	3.7	3.2	5.3
Montana	11.6	11.7	11.1	8.8	5.7	9.8
Wyoming	3.4	3.3	3.2	2.8	1.7	2.9
Nebraska	7.1	7.2	7.1	5.6	5.1	6.4
Greater Minnesota	19.0	18.9	18.4	10.6	8.8	15.1

4.2.2 Vehicle Revenue Miles

North Dakota provides more VRM of urban transit services than any of neighboring states, other than Minnesota (Table 4.8). Prior to the pandemic, urban transit VRM has been fairly steady from year to year

in most states, including North Dakota. Greater Minnesota has experienced the greatest growth in VRM. While VRM dropped in 2020, it rebounded in most states in 2021, though not quite to pre-pandemic levels.

Table 4.8 Urban Transit Vehicle Revenue Miles

	2017	2018	2019	2020	2021	Average 2017-2021
North Dakota	3,312,920	3,220,130	3,141,726	2,682,484	2,904,634	3,052,379
South Dakota	1,829,860	1,828,478	1,769,126	1,332,538	1,436,666	1,639,334
Montana	2,284,717	2,310,795	2,367,875	2,167,014	2,214,882	2,269,057
Wyoming	891,841	863,926	858,757	834,378	790,474	847,875
Nebraska	2,351,986	2,369,807	2,378,413	2,025,146	2,272,826	2,279,636
Greater Minnesota	6,561,858	7,093,887	7,378,545	5,966,916	6,352,480	6,670,737

Greater Minnesota has provided the highest level of urban transit VRM per capita, by a significant margin, while North Dakota has the second highest level of per capita urban VRM, among these states (Table 4.9).

Table 4.9 Urban Transit Vehicle Revenue Miles Per Capita

	2017	2018	2019	2020	2021	Average 2017-2021
North Dakota	10.5	10.2	9.9	8.5	9.2	9.7
South Dakota	8.9	8.7	8.5	6.4	6.9	7.9
Montana	9.3	9.6	9.6	8.7	8.9	9.2
Wyoming	7.6	7.4	7.3	7.1	6.8	7.2
Nebraska	6.9	6.8	6.8	5.8	6.5	6.6
Greater Minnesota	16.0	17.0	17.7	14.3	15.2	16.0

4.2.3 Vehicle Revenue Hours

Vehicle revenue hours have followed similar trends as vehicle revenue miles (Table 4.10). North Dakota similarly provides more VRH of urban transit service than any surrounding state other than Minnesota, as well as the second highest level of VRH per capita (Table 4.11).

Table 4.10 Urban Transit Vehicle Revenue Hours

	2017	2018	2019	2020	2021	Average 2017-2021
North Dakota	260,731	254,019	251,597	226,472	249,027	248,369
South Dakota	151,719	153,388	155,172	127,200	129,408	143,377
Montana	167,708	174,668	182,336	164,812	166,539	171,213
Wyoming	73,072	71,911	70,800	69,249	63,992	69,805
Nebraska	176,329	178,764	177,138	157,561	169,705	171,899
Greater Minnesota	483,510	522,064	548,026	448,655	473,716	495,194

Table 4.11 Urban Transit Vehicle Revenue Hours Per Capita

	2017	2018	2019	2020	2021	Average 2017-2021
North Dakota	0.82	0.80	0.80	0.72	0.79	0.79
South Dakota	0.74	0.73	0.74	0.61	0.62	0.69
Montana	0.68	0.72	0.74	0.67	0.67	0.70
Wyoming	0.62	0.61	0.60	0.59	0.55	0.60
Nebraska	0.52	0.52	0.51	0.45	0.48	0.49
Greater Minnesota	1.18	1.25	1.31	1.07	1.13	1.19

4.3 Efficiency Measures

Cost per trip increased significantly during the pandemic as ridership dropped. Overall, operating cost per trip has been highest in Wyoming, followed by South Dakota and North Dakota, and lowest in Montana (Table 4.12). Cost per trip is generally higher when ridership or load factors are lower, and it is generally much higher for demand-response service compared to fixed-route service. Operating cost per VRM does not vary as significantly between states, but it is lowest for Wyoming (Table 4.13). Operating cost per VRH is similarly lowest in Wyoming and highest in Minnesota and Montana (Table 4.14). Cost per VRM and VRH are generally lower for demand-response service, as compared to fixed-route service. The urban systems in Wyoming provide a higher percentage of their trips by demand-response, which could explain the lower per mile and per hour costs, as well as the higher cost per trip.

Table 4.12 Urban Transit Operating Cost Per Trip

	2017	2018	2019	2020	2021	Average 2017-2021
North Dakota	7.35	7.75	8.87	13.99	17.01	10.99
South Dakota	7.68	8.23	8.18	14.16	18.09	11.27
Montana	5.00	5.41	5.83	7.30	12.24	7.15
Wyoming	9.12	9.20	9.79	11.52	18.68	11.66
Nebraska	5.60	5.73	5.98	7.47	7.44	6.44
Greater Minnesota	5.40	5.84	6.50	10.96	13.41	8.42

Table 4.13 Urban Transit Operating Cost Per Vehicle Revenue Mile

	2017	2018	2019	2020	2021	Average 2017-2021
North Dakota	4.70	5.04	5.52	6.45	7.23	5.79
South Dakota	5.58	6.08	6.41	8.18	8.42	6.93
Montana	6.27	6.61	6.77	7.33	7.80	6.96
Wyoming	4.09	4.08	4.27	4.52	4.80	4.35
Nebraska	5.75	6.05	6.21	7.26	5.88	6.23
Greater Minnesota	6.41	6.47	6.77	8.10	7.76	7.10

Table 4.14 Urban Transit Operating Cost Per Vehicle Revenue Hour

	2017	2018	2019	2020	2021	Average 2017-2021
North Dakota	59.78	63.92	68.90	76.38	84.36	70.67
South Dakota	67.33	72.47	73.13	85.68	93.44	78.41
Montana	85.38	87.41	87.98	96.44	103.70	92.18
Wyoming	49.88	49.00	51.84	54.40	59.29	52.88
Nebraska	76.71	80.17	83.41	93.34	78.80	82.49
Greater Minnesota	86.98	87.97	91.13	107.67	104.01	95.55

Urban transit trips per VRM and per VRH are highest in Montana, Nebraska, and Minnesota, and lowest in Wyoming (Tables 4.15 and 4.16). The lower numbers for Wyoming could again be explained by a greater use of demand-response transit.

