Rural Transit Fact Book | 2020



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INTRODUCTION

Public transportation plays a fundamental role in the livability of communities of all sizes. The *Rural Transit Fact Book* provides information on transit service availability and cost to help the transit industry in the United States provide efficient and effective service to meet rural community mobility needs. Financial and operating statistics can be used by agency managers, local decision makers, state directors, the Federal Transit Administration (FTA), and lawmakers to assist in policy making, planning, managing operations, and evaluating performance.

The *Rural Transit Fact Book* serves as a national resource for statistics and information on rural transit in America. This publication includes rural demographic and travel behavior data as well as financial and operating statistics for agencies receiving section 5311 funding. In addition to national-level data, statistics are presented by state, FTA region, tribe, and mode, as well as other agency characteristics.

The rural transit data presented in this report were obtained from the Rural National Transit Database (NTD). The 2011 edition of the *Rural Transit Fact Book* was the first published by SURTC/SURCOM and included Rural NTD data for 2007-2009. Since 2011, updates have been made to the book to provide updated data. The 2020 edition includes 2018 data from the NTD as well as additional data from the American Community Survey and National Household Travel Survey.

As noted, this publication presents data for transit providers receiving section 5311 Non-Urbanized Area Formula Program funding. This program provides funding to states to support public transportation in rural areas with populations of less than 50,000. A number of rural transit providers also receive funding under the section 5310, Enhanced Mobility of Seniors and Individuals with Disabilities, program. However, nationwide data for 5310 services are not available, as providers are not required to report such data to the NTD. Therefore, rural transit providers not funded by the 5311 program but receiving funding from section 5310 are not included in this report, neither are those receiving strictly non-federal funding. Also excluded from the report are providers that receive both section 5311 funds and section 5307 Urbanized Area Formula Program funding and report their data in the urban NTD.

RURAL AMERICA



Geography influences the type and level of transit service that best serves a community. About 63 million Americans, or close to one fifth of the country's population, live in rural areas, according to data from the American Community Survey (ACS). Table 1 shows select demographic data from the 2018 ACS 1-year estimates for the United States and for urban and rural areas. As defined by the Census, "urban" includes urbanized areas and urban clusters. Urbanized areas have 50,000 or more people and urban clusters have at least 2,500 people but fewer than 50,000 people, and both areas have a core area with a density of at least 1,000 people per square mile. All other areas are defined as rural.

Rural populations tend to be older. The median age is 44 in rural areas and 37 in urban areas. Approximately 19% of residents in rural areas are 65 or older, compared to 15% of those in urban areas. The percentage of residents aged 85 or older, on the other hand, is approximately the same in urban and rural areas. The percentage of people with a disability is slightly higher in rural areas (15%) than in urban areas (12%).

An aging population in rural areas presents a number of transportation challenges. Figure 1 illustrates the growing population of older adults in both urban and rural areas. Median age and the percentage of population aged 65 or older has increased in both urban and rural areas over the past decade, but the increase has been greatest among the rural population.

Rural areas tend to be less ethnically diverse. Urban residents are more likely than their rural counterparts to be non-white or Hispanic, and the foreign-born population is much higher in urban areas (16%) than in rural areas (4%).

Education levels vary somewhat between urban and rural communities. The percentage of individuals that have completed high school in rural areas is about the same as that for urban areas, but urban areas tend to have a higher percentage of residents with a bachelor's or advanced degree.

Median household income is slightly higher in urban areas, but a higher percentage of urban residents live below the poverty line.

Urban residents are more likely to move than those in rural areas (Table 2). About 15% of urban residents moved during the last year, compared to 10% of rural residents. Rural residents are more likely than those in urban areas to live in the state in which they were born.

Table 1. Characteristics of U.S. Urban and Rural Populations

	United		
	States	Urban	Rural
Total Population (million people)	327	264	63
Average Household Size	2.63	2.63	2.61
Gender (%)			
Male	49.2	48.9	50.6
Female	50.8	51.1	49.4
Age			
Median age	38.2	37.1	43.5
65 or older (%)	16.0	15.2	19.4
85 or older (%)	1.9	2.0	1.8
Population with a Disability (%)	12.6	12.0	15.0
Race (%) ^a			
White	75.1	71.8	89.4
Black or African-American	14.1	15.9	6.8
American Indian and Alaska Native	1.7	1.5	2.6
Asian	6.8	8.0	1.6
Hispanic or Latino	18.3	20.9	7.0
Foreign Born (%)	13.7	16.0	3.7
Highest Education Level Completed (%)b			
Did not complete high school	11.6	11.8	11.4
High school	26.9	25.1	33.8
Some college, no degree	20.3	20.0	21.2
Associate's degree	8.6	8.3	9.6
Bachelor's degree	20.0	21.2	15.3
Graduate or professional degree	12.6	13.6	8.7
Economic Characteristics			
Individuals below the poverty line (%)	13.1	13.5	11.6
Median household income (dollars)	61,937	62,305	60,446

^aAlone or in combination with another race

Source: American Community Survey, 2018 1-year estimates

bPopulation 25 years or older

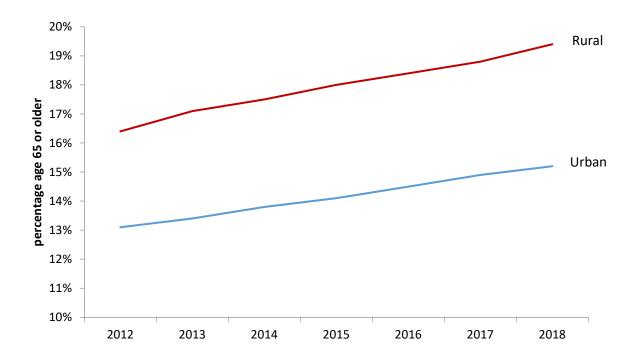


Figure 1. Percentage of Population Aged 65 or Older, 2012-2018 Source: American Community Survey 1-Year Estimates, 2012-2018

Table 2. Geographic Mobility

	l lo:to ol		
	United		
	States	Urban	Rural
	F	Percentage	
Native population born in their state of residence	58.1	55.6	68.4
Lived in a different house 1 year ago	14.0	14.9	10.3
Lived in a different state or abroad 1 year ago	2.9	3.2	1.9

Source: American Community Survey, 2018 1-year estimates

COUNTY-LEVEL DEMOGRAPHIC INFORMATION



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Older adults, people with disabilities, and individuals from low-income households have greater needs for transportation services. This section examines county-level data for these three groups, examining differences between urban and rural areas and demographic shifts over time. Figures 2-4 show percentages of the population aged 65 or older, with a disability, and living below the poverty line, respectively, at the county level. These data are from the ACS 2014-2018 5-year estimates. Many of the counties with the highest percentages of these population groups are in rural areas.

Higher concentrations of older adult populations are found in Florida, the rural Midwest and Great Plains region, and parts of the west. Disability rates tend to be highest in the south (especially Appalachia), and parts of the northwest, northern Michigan, and northern Maine. Disability rates are generally the lowest in the upper Midwest and Mountain West regions, as well as the Washington, DC, to Boston corridor and southern California. High incidences of poverty are found in rural areas in the south, especially in the Mississippi Delta and Appalachia regions, and counties with Native American lands.