Table 4.15 Urban Transit Trips Per Vehicle Revenue Mile

	2017	2018	2019	2020	2021	Average 2017-2021
North Dakota	0.64	0.65	0.62	0.46	0.43	0.56
South Dakota	0.73	0.74	0.78	0.58	0.47	0.66
Montana	1.25	1.22	1.16	1.01	0.64	1.06
Wyoming	0.45	0.44	0.44	0.39	0.26	0.40
Nebraska	1.03	1.06	1.04	0.97	0.79	0.98
Greater Minnesota	1.19	1.11	1.04	0.74	0.58	0.93

Table 4.16 Urban Transit Trips Per Vehicle Revenue Hour

	2017	2018	2019	2020	2021	Average 2017-2021
North Dakota	8.13	8.24	7.77	5.46	4.96	6.91
South Dakota	8.77	8.80	8.94	6.05	5.17	7.55
Montana	17.08	16.17	15.09	13.22	8.47	14.01
Wyoming	5.47	5.33	5.30	4.72	3.17	4.80
Nebraska	13.71	13.99	13.94	12.50	10.59	12.95
Greater Minnesota	16.12	15.08	14.03	9.82	7.75	12.56

4.4 Agency-Level Operating Data and Performance Measures

Urban transit performance in each state could vary significantly between individual transit systems. This section provides operating data and performance measures for each of the urban agencies in the region. The data presented are averaged over the 2017-2021 period. Per capita statistics were calculated based on the service area population of each system.

As shown in Table 4.17, the transit systems in Duluth, Lincoln, and St. Cloud have the highest annual operating expenses. The table shows that a larger share of expenses is for fixed-route transit, but the shares for fixed-route and demand-response service vary between agencies. For example, a very large share of expenses in Duluth (95%) are for fixed-route, while in St. Cloud, about 30% of operating funds are spent on demand-response. The system in Grand Island, NE, is the smallest and is the only urban provider without any fixed-route service. Excluding Grand Island, Bismarck-Mandan is the only urban system with a higher operating budget for demand-response than fixed-route service.

Table 4.17 Urban Transit Agency Operating Expenses, 2017-2021 Average

Agency	City	Demand Response	Fixed Route	Total	Total Per Capita
		----------------------------dollars----------------------------			
Minnesota					
Duluth Transit Authority	Duluth	937,260	16,930,285	17,867,545	175
City of Moorhead, Metro Area Transit (MATBUS)	Moorhead	272,130	2,521,550	2,793,679	58
St. Cloud Metropolitan Transit Commission	St. Cloud	4,148,020	8,526,278	13,467,990	129
Rochester Public Transit	Rochester	593,464	8,903,832	9,755,305	94
Mankato Transit System	Mankato	693,125	2,522,554	3,215,680	55
Montana					
Billings MET Transit	Billings	1,344,756	3,885,350	5,230,106	48
Mountain Line	Missoula	1,060,100	5,553,908	6,614,008	90
Great Falls Transit	Great Falls	746,928	2,655,611	3,402,539	53
Nebraska					
StarTran	Lincoln	2,077,274	10,907,522	13,484,081	47
CRANE Public Transit	Grand Island	658,635	0	658,635	11
North Dakota					
City of Fargo, Metro Area Transit (MATBUS)	Fargo	1,561,048	7,335,077	8,896,125	57
Cities Area Transit	Grand Forks	1,340,407	2,413,347	3,753,754	53
Bis-Man Transit Board	Bismarck-Mandan	2,231,819	1,572,660	3,804,479	38
South Dakota					
Sioux Area Metro	Sioux Falls	3,412,145	5,120,109	8,532,254	61
Rapid Transit System	Rapid City	1,060,886	1,217,453	2,278,339	33
Wyoming					
Casper Area Transit	Casper	1,045,574	973,948	2,019,522	35
Cheyenne Transit Program	Cheyenne	890,208	770,247	1,660,455	28

Per capita expenditures are an indicator of the level of transit investment in the city. Duluth has the highest per capita operating expenditures, by a large margin, followed by St. Cloud, Rochester, and Missoula. Fargo and Grand Forks are among the middle-tier agencies with respect to per capita operating expenses, while Bismarck-Mandan is on the low end.

Per capita ridership is also highest in Duluth, followed by Missoula, Rochester, and St. Cloud (Table 4.18). Fargo is again among the middle-tier of agencies with respect to per capita ridership, while Grand Forks and Bismarck-Mandan are toward the lower end. Bismarck-Mandan has the second lowest per capita ridership, ahead of only Grand Island. The low level of investment in the fixed-route system in Bismarck-Mandan likely contributes to the poor per capita ridership.

Table 4.18 Urban Transit Agency Ridership, 2017-2021 Average

Agency	City	Demand Response	Fixed Route	Total	Total Per Capita
Minnesota					
Duluth Transit Authority	Duluth	29,167	2,289,706	2,318,873	22.7
City of Moorhead, Metro Area Transit (MATBUS)	Moorhead	9,106	424,976	434,083	9.0
St. Cloud Metropolitan Transit Commission	St. Cloud	125,574	1,298,952	1,460,053	14.0
Rochester Public Transit	Rochester	24,470	1,517,084	1,551,903	14.9
Mankato Transit System	Mankato	12,169	509,444	521,612	8.9
Montana					
Billings MET Transit	Billings	40,045	398,420	438,466	4.0
Mountain Line	Missoula	34,507	1,335,843	1,370,350	18.7
Great Falls Transit	Great Falls	37,841	349,553	387,395	6.0
Nebraska					
StarTran	Lincoln	49,476	2,132,805	2,198,031	7.7
CRANE Public Transit	Grand Island	33,105	0	33,105	0.5
North Dakota					
City of Fargo, Metro Area Transit (MATBUS)	Fargo	49,723	1,166,879	1,216,603	7.8
Cities Area Transit	Grand Forks	53,962	215,153	269,115	3.8
Bis-Man Transit Board	Bismarck-Mandan	107,060	84,109	191,169	1.9
South Dakota					
Sioux Area Metro	Sioux Falls	73,032	636,323	709,354	5.0
Rapid Transit System	Rapid City	68,344	302,216	370,560	5.3
Wyoming					
Casper Area Transit	Casper	41,678	152,389	194,066	3.4
Cheyenne Transit Program	Cheyenne	24,584	118,891	143,475	2.4

Duluth also has the highest levels of VRM and VRH per capita, and St. Cloud, Rochester, and Missoula have the next highest levels (Tables 4.19 and 4.20). The North Dakota agencies are all near the middle-tier of agencies and have similar levels of per capita VRM and VRM. The differences in per capita ridership among the North Dakota agencies, therefore, is not due to differences in VRM or VRH. Fargo generates more trips per VRM and VRH because of its more efficient and successful fixed-route system, while Bismarck-Mandan has a greater orientation toward demand-response, and Grand Forks is in-between.

A few agencies have also reported passenger miles (Table 4.21). Per capita passenger miles is highly correlated with per capita ridership.

Table 4.19 Urban Transit Agency Vehicle Revenue Miles, 2017-2021 Average

Agency	City	Demand Response	Fixed Route	Total	Total Per Capita
Minnesota					
Duluth Transit Authority	Duluth	230,185	1,970,810	2,200,995	21.5
City of Moorhead, Metro Area Transit (MATBUS)	Moorhead	67,275	469,126	536,401	11.2
St. Cloud Metropolitan Transit Commission	St. Cloud	555,232	1,207,921	1,902,028	18.2
Rochester Public Transit	Rochester	169,793	1,414,661	1,630,044	15.6
Mankato Transit System	Mankato	66,522	334,748	401,270	6.9
Montana					
Billings MET Transit	Billings	132,419	605,223	737,641	6.8
Mountain Line	Missoula	180,974	675,123	856,097	11.7
Great Falls Transit	Great Falls	180,403	407,708	588,110	9.2
Nebraska					
StarTran	Lincoln	341,628	1,707,019	2,145,567	7.5
CRANE Public Transit	Grand Island	134,069	0	134,069	2.2
North Dakota					
City of Fargo, Metro Area Transit (MATBUS)	Fargo	311,865	968,944	1,280,809	8.2
Cities Area Transit	Grand Forks	216,011	376,877	592,888	8.4
Bis-Man Transit Board	Bismarck-Mandan	496,051	344,148	840,199	8.4
South Dakota					
Sioux Area Metro	Sioux Falls	392,313	697,563	1,089,876	7.8
Rapid Transit System	Rapid City	223,347	277,387	500,734	7.2
Wyoming					
Casper Area Transit	Casper	212,198	236,527	448,725	7.8
Cheyenne Transit Program	Cheyenne	160,728	238,423	399,150	6.7

Table 4.20 Urban Transit Agency Vehicle Revenue Hours, 2017-2021 Average

Agency	City	Demand Response	Fixed Route	Total	Total Per Capita
Minnesota					
Duluth Transit Authority	Duluth	17,714	154,589	172,303	1.7
City of Moorhead, Metro Area Transit (MATBUS)	Moorhead	5,988	34,489	40,477	0.8
St. Cloud Metropolitan Transit Commission	St. Cloud	43,125	90,642	138,462	1.3
Rochester Public Transit	Rochester	10,735	96,736	110,479	1.1
Mankato Transit System	Mankato	6,898	26,576	33,474	0.6
Montana					
Billings MET Transit	Billings	10,810	40,140	50,950	0.5
Mountain Line	Missoula	16,297	48,313	64,610	0.9
Great Falls Transit	Great Falls	15,636	31,944	47,580	0.7
Nebraska					
StarTran	Lincoln	27,652	125,880	157,978	0.6
CRANE Public Transit	Grand Island	13,922	0	13,922	0.2
North Dakota					
City of Fargo, Metro Area Transit (MATBUS)	Fargo	22,441	81,730	104,172	0.7
Cities Area Transit	Grand Forks	24,506	31,322	55,828	0.8
Bis-Man Transit Board	Bismarck-Mandan	36,268	21,281	57,549	0.6
South Dakota					
Sioux Area Metro	Sioux Falls	38,980	58,439	97,418	0.7
Rapid Transit System	Rapid City	19,721	20,230	39,951	0.6
Wyoming					
Casper Area Transit	Casper	18,130	20,906	39,036	0.7
Cheyenne Transit Program	Cheyenne	12,620	18,149	30,769	0.5

Table 4.21 Urban Transit Agency Passenger Miles, 2017-2021 Average

Agency	City	Demand Response	Fixed Route	Total	Total Per Capita
		----------------------------dollars----------------------------			
Minnesota					
Duluth Transit Authority	Duluth	135,813	9,767,745	9,903,558	96.8
City of Moorhead, Metro Area Transit (MATBUS)	Moorhead	37,052	1,644,793	1,681,845	35.0
St. Cloud Metropolitan Transit Commission	St. Cloud	539,276	3,989,122	5,502,975	52.7
Rochester Public Transit	Rochester	152,924	5,538,891	5,737,404	55.0
Mankato Transit System	Mankato	NA	NA	NA	NA
Montana					
Billings MET Transit	Billings	231,386	1,660,766	1,892,152	17.4
Mountain Line	Missoula	121,319	2,953,527	3,074,846	42.1
Great Falls Transit	Great Falls	121,196	1,031,229	1,152,426	18.0
Nebraska					
StarTran	Lincoln	308,816	6,350,662	6,758,440	23.6
CRANE Public Transit	Grand Island	NA	NA	NA	NA
North Dakota					
City of Fargo, Metro Area Transit (MATBUS)	Fargo	274,861	4,848,174	5,123,035	32.9
Cities Area Transit	Grand Forks	181,745	933,441	1,115,185	15.8
Bis-Man Transit Board	Bismarck-Mandan	NA	NA	NA	NA
South Dakota					
Sioux Area Metro	Sioux Falls	514,030	2,660,606	3,174,636	22.6
Rapid Transit System	Rapid City	NA	NA	NA	NA
Wyoming					
Casper Area Transit	Casper	NA	NA	NA	NA
Cheyenne Transit Program	Cheyenne	NA	NA	NA	NA

NA = Not Available

Lastly, Table 4.22 provides some agency-level performance measures. Bismarck-Mandan and Grand Island have the highest costs per trip. This is expected because costs per trip are greater for demand-response service. Grand Island only operates demand-response, and Bismarck-Mandan is oriented more toward demand-response. On the other hand, costs per VRM and per VRH are lower in Bismarck-Mandan, because those costs are usually higher for fixed-route services. The table also shows that Fargo has more trips per VRH and per VRM than the other systems in North Dakota, as was suggested earlier. The performance measures for Fargo compare reasonably well with those of other systems in the region. Missoula has the most efficient system in terms of trips per VRM, trips per VRH, and cost per trip. Mankato, Rochester, Lincoln, and Duluth have the next most efficient systems. Bismarck-Mandan, on the other hand, has one of the least efficient systems, as measured by these metrics.