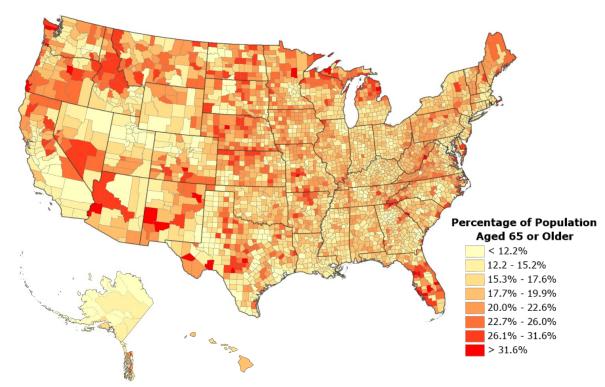


Figure 2. Percentage of Population Aged 65 or Older, by County Source: American Community Survey, 2018 5-year estimates

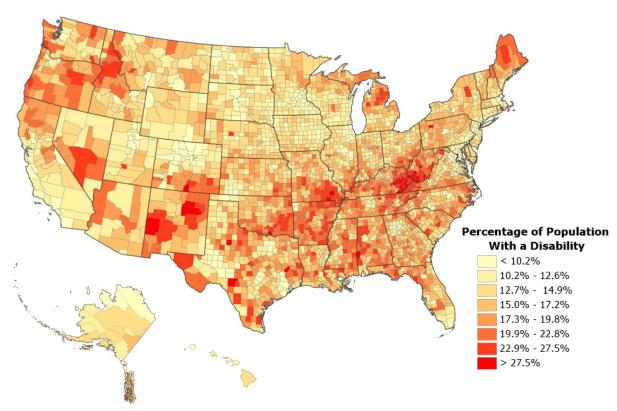


Figure 3. Percentage of Population with a Disability, by County Source: American Community Survey, 2018 5-year estimates

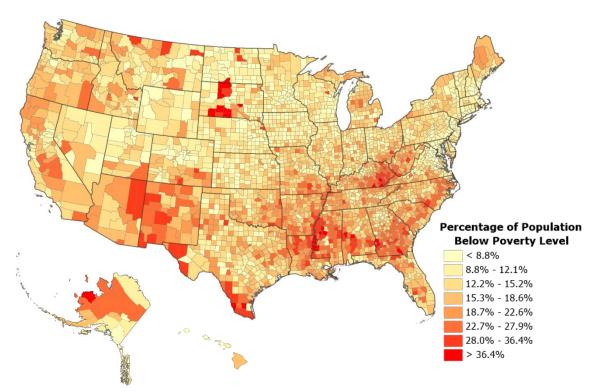


Figure 4. Percentage of Population in Poverty, By County Source: American Community Survey, 2018 5-year estimates

As discussed previously, the population in both urban and rural areas has been aging. This is further illustrated in Figures 5 and 6. These figures show the change in the population aged 65 or older from the ACS 2006-2010 5-year estimates to the 2014-2018 5-year estimates. As shown in Figure 5, most counties have experienced growth in population of this demographic. In many counties, the population has grown by 15% or more, with the greatest growth in the west, south, and mid-Atlantic regions. Not only is the population of older adults growing, but it is growing faster than the overall population. In most counties, older adults represent an increasing share of the total population, as illustrated in Figure 6. This figure shows changes in the percentage of the population aged 65 or older over this same period. Many of the counties with the largest growth in senior population are rural counties, especially in the west. Declines have occurred in western North Dakota, which could be explained by the oil boom attracting younger workers to the region, and a few other rural Great Plains counties.

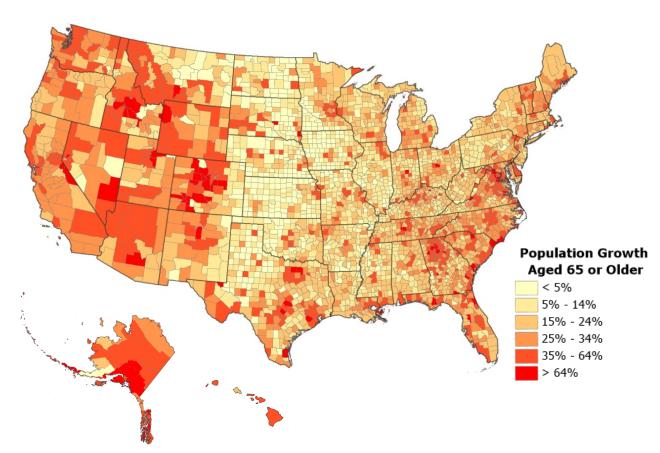


Figure 5. Growth in Population Aged 65 or Older, 2010-2018, by County Source: American Community Survey, 2018 5-year estimates, 2010 5-year estimates

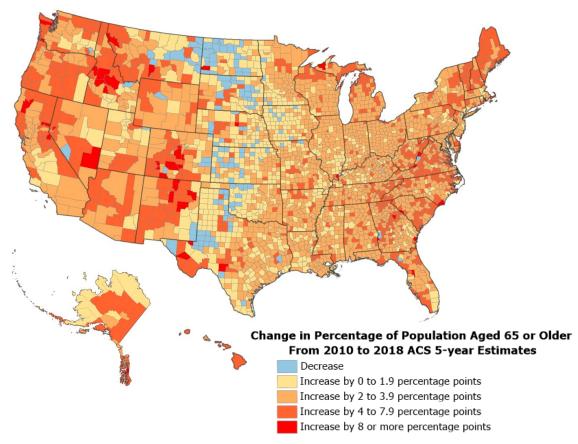


Figure 6. Change in Percentage of Population Aged 65 or Older, by County Source: American Community Survey, 2018 5-year estimates, 2010 5-year estimates

To show the demographic differences between urban and rural counties, counties were classified using the Rural-Urban Continuum Codes (RUCCs). The RUCC classifies counties on a 1-9 scale, as shown in Table 3, with higher numbers indicating more rural counties. Codes 1-3 are used for counties with metro areas, and 4-9 are used for increasingly rural, non-metro counties. Codes for 2013, the most recent year available, were obtained for each county from the U.S. Census. Figure 7 maps the RUCC codes for each county, with the more urban counties shown in red and orange and the more rural counties in green.

 Table 3. Rural-Urban Continuum Codes

Code	Description
1	Counties in metro areas of 1 million population or more
2	Counties in metro areas of 250,000 to 1 million population
3	Counties in metro areas of fewer than 250,000 population
4	Urban population of 20,000 or more, adjacent to a metro area
5	Urban population of 20,000 or more, not adjacent to a metro area
6	Urban population of 2,500 to 19,999, adjacent to a metro area
7	Urban population of 2,500 to 19,999, not adjacent to a metro area
8	Completely rural or less than 2,500 urban population, adjacent to a metro area
9	Completely rural or less than 2,500 urban population, not adjacent to a metro area