Table 4.22 Urban Transit Performance Measures, 2017-2021 Average

Agency	City	Operating Expense ($)			Trips Per VRM	Trips Per VRH	Passenger Miles Per VRM
		Per Trip	Per VRM	Per VRH			
Minnesota							
Duluth Transit Authority	Duluth	7.71	8.12	103.70	1.1	13.5	4.50
City of Moorhead, Metro Area Transit (MATBUS)	Moorhead	6.44	5.21	69.02	0.8	10.7	3.14
St. Cloud Metropolitan Transit Commission	St. Cloud	9.22	7.08	97.27	0.8	10.5	2.89
Rochester Public Transit	Rochester	6.29	5.98	88.30	1.0	14.0	3.52
Mankato Transit System	Mankato	6.16	8.01	96.06	1.3	15.6	NA
Montana							
Billings MET Transit	Billings	11.93	7.09	102.65	0.6	8.6	2.57
Mountain Line	Missoula	4.83	7.73	102.37	1.6	21.2	3.59
Great Falls Transit	Great Falls	8.78	5.79	71.51	0.7	8.1	1.96
Nebraska							
StarTran	Lincoln	6.13	6.28	85.35	1.0	13.9	3.15
CRANE Public Transit	Grand Island	19.90	4.91	47.31	0.2	2.4	NA
North Dakota							
City of Fargo, Metro Area Transit (MATBUS)	Fargo	7.31	6.95	85.40	0.9	11.7	4.00
Cities Area Transit	Grand Forks	13.95	6.33	67.24	0.5	4.8	1.88
Bis-Man Transit Board	Bismarck-Mandan	19.90	4.53	66.11	0.2	3.3	NA
South Dakota							
Sioux Area Metro	Sioux Falls	12.03	7.83	87.58	0.7	7.3	2.91
Rapid Transit System	Rapid City	6.15	4.55	57.03	0.7	9.3	NA
Wyoming							
Casper Area Transit	Casper	10.41	4.50	51.74	0.4	5.0	NA
Cheyenne Transit Program	Cheyenne	11.57	4.16	53.96	0.4	4.7	NA

NA = Not Available

4.5 Summary and Discussion

Overall, the quality of urban transit service in North Dakota is similar to that in surrounding states, although there are higher levels of transit service being provided in some urban areas across the region. A summary of statewide measures is provided in Table 4.21. Greater Minnesota provides a much higher number of trips per capita and a greater quantity of service than the other states in the region. Montana also provides more trips per capita than North Dakota. North Dakota provides a similar number of trips per capita as South Dakota, while providing more vehicle miles and hours of service per capita.

Table 4.23 Summary of Urban Transit Measures, 2017-2021 Average

	Per Capita Ridership	Per Capita VRM	Per Capita VRH	Operating Cost Per Trip	Trips Per VRM	Trips Per VRH
North Dakota	5.5	9.7	0.79	10.99	0.56	6.91
South Dakota	5.3	7.9	0.69	11.27	0.66	7.55
Montana	9.8	9.2	0.70	7.15	1.06	14.01
Wyoming	2.9	7.2	0.60	11.66	0.40	4.80
Nebraska	6.4	6.6	0.49	6.44	0.98	12.95
Greater Minnesota	15.1	16.0	1.19	8.42	0.93	12.56

Analyzing individual agencies shows significant variation across the region. Duluth stands out as providing a much higher number of trips per capita and a greater quantity of service. Agencies in St. Cloud, Rochester, and Missoula also rank highly in terms of ridership and service quantity per capita. The system in Missoula is shown to be the most efficient in terms of cost per trip and trips per VRM or VRH.

While the system in Fargo does not rank among the top systems according to these metrics, it performs reasonably well, with metrics placing it among the middle-tier of agencies in the region. The systems in Grand Forks and Bismarck also perform reasonably well by some metrics, such as per capita VRM or VRH. However, the system in Bismarck ranks among the lowest in some metrics, such as per capita ridership, cost per trip, and trips per VRM or VRH. The lower levels of ridership in Bismarck and the lower efficiency measures are due to the system having a greater focus on its demand-response service.

Operating expenditures per capita is a measure of investment in transit. The systems in Minnesota, particularly those in Duluth, St. Cloud, and Rochester, as well as the transit agency in Missoula, have a much higher operating budget per capita compared to the other systems in the region. As a result, these agencies provide a higher level of service and generate more trips per capita.

Service frequency, span of service, and geographic coverage are measures of fixed-route service quality that were analyzed in this study. Among the agencies studied, those in Duluth and Missoula had the greatest coverage, with the highest percentage of residents living within 0.25 miles of a bus stop. Grand Forks was also found to have good coverage. While increased investments in transit can improve the system's coverage and quality of service, land use development has a significant role in how well transit agencies can serve the needs of residents. Areas with lower-density, auto-oriented development are more difficult for transit agencies to effectively serve.

5. CONCLUSIONS

Rural transit agencies in the six-state region cover many highly rural areas with low population densities. While several rural counties have experienced declining or stagnant population, an aging population could indicate a significant need for transit. High percentages of older adults are found in some of the most rural counties in the region. High instances of poverty and lower vehicle ownership are found in some of the counties with high Native American populations.

This study shows how the level of transit service varies across the states of North Dakota, South Dakota, Montana, Wyoming, Nebraska, and Greater Minnesota. Overall, North Dakota performs well by some measures and not as well by others, but the level of service in the state is generally comparable to what is found in surrounding states. Although North Dakota has good rural transit coverage, service could be improved by expanding the hours of service or adding weekend service. One limitation is that data on service span for demand response services were collected from the websites of individual transit agencies, and the accuracy of the data depends on the accuracy and completeness of the information provided.

North Dakota provides a relatively high level of rural transit vehicle revenue miles and vehicle revenue hours per capita, in comparison to the surrounding states, but ridership per capita is lower than in South Dakota, Minnesota, and Montana. Per capita investment levels in North Dakota for rural transit are similar to those in South Dakota and Minnesota and greater than the levels in other states. Overall, the quality of urban transit service in North Dakota is also similar to that in surrounding states, but there are higher levels of transit service provided in some urban areas across the region. For example, the transit systems in Duluth, St. Cloud, Rochester, and Missoula have higher per capita operating budgets and generate more trips per capita.

Statewide averages show how the states compare to each other, but there are significant variations within states regarding the level of service provided, for both rural and urban transit. The higher-performing agencies and regions within the study area can be used as benchmarks for improving service.