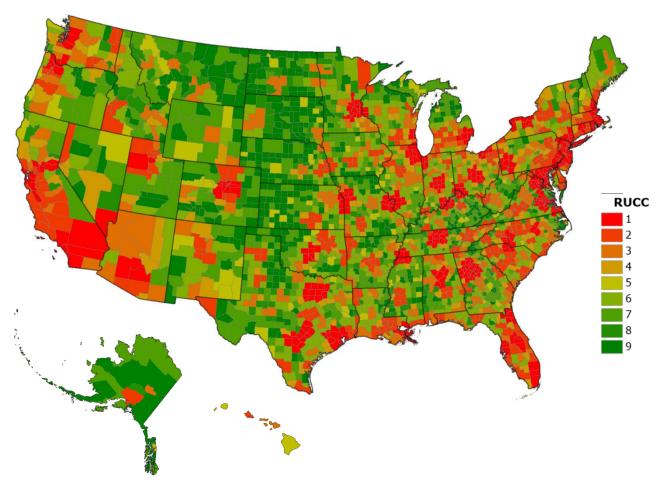
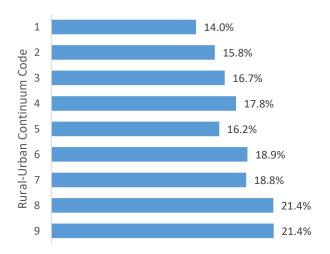
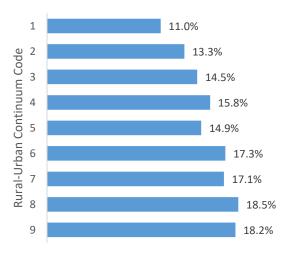


Figure 7. County-Level 2013 Rural-Urban Continuum Codes



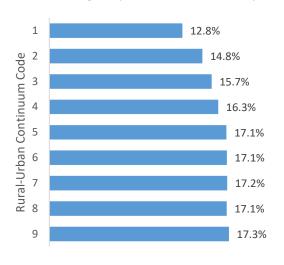
Percentage Population with a Disability





Percentage Population below Poverty Line

Percentage Households with No Vehicle



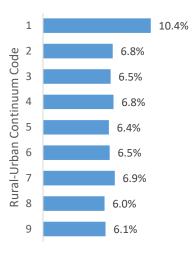


Figure 8. Percentage of Population Consisting of Transportation-Disadvantaged Populations, by Rural-Urban Continuum Code

Source: American Community Survey, 2018 5-year estimates

Figure 8 shows differences in demographics based on the degree to which a county is urban or rural. The most rural counties are shown to have the highest percentages of older adults and people with a disability. In counties with an RUCC code of 8 or 9, 21% of the population is aged 65 or older and 18% has a disability. Non-metro counties are also shown to have a higher percentage of individuals living below the poverty line. These are indicators of a need for transit services. On the other hand, the most urban counties have the highest percentage of households without a vehicle. This is likely because the most urban areas have the highest quality transit, and those living in these areas are able to live without a vehicle and rely on transit for their transportation needs.

The data in Figure 8 are nationwide averages, and some counties have considerably higher concentrations of these populations. To give some indication of this variability, Table 4 shows percentile and median values for county-level data. For example, this table shows that, among the most rural counties, those with an RUCC code of 9, the median percentage of population 65 or older is 22%, the 10th percentile is 15%, and the 90th percentile is 28%. In other words, at least 22% of the population is aged 65 or older in half of these counties, and in 10% of these counties, 28% or more of the population is 65 or older. The data further show that in 10% of the most rural counties, at least 24% of the population has a disability and about 25% or more of population is in poverty.

Table 4. County-Level Median and Percentile Data for Transportation-Disadvantaged Populations, by Rural-Urban Continuum Code

Percentage of Population									
Percentage Aged 65 or Older			Perce	ntage with a	Disability	Percen	Percentage Below Poverty Line		
RUCC Code	Median	10th percentile	90th percentile	Median	10th percentile	90th percentile	Median	10th percentile	90th percentile
1	15	11	19	12	9	17	11	6	18
2	17	12	21	14	11	20	14	9	21
3	17	12	21	15	11	21	15	9	22
4	18	13	21	16	12	20	16	10	24
5	17	11	19	15	10	20	16	10	24
6	19	15	23	17	13	22	16	10	26
7	19	14	24	16	11	23	15	10	26
8	21	16	27	18	12	24	16	9	26
9	22	15	28	16	11	24	14	7	25

Source: American Community Survey, 2018 5-year estimates

Table 5 shows the counties with the highest percentages of older adults, people with disabilities, and people living below the poverty line, as well as the counties with the lowest percentages of these populations. The counties with the highest percentages of older adults are either metro Florida counties or rural counties elsewhere in the country. The counties with the highest incidences of disabilities are all rural counties, many of them very rural, and most are in the Appalachia region. The highest rates of poverty are also found in rural counties, many of them very rural. In particular, rural counties in South Dakota with Native American lands and rural counties in the southeast have the highest rates of poverty.

Table 5. Counties with Highest and Lowest Percentages of Population Aged 65 or Older, with a Disability, or Living Below Poverty Line

			Population A	ged 65 or Older			
Hi	ghest Perce	entages of Population	on	Low	est Perce	ntages of Populati	on
County	State	RUCC Code	Percentage	County	State	RUCC Code	Percentage
Sumter	FL	3	56	Chattahoochee	GA	2	4
Charlotte	FL	3	39	Kusilvak	AK	9	6
Catron	NM	9	39	Aleutians West	AK	9	6
Harding	NM	9	38	North Slope	AK	7	6
La Paz	ΑZ	6	38	Madison	ID	4	6
Highland	VA	8	37	Oglala Lakota	SD	6	7
Custer	CO	8	36	Bethel	AK	7	7
Northumberland	VA	9	36	Denali	AK	8	7
Citrus County	FL	3	36	Utah	UT	2	7
Llano	TX	7	36	Nome	AK	7	8
Alcona	MI	9	36	Todd	SD	9	8
Lancaster	VA	9	36	Sioux	ND	3	8
Sarasota	FL	2	35	Northwest Arctic	AK	7	8
Sierra County	NM	6	35	Lake and Peninsula	AK	9	8
Highlands	FL	3	35	Geary	KS	4	8

Population With a Disability Highest Percentages of Population Lowest Percentages of Population RUCC Code Percentage **RUCC Code** County State County State Percentage Breathitt 7 34 СО 7 4 ΚY Pitkin 9 Wolfe 34 CO 5 4 $\mathsf{K}\mathsf{Y}$ Eagle Wyoming WV 6 33 Summit UT 4 5 5 McDowell WV 7 33 Grand CO 9 33 CO 5 Knott ΚY Routt Bell ΚY 7 32 Clark ID 5 7 Harlan ΚY 32 Glasscock TX 8 5 9 Leslie ΚY 32 Loudoun VA6 9 32 Arlington Lee ΚY ٧A 6 9 Ripley МО 31 Falls Church ٧A 6 Magoffin ΚY 9 31 Summit CO 6 TX 9 31 СА 7 Kent Mono 7 ΚY 9 31 CO Letcher Douglas Mingo WV 7 31 Manassas VA 7 30 MN NM Catron Carver

Population in Poverty								
н	lighest Perce	ntages of Population	on		owest Perce	ntages of Populati	on	
County	State	RUCC Code	Percentage	County	State	RUCC Code	Percentage	
Todd	SD	9	55	Scott	KS	7	2	
Jefferson	MS	8	50	Borden	TX	8	3	
Oglala Lakota	SD	6	49	Falls Church	VA	1	3	
East Carroll	LA	7	49	Morgan	UT	2	3	
Mellette	SD	9	48	Douglas	CO	1	4	
Jackson	SD	8	48	Sterling	TX	8	4	
Corson	SD	9	44	Lincoln	SD	3	4	
Claiborne	MS	8	44	Loudoun	VA	1	4	
Holmes	MS	6	44	Sargent	ND	9	4	
Perry	AL	8	42	Carver	MN	1	4	
Issaquena	MS	8	42	Campbell	SD	9	4	
Clay	GA	9	41	Gilpin	CO	1	4	
Ziebach	SD	8	41	Daniels	MT	9	4	
Kusilvak	AK	9	41	Williamson	TN	1	4	
Tensas	LA	9	40	Sully	SD	9	4	

Source: American Community Survey, 2018 5-year estimates

RURAL TRANSPORTATION



Data from the ACS, Federal Highway Administration (FHWA), and National Household Travel Survey (NHTS) show there are differences in transportation and travel behavior between urban and rural areas. One notable difference is a greater reliance on automobiles by rural residents. Just 4% of rural households do not have a vehicle available, compared to 10% of urban households (Table 6). Meanwhile, 71% of rural households have two or more vehicles, while only 54% of urban households have two or more vehicles.

Table 6. Vehicles Available in Household

Number of	United		
Vehicles	States	Urban	Rural
	Per	centage	
None	8.5	9.7	3.8
1	32.5	34.6	23.9
2	37.1	36.5	39.4
3 or more	21.9	19.2	32.9

Source: American Community Survey, 2018 1-year estimates

Rural workers are more likely to drive alone to work and less likely to commute by public transportation than those in urban areas (Table 7). Only 0.5% of rural residents use public transportation to travel to work, compared to 6.3% of urban residents, and just 1.8% of rural workers aged 16 or older do not have access to a vehicle, compared to 5.0% of their urban counterparts. Rural residents also tend to have slightly longer commutes (measured in minutes).

Despite heavy reliance on automobiles, vehicle miles traveled (VMT) on rural roads had been slowly declining during the previous decade, though VMT on rural interstates and other rural arterials has been increasing after 2016 (Figure 9). VMT on urban roads steadily increased until dropping or leveling off after 2007, then began increasing again after 2011. In 2019, VMT increased 1.1% on rural roads and

0.8% on urban roads, according to most recent estimates. The VMT depicted in Figure 9 includes both personal and commercial travel and is total VMT, as opposed to per capita VMT.

Table 7. Commuting to Work

	United		
	States	Urban	Rural
Mode Used (%)			
Car, truck, or van – drove alone	76.3	75.0	82.0
Car, truck, or van – carpooled	9.0	9.1	8.7
Public transportation (excluding taxicab)	4.9	5.9	0.5
Walked	2.6	2.8	1.7
Other means	1.8	2.0	1.2
Worked at home	5.3	5.2	5.9
Mean travel time to work (minutes)	27.1	26.9	28.0

Source: American Community Survey, 2018 1-year estimates

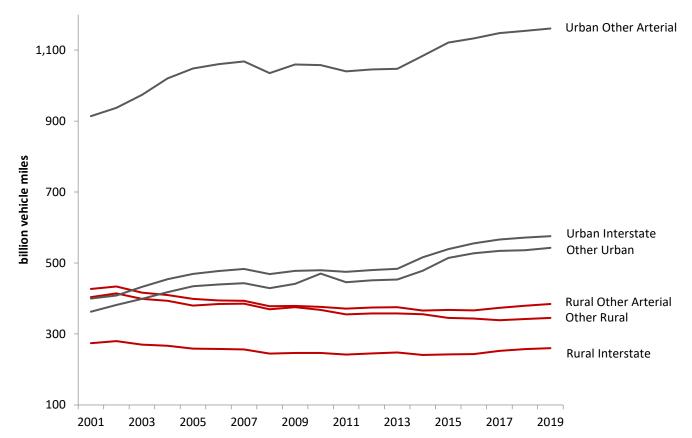


Figure 9. Vehicle Miles Traveled on Urban and Rural Roadways Source: Federal Highway Administration

The NHTS contains a variety of statistics on travel behavior. The NHTS is a periodic national survey sponsored by the FHWA. The most recent NHTS for which data are available was conducted in 2017. Data from the NHTS show that rural residents drive more, on average, than their urban counterparts; are less likely to use public transportation; and drive vehicles that tend to be a bit older with more miles and have slightly lower fuel economy.

Table 8 provides data on differences in trips per day, trip distances, VMT, and use of transit among residents of different types of geographic locations. The NHTS categorizes respondents into five types of geographic areas: urban, suburban, second city, small town, and rural. Urban areas have the highest population densities and include the downtowns of major cities and surrounding neighborhoods, sometimes including the earliest suburbs. Suburban areas are tied closely to urban areas or second cities but are not the population centers of their surrounding community. Second cities are less dense than urban areas, similar to suburban areas, but are the population centers of their surrounding communities. They include large towns, small cities, and higher-density suburbs.

Rural residents, on average, make fewer trips per day, but their average trip distance is greater. As a result of longer trip distances and greater reliance on the automobile, rural residents drive more miles per year than their urban counterparts. As shown in Table 8, annual VMT per person is the greatest for rural residents, at 14,061 miles, and the lowest for urban residents, at 8,854 miles. Use of transit is also shown to be much greater in urban areas.

Table 8. Travel Behavior Data by Geography

	Urban	Suburban	Second City	Small Town	Rural
Number of trips per person per day	3.4	3.4	3.4	3.4	3.2
Average trip distance (miles)	9.9	10.7	8.9	11.1	13.3
Annual VMT per driver	8,854	11,617	10,673	12,492	14,061
Number of days in last month that transit was used, per person	5.02	1.28	1.54	0.91	0.71

Source: 2017 National Household Travel Survey

Figures 10-12 show differences in travel behavior for different age groups and geographic areas. Within all geographic areas, the number of trips per person per day and annual VMT decline with age. Further, within all age groups, the person trip rate and use of transit is lowest in the rural areas, and VMT is highest in rural areas.

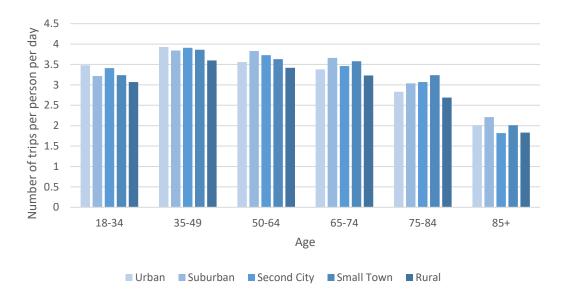


Figure 10. Number of Trips Per Person Per Day, by Age Group and Geography Source: 2017 National Household Travel Survey

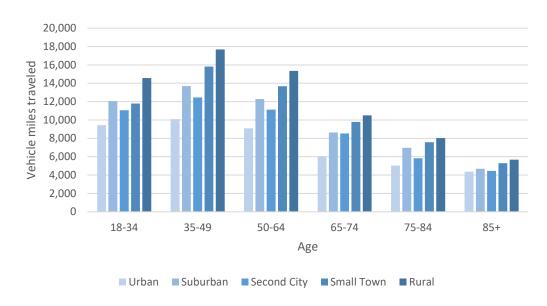


Figure 11. Average Annual Vehicle Miles Traveled, by Age Group and Geography Source: 2017 National Household Travel Survey

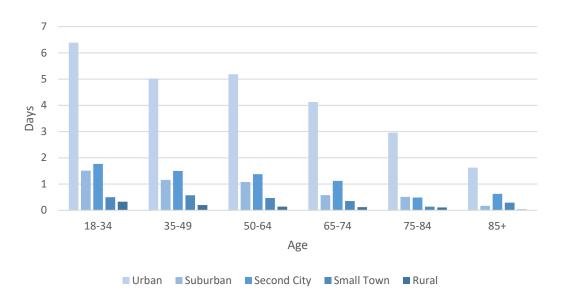


Figure 12. Number of Days in Last Month Transit was Used, by Age Group and Geography Source: 2017 National Household Travel Survey

The annual VMT estimates shown previously in Table 8 and Figure 11 are for those who are identified as drivers, not the entire population. Not only do rural drivers drive more miles per year than their urban counterparts, but a higher percentage of residents in rural areas drive, as shown in Table 9. In this table, all residents are categorized as urban or rural using the same classification as the ACS. The differences between urban and rural driving rates is greatest for women, especially older women. For example, 94% of women aged 65 to 74 in rural areas drive, compared to 82% of urban women in the same age group, and 54% of women aged 85 or older in rural areas drive, compared to 42% of urban women of the same age.