While the study shows how states, regions within states, and individual urban agencies rank among those in the six-state study area, it does not prescribe desired or needed levels of service. If a state or agency ranks highly, it does not necessarily mean that all the needs are being met or that there is no need for improvement. Rather, the study helps to show where the needs are being met more successfully and where there is greater need for improvement. Results can be used by the states to evaluate the level of service being provided and to identify investment needs.

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APPENDIX A. LIST OF TRANSIT AGENCIES

Minnesota

	Agency Name	City
Rural	Arrowhead Economic Opportunity Agency, Inc.	Virginia
	Becker County Transit	Detroit Lakes
	Blue Earth Blue Sky	Mankato
	Brainerd, City of	Brainerd
	Brown County Family Services	
	Cedar Valley Services, Inc.	Austin
	Central Community Transit	Willmar
	Faribault-Martin Counties Joint Powers	Fairmont
	Fosston, City of	Fosston
	Hibbing, City of	Hibbing
	Hubbard County	Park Rapids
	Isanti County	Cambridge
	Kanabec County	
	Minnesota River Valley Transit	St Peter
	Morris, City of	Morris
	Paul Bunyan Transit	Bemidji
	Prairie Five CAC, Inc.	Montevideo
	Productive Alternatives	Fergus Falls
	Rainbow Rider Transit Board	Lowry
	SEMCAC	
	Southwestern MN Opportunity Council, Inc.	Worthington
	Three Rivers Community Action, Inc.	Plainview
	Trailblazer Joint Powers Board	Glencoe
	Tri-County Action Program, Inc.	Waite Park
	Tri-Valley Opportunity Council, Inc.	Crookston
	United Community Action Partnership, Inc.	Marshall
	Volunteer Interfaith Network Effort	Mankato
	Wadena County Social Services	Wadena
	Watonwan County	Saint James
	Winona, City of	Winona
Tribal	Bois Forte Reservation Tribal Council	Nett Lake
	Fond du Lac Reservation	Carlton
	Grand Portage Reservation Tribal Council	Grand Portage
	Leech Lake Band of Ojibwe	Cass Lake
	Red Lake Band of the Chippewa	Redlake
	White Earth Band of Chippewa	Ogema
Urban	City of Mankato	Mankato
	City of Maple Grove	Osseo

	City of Moorhead	Moorhead
	City of Plymouth	Plymouth
	City of Rochester, Minnesota	Rochester
	Duluth Transit Authority	Duluth
	Metro Transit	Minneapolis
	Metropolitan Council	Minneapolis
	Minnesota Valley Transit Authority	Burnsville
	SouthWest Transit	Eden Prairie
	St. Cloud Metropolitan Transit Commission	Saint Cloud
	University of Minnesota Transit	Minneapolis

Montana

	Agency Name	City
Rural	Big Sky Transportation District	Big Sky
	Butte Silver Bow COA	Butte
	Butte Silver Bow Transit	Butte
	Carter County	Ekalaka
	City of Dillon	Dillon
	City of Laurel	Laurel
	Custer County Council on Aging	Miles City
	Daniels Memorial Healthcare Foundation	Scobey
	Fallon County	Baker
	Fergus County Council on Aging	Lewistown
	Flathead County Public Transportation	Kalispell
	Garfield County Council on Aging	Jordan
	Glen-wood, Inc.	Plentywood
	Helena, City of	Helena
	Human Resource Development Council District IX, Inc.	Bozeman
	Lake County Council on Aging	Ronan
	Liberty County Council on Aging	Chester
	Liberty Place, Inc.	Whitehall
	Lincoln County Transportation Service, Inc.	Libby
	Mineral County Pioneer Council, Inc.	Superior
	Missoula Ravalli Transportation Management Association	Missoula
	Opportunity Link	Havre
	Park County Windrider Transit	Livingston
	Phillips Transit Authority	Malta
	Powder River County	Broadus
	Powell County Public Transportation	Deer Lodge
	Ravalli County Council on Aging	Hamilton
	Red Lodge Area Community Foundation	Red Lodge
	Richland County	Sidney

	Rosebud Community Hospital	Forsyth
	Sanders County Council on Aging	Hot Springs
	Toole County	Shelby
	Urban Transportation District of Dawson County	Glendive
	Valley County Transit	Glasgow
	West Yellowstone Foundation, Inc.	West Yellowstone
Tribal	Blackfeet Nation Transit Department	Browning
	Chippewa Cree Tribe	Box Elder
	Confederated Salish and Kootenai Tribes	Pablo
	Crow Tribe of Indians	Crow Agency
	Fort Belknap Indian Community	Harlem
	Fort Peck Tribes	Wolf Point
	Northern Cheyenne Tribe	Lame Deer
Urban	City of Billings	Billings
	Great Falls Transit District	Great Falls
	Missoula Urban Transportation District	Missoula
	University of Montana	Missoula

North Dakota

	Agency Name	City
Rural	Benson County Transportation	Maddock
	Can-Do Transportation	Cando
	Cavalier County Senior Meals & Services	Langdon
	City of Minot	Minot
	Devils Lake Transit (Senior Meals & Services)	Devils Lake
	Dickey County Senior Citizens	Ellendale
	Golden Valley/Billings County Council on Aging	Beach
	Hazen Busing Project	Hazen
	James River Senior Citizens Center, Inc.	Jamestown
	Kenmare Wheels & Meals	Kenmare
	Kidder-Emmons County Senior Services	Steele
	North Dakota Department of Transportation	Bismarck
	Nutrition United	Rolla
	Pembina County Meals and Transportation	Drayton
	Souris Basin Transit	Minot
	South Central Adult Services	Valley City
	Southwest Transportation Services	Bowman
	Stark County Council on Aging / Elder Care	Dickinson
	Walsh County Transportation Program	Park River
	West River Transit	Bismarck
	Wildrose Public Transportation	Crosby
	Williston Council for the Aging	Williston

Tribal	Spirit Lake Tribe	Fort Totten
	Standing Rock Public Transportation	Fort Yates
	Turtle Mountain Band of Chippewa Indian	Belcourt
Urban	Bis-Man Transit Board	Bismarck
	Cities Area Transit	Grand Forks
	City of Fargo	Fargo
	Fargo Park District	Fargo