Table 9. Percentage Who Drive, by Age and Gender

	Url	oan	Ru	ıral
Age	Male	Female	Male	Female
18-34	85.4	84.8	88.2	90.2
35-49	93.9	91.4	94.6	95.5
50-64	91.2	87.8	96.5	96.5
65-74	91.3	81.6	97.3	94.3
75-84	87.6	71.8	89.6	78.9
85+	68.6	41.5	72.1	53.6

Source: 2017 National Household Travel Survey

Differences in mode shares are illustrated in Table 10 and Figure 13. The percentage of trips made by public transportation is 8.8% in urban areas, while just 0.6% of trips in small towns and 0.2% of trips in rural areas are made by transit. Trips made by walking, bicycle, and Taxi/Uber/Lyft are also shown to be greater in urban areas. Figure 13 shows how transit mode shares vary by the size of the metro area. In

non-metro areas, 0.3% of trips are made by public transportation, while 5.4% of trips are made by public transportation in metro areas with a population of 3 million or more.

Table 10. Mode Shares by Geographic Areas

			Second		
Mode	Urban	Suburban	City	Small Town	Rural
			Percentag	e	
Autoa	65.0	85.8	82.7	88.1	89.9
Transit ^b	8.8	1.6	2.2	0.6	0.2
Bicycle	1.9	0.7	1.2	0.6	0.4
Walking	21.0	8.5	10.7	6.7	5.4
School bus	0.7	2.2	1.7	2.4	2.5
Taxi/Uber/Lyft	1.4	0.3	0.4	0.1	0.2
Other ^c	1.3	1.0	1.1	1.4	1.4

^a Includes car, SUV, van, pickup truck, and rental car, but not taxi, limo, Uber, or Lyft

Source: 2017 National Household Travel Survey

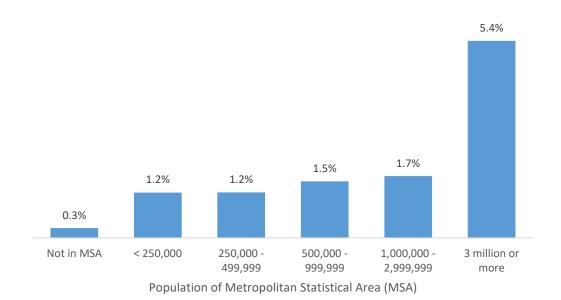


Figure 13. Percentage of Trips by Public Transportation, by Size of Metro Area

^b Includes public or commuter bus, paratransit/dial-a-ride, intercity bus, intercity rail, commuter rail, and rail transit, but not taxi, school bus, or private or charter bus

 $^{^{\}mathrm{c}}$ Includes motorcycle, private or charter bus, airplane, boat, RV, and others

NATIONAL RURAL TRANSIT



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This section describes the characteristics of rural transit systems receiving section 5311 funding, using data submitted to the NTD. Data for 2018 are the most recent data available at the time of publication.

As reported in the NTD, 1,301 agencies provided service in 2018, a little less than in 2017 (Table 11). This number may not include urban agencies that also receive 5311 funding to provide service in rural areas because they reported their data as urban systems.

Many rural transit agencies offer strictly a demand-response service, while 339 offer both demand-response and fixed-route service, and some offer just fixed-route service. A total of 468 systems provided fixed-route service in 2018, including either a traditional fixed-route service or deviated fixed-route service.

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¹ Although the Americans with Disabilities Act (ADA) requires transit agencies to provide paratransit services that complement their fixed-route services, it is not required for those that provide deviated fixed-route or commuter bus services. Many of those agencies identified as offering just fixed-route service provide these types of services.

Table 11. Number of Rural Transit Providers Nationwide

	2014	2015	2016	2017	2018
Type of Service Provided					
Fixed-route	428	437	460	476	468
Demand-response	1,092	1,102	1,107	1,121	1,136
Fixed-route and Demand- response	266	287	319	338	339
Demand-response taxi	45	45	49	50	46
Ferryboat	7	7	8	9	9
Commuter bus	73	73	68	69	72
Van pool	21	21	21	21	22
Other	2	2	2	2	2
Total Rural General Public Transit	1,333	1,334	1,324	1,331	1,301

Source: National Transit Database, 2014–2018

COVERAGE STATISTICS

Nationwide, 82% of counties had some level of rural transit service in 2018, a slight increase from the previous year (Table 12). Some of the counties without service are urban counties served by urban transit agencies. Others may have some other type of service not supported by section 5311 funding.

The NTD lacks geographic coverage information for individual transit agencies. In the 2014 data, the rural NTD included counties served by each agency, but the NTD data does not include this information after 2015. Even if county-level data from the NTD were available, its usefulness would be limited because some areas of a county may be unserved. Some agencies strictly serve a municipality or parts of a county. Geographic data at a finer level than the county is preferred. To address this gap in information, service area information was collected for each rural agency in 2017 and originally published in the 2017 *Rural Transit Fact Book*. This information was compiled from transit agency, state DOT, and transit association websites at the county subdivision level. County subdivisions vary across the country, but they can include cities, townships, census county divisions (CCDs), precincts, etc. Because the information available online could be incomplete or imprecise, the data collected is subject to some inaccuracies, but the results provide an overview of service coverage based on the data that could be collected.