Nebraska

	Agency Name	City
Rural	Avera Creighton Hospital	Yankton
	Avera St. Anthony's Hospital	Oneill
	Blue River AAA	Beatrice
	Blue Valley Community Action Partnership	Geneva
	Butler County Senior Service Program	David City
	Callaway District Hospital	Callaway
	Cambridge Memorial Hospital	Cambridge
	Cedar County Transit	Hartington
	Central City	Central City
	Chase County	Imperial
	City of Crawford	Crawford
	City of Chadron	Chadron
	City of Alliance	Alliance
	City of Benkelman	Benkelman
	City of Broken Bow	Broken Bow
	City of Columbus Transit	Columbus
	City Of McCook Public Transit	Mc Cook
	City of Neligh	Neligh
	City of North Platte	North Platte
	City of Plainview Handivan	Plainview
	City Of Sidney	Sidney
	City Of Tecumseh	Tecumseh
	Community Memorial Health Center Burwell	Burwell
	Community Concern	Norfolk
	Eastern Nebraska	Omaha
	Garden County	Oshkosh
	Grant County	Hyannis
	Guide Rock	Guide Rock
	Harlan Co. Public Transit	Alma
	Hooker Co	Mullen
	Kimball County Public Transit	Kimball
	Lancaster Co Rural Transit	Lincoln

	Loup City	Loup City
	Midland Area Agency	Hastings
	Mid-Nebraska Community Action	Kearney
	Morrill County Handi Bus	
	Nance Trans	Fullerton
	Oakland Heights	Oakland
	Ogallala Transit System	Ogallala
	Perkins County Public Transit	Grant
	Phelps County Senior Citizen	Holdrege
	Saline County Area Transit	Western
	Saunders County Transportation	Wahoo
	Schuyler	Schuyler
	Scotts Bluff Public Transit	Gering
	Senior Information Center York	York
	Senior Services, Inc.	Alliance
	Seward County Handibus	Seward
	Sheridan County Public Transit	Chadron
	Southeast Nebraska Community Action Partnership	Humboldt
	Stratton Industrial Commission	Stratton
	Valley County Hospital	Ord
	Wayne Public Transit	Wayne
	Wolf Memorial Good Samaritan Center	Albion
Tribal	Omaha Tribe Public Transit	Macy
	Ponca Tribe of Nebraska	Niobrara
	Santee Sioux Nation	Niobrara
	Winnebago Tribe of Nebraska	Winnebago
Urban	City of Grand Island	Grand Island
	City of Lincoln	Lincoln
	Senior Citizen Industries	Grand Island
	Transit Authority of Omaha	Omaha

South Dakota

	Agency Name	City
Rural	Brookings Area Transit Authority	Brookings
	River Cities Transit	Pierre
	City of Aberdeen - Aberdeen Ride Line	Aberdeen
	City of Brandon - Brandon City Transit	Brandon
	City of Mitchell - Palace Transit	Mitchell
	Community Transit of Watertown/Sisseton, Inc.	Watertown
	East Dakota Transit, Inc.	Madison
	People's Transit	Huron
	Rural Office of Community Services	Wagner

	Agency Name	City
	SESDAC, Inc.	Vermillion
	West River Transit Authority, Inc.	Spearfish
	Yankton Transit, Inc.	Yankton
Tribal	Cheyenne River Sioux Tribe	Eagle Butte
	Lower Brule Sioux Tribe	Lower Brule
	Oglala Sioux Tribe	Pine Ridge
	Rosebud Sioux Tribe	Rosebud
	Sisseton-Wahpeton Oyate	Agency Village
	Yankton Sioux Tribe	Wagner
Urban	City of Rapid City	Rapid City
	Community Coordinated Transportation System	Pierre
	Su Tran LLC	Sioux Falls

Wyoming

	Agency Name	City
Rural	AllTrans Inc.	Jackson
	Buffalo Senior Center Inc	Buffalo
	Campbell County Senior Citizens Association Inc	Gillette
	Carbon County Senior Services, Inc.	Rawlins
	Cody Council on Aging, Inc.	Cody
	Converse County Aging Services	Douglas
	Crook County Senior Services, Inc.	
	Diversified Services Inc.	
	Eppson Center for Seniors	Laramie
	Fremont County Association of Governments	Riverton
	Goshen County Senior Friendship Center	Torrington
	High Country Senior Citizens, Inc.	Dubois
	Hot Springs County Senior Citizens Center, Inc.	Thermopolis
	Kemmerer Senior Citizens Association	Kemmerer
	Lander Senior Citizens Center, Inc.	Lander
	Meeteetse Recreation District	Meeteetse
	Niobrara Senior Center, Inc.	Lusk
	North Big Horn Senior Center, Inc.	Lovell
	Pine Bluffs Senior Citizens, Inc.	Pine Bluffs
	Powell Senior Citizens Ago-Go, Inc.	Powell
	Rehabilitation Enterprises of North Eastern Wyoming (RENEW)	Sheridan
	Rendezvous Pointe	Pinedale
	Riverton Senior Center	Riverton
	Senior Center of Jackson Hole	Jackson
	Senior Citizens Council	Sheridan
	Services for Seniors, Inc.	Wheatland
	Shoshoni Senior Citizens	

|		
	South Big Horn Senior Citizens, Inc.	Greybull
	Southern Teton Area Rapid Transit	Jackson
	Southern Teton Area Rapid Transit	Jackson
	Southwest Sublette County Pioneers, Inc.	Big Piney
	Star Valley Senior Citizens, Inc.	Afton
	Sweetwater Transit Authority Resources	Rock Springs
	Ten Sleep Senior Center	Ten Sleep
	Thayne Senior Center	Thayne
	Uinta Senior Citizens, Inc.	Evanston
	University of Wyoming	Laramie
	Washakie County Senior Citizens Center	Worland
	Weston County Senior Services	Newcastle
	Wyoming Department of Transportation	Cheyenne
Tribal	Shoshone and Arapaho Tribes DOT	Fort Washakie
Urban	City of Casper	Casper
	The City of Cheyenne	Cheyenne

APPENDIX B. URBAN TRANSIT NETWORKS
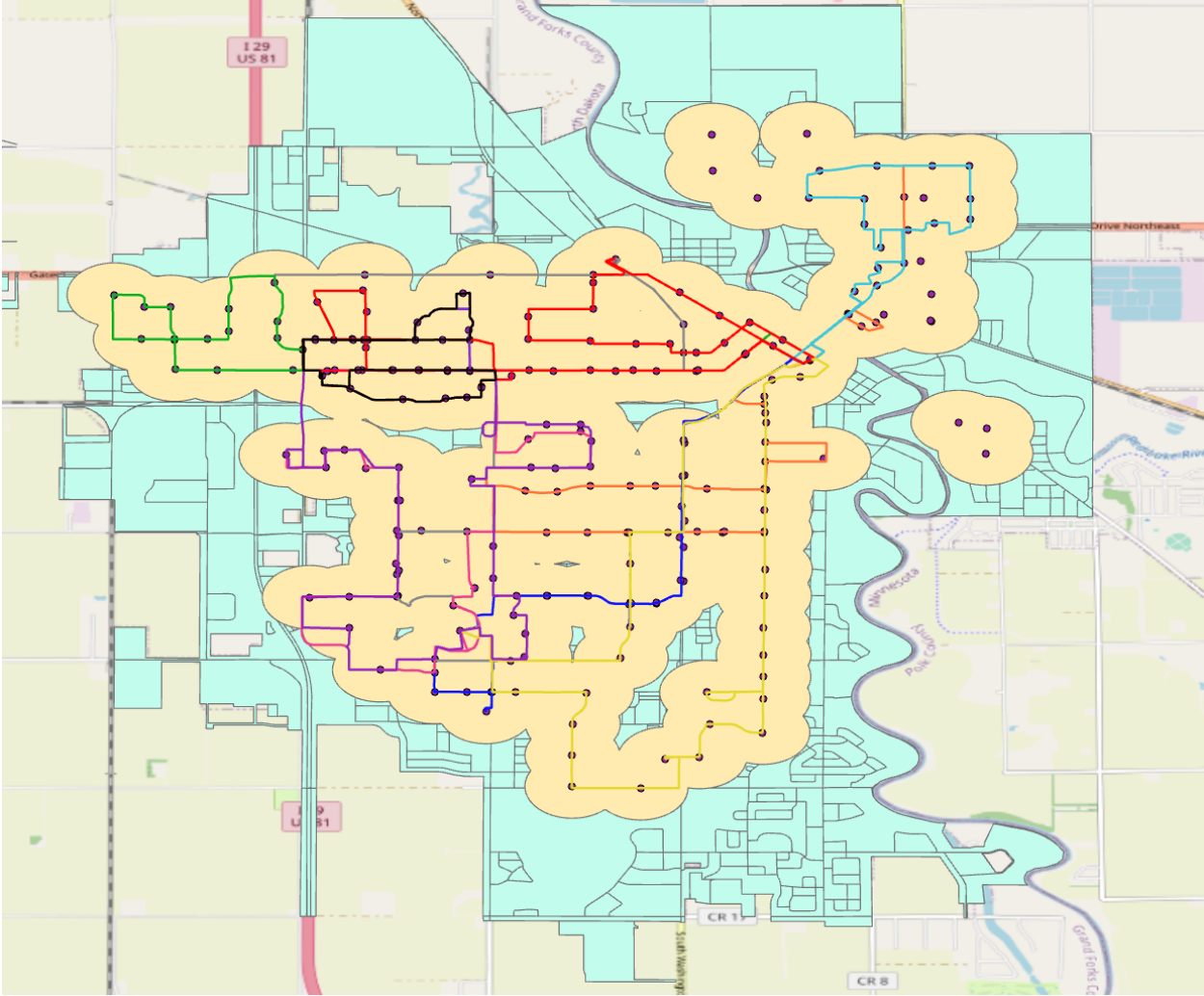
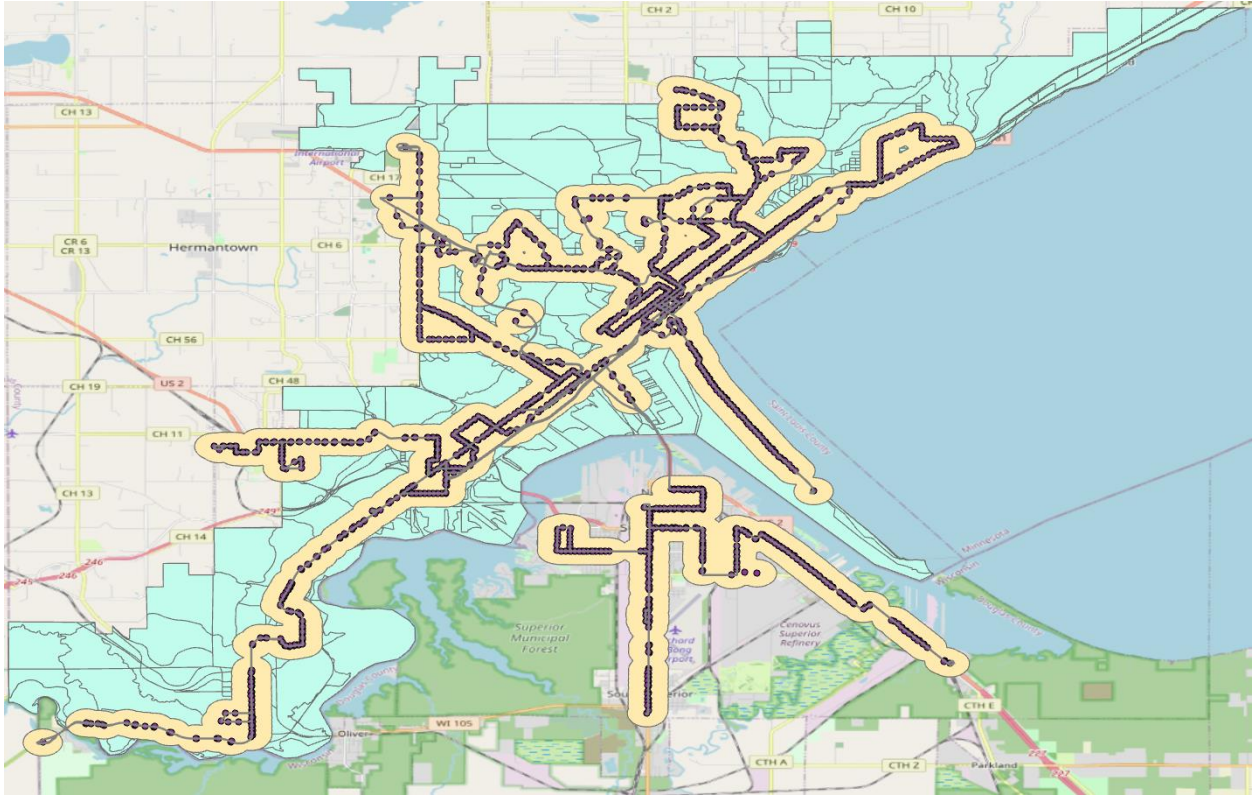**Figure B.1** Grand Forks Transit Network