Table 12. Counties with Rural Transit Service

Table 12. Countie	Number of	<u> </u>		ies with 5311 S	Service	
	Counties in					
State	State	2014	2015	2016	2017	2018
Alabama	67	51	51	51	51	51
Alaska	18	12	18	18	9	9
Arizona	15	11	14	14	14	14
Arkansas	75	59	59	56	59	59
California	58	56	56	56	57	57
Colorado	64	38	38	50	52	53
Connecticut	8	8	8	8	8	4
Delaware	3	1	1	1	1	1
Florida	67	62	62	62	62	62
Georgia	159	112	114	111	112	112
Hawaii	4	3	3	3	3	3
Idaho	44	43	43	43	43	43
Illinois	102	88	89	90	90	93
Indiana	92	68	67	67	67	67
lowa	, <u>-</u> 99	99	99	99	99	99
Kansas	105	87	87	82	82	82
Kentucky	120	103	103	103	103	103
Louisiana	64	34	36	36	37	37
Maine	16	16	16	16	16	16
Maryland	24	20	17	17	17	17
Massachusetts	14	10	10	6	6	6
	83	72	74	o 74	74	74
Michigan						
Minnesota	87	85 64	86 82	86	86	86
Mississippi	82			56	56	56
Missouri	115	114	114	114	114	114
Montana	56	30	30	30	30	38
Nebraska	93	72	61	83	84	84
Nevada	17	11	12	12	12	12
New Hampshire	10	7	7	7	7	7
New Jersey	21	15	15	15	15	15
New Mexico	33	26	29	29	29	29
New York	62	45	43	44	45	45
North Carolina	100	97	98	98	98	97
North Dakota	53	53	53	53	53	53
Ohio	88	36	36	34	35	36
Oklahoma	77	73	74	74	72	72
Oregon	36	31	36	33	33	33
Pennsylvania	67	29	28	28	30	30
Rhode Island	5	2	2	2	2	2
South Carolina	46	40	40	40	40	40
South Dakota	66	59	59	59	59	59
Tennessee	95	95	95	95	95	95
Texas	254	247	246	246	246	246
Utah	29	5	13	13	13	13
Vermont	14	14	14	14	14	14
Virginia	95	57	57	57	57	58
Washington	39	35	35	29	31	31
West Virginia	55	25	25	25	25	25
Wisconsin	72	60	60	60	60	60
Wyoming	23	11	12	14	14	14
Total	3,091	2,491	2,527	2,513	2,517	2,526
Percentage of Cou		81%	82%	81%	81%	82%
Source: National Tran			02/0	01/0	01/0	02/0

Source: National Transit Database, 2014–2018

Based on the information collected, Figure 14 is a map of U.S. counties with rural transit service. Counties with service are shown in green. Because the data were collected in 2017, the information may no longer be current. Again, some of the counties without service may be served by urban providers or some other service not supported by section 5311 funding. California, North Carolina, Florida, Texas, New York, Pennsylvania, and Michigan have a number of urban providers serving rural areas.

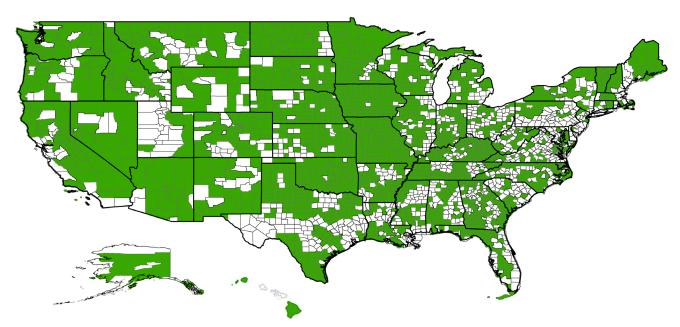


Figure 14. Map of U.S. Counties with Section 5311 Rural Transit Service Note: Counties with service shown in green.

More detailed county subdivision data are shown in Figure 15. In many cases, rural transit agencies serve entire counties. In some cases, they serve individual municipalities or parts of a county. Because it is difficult to depict individual municipalities in Figure 15, light green areas highlight counties that have service but may not be served county-wide, based on information collected. Counties were defined as urban or rural based on RUCC codes. Those with a code of 1-3 were defined as urban and all others as rural.

Collecting geographic coverage data at the county subdivision level allows for an estimation of how many rural residents are being served by transit, which is presented in Table 13. The results in Table 13 were calculated based on county subdivision data for counties with RUCC codes 4-9. Residents were considered to be served by transit if service is available within their county subdivision. Results show that 70% of the rural population has access to transit. Similarly, 70% of the population aged 65 or older, 71% of individuals with a disability, and 72% of those living in households below the poverty line in rural areas are served by transit. There are some differences by RUCC code, as shown in the table. In the most rural counties (RUCC codes 8 and 9), somewhat lower percentages of the population are served.

Table 13 may overestimate the percentage of population served because, even though county subdivision data are used to provide finer detail than county data, some county subdivisions are rather large, especially in western states. Consequently, in some cases, the transit agency may not serve all residents within the county subdivision. On the other hand, some rural areas without rural public transit may have other types of transportation services available to transportation-disadvantaged populations.

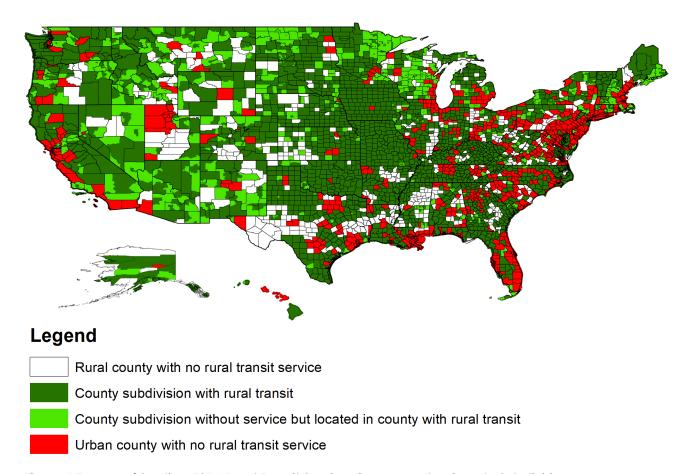


Figure 15. Map of Section 5311 Rural Transit Service Coverage, by County Subdivisions

Table 13. Percentage of Rural Population Served by Transit

Percentage of Population Served									
RUCC		Aged 65	With a						
Code	Total	or Older	Disability	Poverty					
4	72	72	74	75					
5	75	75	74	74					
6	68	68	68	69					
7	71	72	73	72					
8	64	63	64	65					
9	66	67	68	68					
Total Rural	70	70	71	72					

OPERATING STATISTICS

Total annual ridership for rural transit systems decreased 1% in 2018, from 128 million rides in 2017 to 126 million rides (Table 14). Meanwhile, total vehicle miles and vehicle hours both stayed almost the same. Rural transit agencies provided 496 million miles of service and 28 million vehicle hours of service in 2018. Data for intercity bus carriers receiving government support are not included in Table 14.

Table 14. Rural Transit Operating Statistics

Table 14. Rolal Harish Operanii	9					% Change
	2014	2015	2016	2017	2018	2017-2018
			millions			
Annual Ridership						
Fixed-route	61.1	65.4	66.9	67.4	66.7	-1%
Demand-response	53.3	52.9	48.3	47.3	47.2	0%
Van pool	0.9	1.0	0.9	0.9	0.8	-15%
Commuter bus	6.8	5.9	5.6	5.7	5.4	-5%
Demand-response taxi	1.6	1.8	1.8	1.8	0.4	-79%
Ferryboat	1.4	1.4	1.5	1.5	1.5	-1%
Bus rapid transit	0.8	0.8	0.8	0.9	0.9	3%
Aerial tramway	2.4	2.4	2.8	2.8	3.0	8%
Total	128.3	131.7	128.6	127.5	126.0	-1%
Annual Vehicle Miles						
Fixed-route	97.4	102.2	106.6	109.0	109.6	1%
Demand-response	349.6	351.6	343.9	350.2	354.4	1%
Van pool	5.8	7.0	6.6	7.5	6.8	-10%
Commuter bus	18.6	16.7	17.3	18.2	17.1	-6%
Demand-response taxi	5.9	7.5	7.5	7.2	1.9	-73%
Ferryboat	0.1	0.1	0.1	0.2	0.2	5%
Bus rapid transit	1.8	1.8	1.8	1.9	1.8	-2%
Aerial tramway	3.3	3.3	3.2	3.2	4.0	23%
Total	482.6	490.1	487.1	494.5	495.7	0%
Annual Vehicle Hours						
Fixed-route	5.6	5.8	6.1	6.2	6.3	1%
Demand-response	19.9	20.1	19.5	19.9	20.4	2%
Van pool	0.2	0.2	0.2	0.2	0.2	-14%
Commuter bus	0.7	0.6	0.6	0.7	0.6	-4%
Demand-response taxi	0.6	0.6	0.7	0.7	0.2	-74%
Ferryboat	0.0	0.0	0.0	0.0	0.0	3%
Bus rapid transit	0.1	0.1	0.1	0.1	0.1	-3%
Aerial tramway	0.3	0.3	0.3	0.3	0.4	23%
Total	27.3	27.7	27.5	27.9	28.1	1%