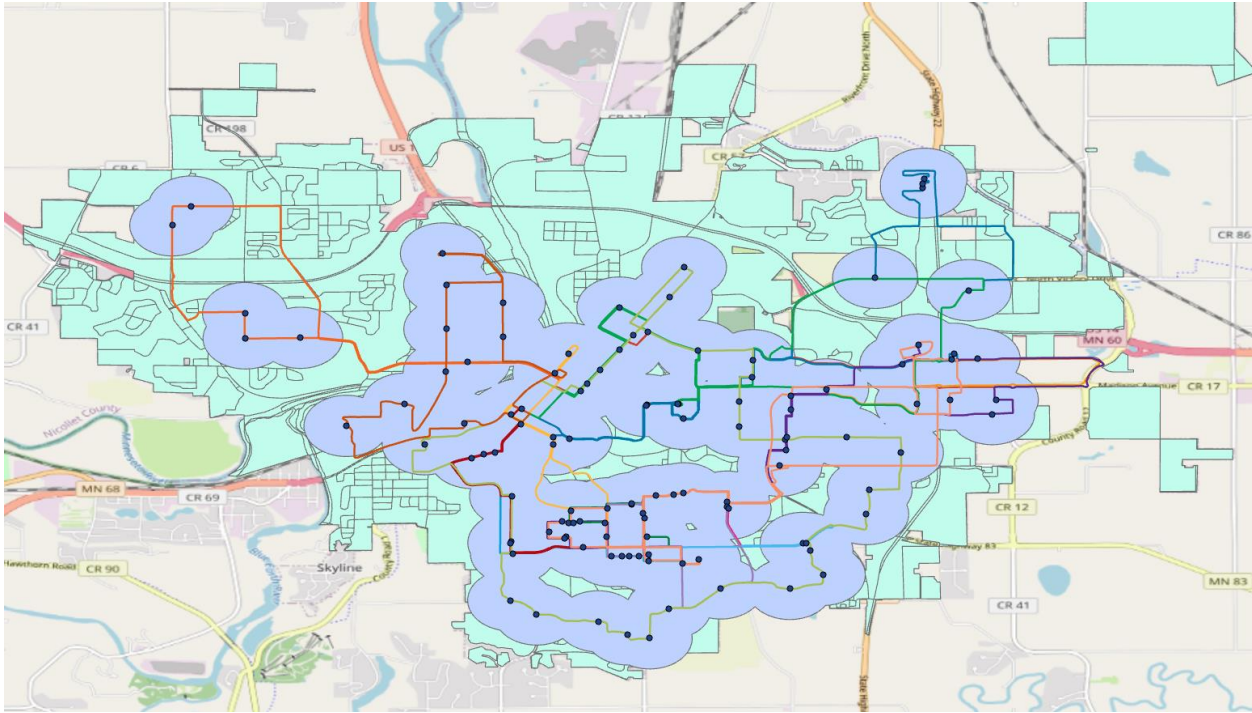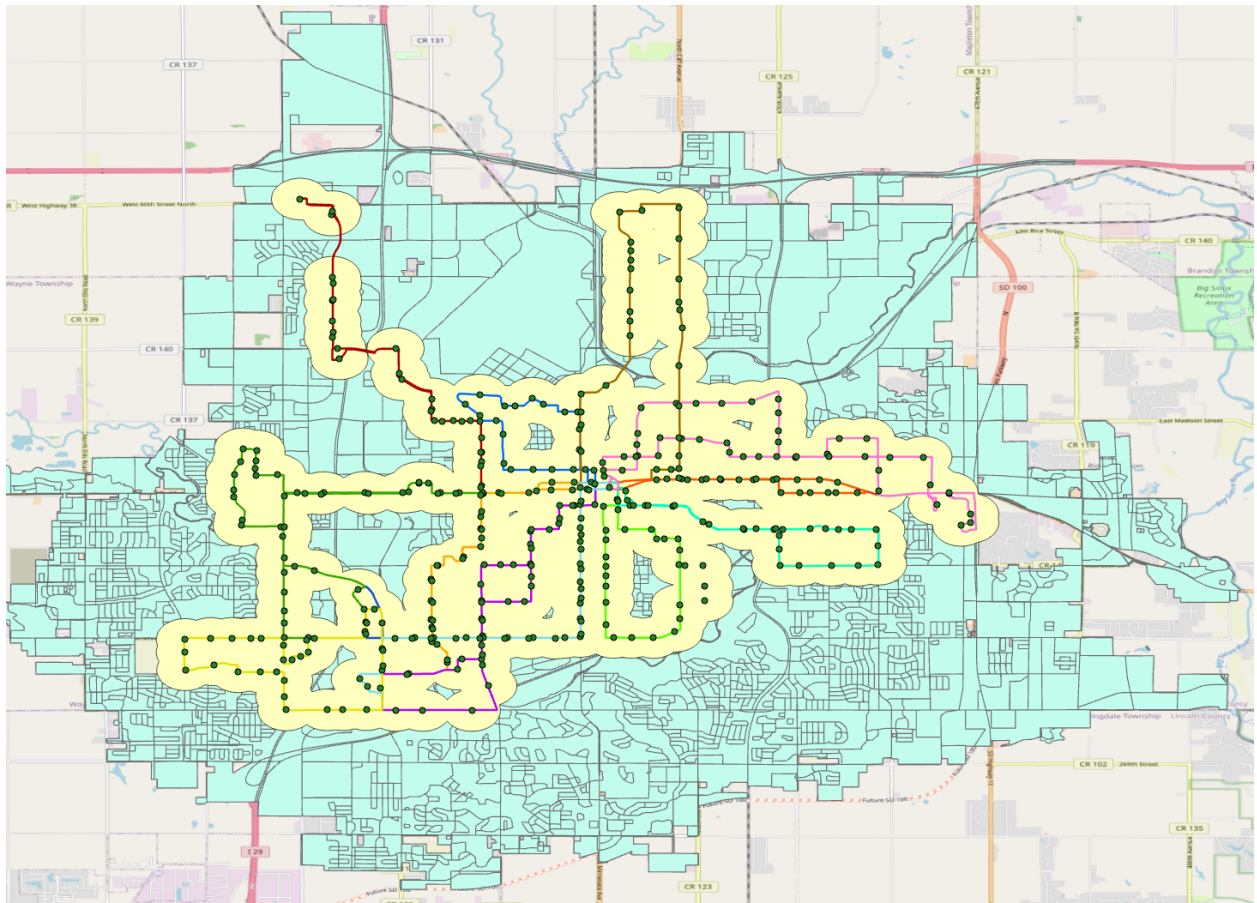**Figure B.2** Duluth Transit Network

Figure B.3 Mankato Transit Network

Figure B.4 Sioux Falls Transit Network