Source: National Transit Database, 2014–2018

Changes in ridership and service provided are partly due to changes by existing agencies and partly due to the addition or subtraction of transit providers. A small difference could also be due to measurement error. To determine the degree to which ridership and service provided has changed for existing agencies, data for individual transit providers were tracked over time. The data reveal that 48% of existing providers experienced an increase in ridership from 2017 to 2018, while 53% increased vehicle miles and hours (Table 15). The median change from 2014 to 2015 was a 0.6% increase in vehicle miles, a 0.6% increase in vehicle hours, and a 0.6% decrease in ridership. Some agencies experienced significant gains. Thirty-one percent had an increase in ridership of 5% or more, 19% increased ridership by 10% or more, and 10% experienced an increase of 20% or more. Some agencies also experienced significant decreases in ridership.

Table 15. Agency Level Changes in Service Miles, Hours, and Trips, 2017-2018

	Vehicles Miles	Vehicle Hours	Total Trips
Median Change	+0.6%	+0.6%	-0.6%
Percentage of Agencies with an Increase	53	53	48
Percentage of Agencies with an Increase of:			
5% or more	32	33	31
10% or more	21	21	19
20% or more	12	11	10
50% or more	4	4	3
100% or more	2	2	1
Percentage of Agencies with a Decrease of:			
5% or more	26	25	33
10% or more	15	14	19
20% or more	5	6	6
50% or more	1	1	1

Source: National Transit Database, 2017, 2018

Table 16 shows median and percentile rankings for vehicle miles and hours and passenger trips per agency in 2018. The data show that the median vehicle miles provided per system was 190,535, the median hours of service was 11,519, and the median number of trips provided was 31,030. For systems providing fixed-route service, the median fixed-route miles provided was 145,798, the median fixed-route hours of service were 8,230, and the median number of rides provided was 38,669. For demand-response operations, the median values were 124,300 miles, 8,491 hours, and 19,824 rides. These median numbers changed slightly from the previous year. However, as Table 18 shows, there is significant variation among agencies. For example, 10% of the agencies provided 853,318 or more miles of service, and the smallest 10% provided 27,390 miles or less.

Table 16. Rural Transit Operating Statistics, Median and Percentile Rankings per Agency, 2018

	Vehicle Miles				Vehicle Hours			gular Unlinked	Trips
Percentile	Fixed- Route	Demand- Response	Total	Fixed- Route	Demand- Response	Total	Fixed- Route	Demand- Response	Total
10th	29,282	19,275	27,390	1,906	1,581	1,837	3,932	3,159	4,351
25th	56,389	50,668	68,184	3,568	3,443	4,391	11,272	8,007	11,262
50th	145,798	124,300	190,535	8,230	8,491	11,519	38,669	19,824	31,030
75th	297,712	320,650	422,464	17,169	19,133	25,016	113,086	48,764	87,413
90th	538,329	700,856	853,318	31,339	40,944	48,042	307,481	99,965	214,678
Number of Agencies Reporting	466	1,132	1,281	467	1,132	1,281	467	1,132	1,281

Source: National Transit Database, 2018

FINANCIAL STATISTICS

Funding for capital projects increased 2% from federal sources, 4% from state governments, and 8% from local governments in 2018 (Table 17). Overall, capital funding increased 3% from the previous year.

Federal support of operating costs increased 4% in 2018, from \$518 million to \$537 million. State funding for operations increased 4%, and local funding increased 12% in 2018. Directly generated revenues, which include fare revenues, contract revenues, and other direct revenues, decreased 11% in 2018. Total operating funds increased 3%.

The data in Table 17 reflect the dollar amounts reported by rural transit providers to the Rural NTD. Figure 16 shows actual federal obligations by the FTA under the section 5311 Non-Urbanized Area Formula Program, including capital, operating, planning, and administrating expenses. As shown, federal funding had been following a general upward trend, but decreased in FY2018.

Table 17. Rural Transit Financial Statistics: Sources of Funding

						% Change
	2014	2015	2016	2017	2018	2017-2018
			-million dollars	3		
Capital Funding						
Federal	132.6	123.2	128.2	154.1	156.6	2%
State	31.3	31.9	35.0	36.6	38.1	4%
Local	21.7	31.8	35.9	34.4	37.3	8%
Directly Generated			2.8	3.8	3.8	0%
Total Capital			202.0	228.8	235.9	3%
Operating						
Federal Assistance	526.9	448.8	489.8	517.5	536.7	4%
State Assistance	249.3	248.7	257.6	278.3	290.8	4%
Local Assistance	326.0	338.2	332.4	370.6	413.4	12%
Directly Generated			289.5	288.1	255.7	-11%
Total Operating	1,390.9	1,325.5	1,369.2	1,454.5	1,496.5	3%

Source: National Transit Database, 2014–2018



Figure 16. FTA Obligations under the Section 5311 Program, FY2006–FY2015 Source: Federal Transit Administration, Statistical Summaries, 2020

FLEET STATISTICS

Table 18 shows the types and total number of active vehicles in use for each mode of rural transit in 2018. In 2018, 3,768 vehicles were used for fixed-route transit, and 18,494 were used for demand-response service. Vehicles are categorized in the NTD as buses, cutaways, vans, minivans, and sport utility vehicles, using the definitions provided in Table 19.

Table 18. Vehicles by Mode, 2018

					Demand-		Bus	
	Fixed-	Demand-	Van	Commuter	Response		Rapid	Aerial
	Route	Response	Pool	Bus	Taxi	Ferryboat	Transit	Tramway
Bus	1,788	1,001	0	313	0	0	22	0
Cutaway	1,679	10,008	0	357	0	0	0	0
Van	114	2,658	319	10	73	0	0	0
Minivan	45	4,181	130	0	41	0	0	0
Automobile	9	325	0	0	43	0	0	0
School Bus	11	41	0	0	0	0	0	0
Over-the-road bus	27	0	0	69	0	0	0	0
Sport Utility Vehicle	0	279	9	0	0	0	0	0
Aerial Tramway	0	0	0	0	0	0	0	68
Articulated Bus	3	0	0	2	0	0	0	0
Ferryboat	0	0	0	0	0	18	0	0
Other	8	1	0	0	0	0	23	0
Total	3,684	18,494	458	751	157	18	45	68

Source: Rural National Transit Database, 2018

Vehicle Type

Definition

Bus



A rubber-tired passenger vehicle powered by diesel, gasoline, battery or alternative fuel engines contained within the vehicle. Vehicles in this category do not include school buses or cutaways. This group does include minibuses such as a Sprinter

Cutaway



A transit vehicle built on a van or truck chassis by a second stage manufacturer. The chassis is purchased by the body builder, a framework is built for the body, and then the body is finished for a complete vehicle. For example, a truck chassis may be used as the base for a small transit bus.

Van



An enclosed vehicle having a typical seating capacity of 8 to 18 passengers and a driver. A van is typically taller and with a higher floor than a passenger car, such as a hatchback or station wagon. Vans normally cannot accommodate standing passengers

Minivan



A light duty vehicle having a typical seating capacity of up to seven passengers plus a driver. A minivan is smaller, lower and more streamlined than a full-sized van, but it is typically taller and has a higher floor than a passenger car. Minivans normally cannot accommodate standing passengers.

Sport Utility Vehicle



A high-performance four-wheel drive car built on a truck chassis. This passenger vehicle combines the towing capacity of a pickup truck with the passenger-carrying space of a minivan or station wagon. Most SUVs are designed with a roughly square cross-section, an engine compartment, a combined passenger and cargo compartment, and no dedicated trunk. Most mid-size and full-sized SUVs have three rows of seats with a cargo area directly behind the last row of seats. Compact SUVs and mini SUVs may have five or fewer seats.

Source: 2019 NTD Reduced Reporter Policy Manual, FTA

About half of fixed-route and demand-response vehicles were cutaways (Figure 17). Most fixed-route vehicles were either buses or cutaways. For demand-response, a significant number of vans and minivans were also used. Among other modes, 458 vehicles were used for van pools, mostly vans and minivans; 751 vehicles were used for commuter bus service, mostly buses and cutaways; and 157 vehicles were used for demand-response taxi, mostly vans, minivans, and automobiles.

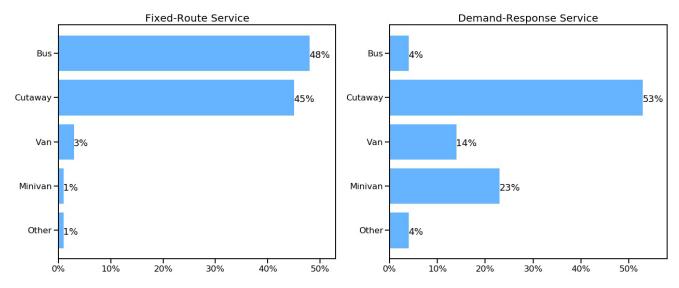


Figure 17. Fleet Composition of Fixed-Route and Demand-Response Service, 2018

As shown in Table 20, the average fixed-route system operated 7.9 vehicles, and the average demand-response system operated 16.3 vehicles. Agencies that operated both fixed-route and demand-response service may have used some vehicles for both services. Eighty-four percent of these vehicles were ADA accessible (Table 21). Most buses (95%) and cutaways (94%) were ADA accessible, whereas 74% of minivans and 62% of vans were ADA accessible in 2018.

Table 20. Fleet Size by Mode, 2018

					Demand-		Bus		
	Fixed-	Demand-	Van	Commuter	Response		Rapid	Aerial	
	Route	Response	Pool	Bus	Taxi	Ferryboat	Transit	Tramway	Total
Total number of vehicles	3,684	18,494	458	751	157	18	45	68	23,675
Number of agencies	468	1,136	19	69	13	10	1	1	1,279
Average fleet size	7.9	16.3	24.1	10.9	12.1	1.8	45.0	68.0	18.5

Table 21. Percentage of Rural Transit Vehicles that are ADA Accessible

Vehicle Type	2014	2015	2016	2017	2018
		Ре	ercentage		
Bus	92	95	95	95	95
Cutaway	95	96	94	94	94
Van	66	66	62	65	62
Minivan	67	71	74	75	74
Automobile	7	8	20	11	20
School bus	30	21	8	21	8
Over-the-road bus	83	95	92	92	92
Sport utility vehicle	18	25	25	22	25
Total	83	84	84	85	84

The average age of the vehicles was 6.9 years in 2018. The average vehicle length was 22.3 feet with an average seating capacity of 14.3 (Tables 22-24). The average bus was 31 feet and had a seating capacity of 27.6, while the average cutaway was 23.6 feet with a seating capacity of 15. Average vehicle age, length, and capacity have changed only slightly from year to year.

Table 22. Average Vehicle Age

Vehicle Type	2014	2015	2016	2017	2018
			Years		
Bus	7.4	7.8	8.2	8.5	8.4
Cutaway	6.2	6.4	6.5	6.4	6.6
Van	6.2	6.6	6.5	6.7	6.5
Minivan	5.8	5.8	5.8	5.9	6.3
Automobile	8.3	8.8	4.2	6.2	7.6
School bus	12.8	13.7	13.8	13.8	15.0
Over-the-road bus	8.9	8.9	10.0	7.7	8.0
Sport utility vehicle	6.2	6.5	6.1	5.8	6.4
Total	6.4	6.6	6.5	6.7	6.9

Table 23. Average Vehicle Length

Vehicle Type	2014	2015	2016	2017	2018
	-		Feet		
Bus	30.6	30.9	30.7	30.2	31.0
Cutaway	23.8	23.9	23.4	23.5	23.6
Van	18.9	19.4	18.6	18.3	18.0
Minivan	16.4	16.5	15.6	15.7	16.3
Automobile	15.5	15.6	7.8	12.0	13.8
School bus	32.2	32.7	35.9	36.6	37.4
Over-the-road bus	43.2	43.4	49.4	41.5	40.0
Sport utility vehicle	15.8	15.9	15.9	15.7	15.9
Total	22.8	23.0	21.8	22.2	22.3

Table 24. Average Seating Capacity

Vehicle Type	2014	2015	2016	2017	2018
Bus	26.3	26.2	27.7	27.4	27.6
Cutaway	15.2	15.3	15.5	15.3	15.0
Van	10.4	10.4	10.4	10.2	9.9
Minivan	5.8	5.7	5.8	5.6	5.6
Automobile	4.3	4.2	4.3	4.3	4.2
School bus	40.5	44.6	50.3	51.6	60.0
Over-the-road bus	50.9	52.2	62.3	50.5	50.7
Sport utility vehicle	5.0	5.1	5.1	5.3	5.2
Total	14.5	14.7	14.7	14.7	14.3

Seventy-eight percent of the vehicles were owned outright by a public agency, while 14% were owned by a private entity, and most of the remainder was leased or borrowed by a public agency (Table 25).

Table 25. Vehicle Ownership, 2018

			Leased or		
	Owned	Owned	Borrowed from	Leased Under	
	Outright by	Outright by	Related Parties	Lease Purchase	
	Public	Private	by a Public	Agreement by a	
Vehicle Type	Agency	Entity	Agency	Public Agency	Other
			Percentage		
Bus	84	7	4	4	1
Cutaway	79	12	4	4	1
Van	78	16	3	3	0
Minivan	71	22	3	3	1
Automobile	62	33	0	1	3
School bus	58	33	8	0	2
Over-the-road bus	71	8	9	9	2
Sport utility vehicle	73	24	0	1	2
Total	78	14	3	3	1

Source: National Transit Database, 2018

The FTA's rural area formula program was the primary funding source for a majority of vehicles, though 7% were primarily supported by section 5310 funds, 27% by other federal funds, 11% by non-federal public funds, and 3% by private funds (Table 26).

Table 26. Primary Funding Source for Vehicles, 2018

Vehicle Type	Rural Area Formula Program	Enhanced Mobility of Seniors & Individuals with Disabilities	Other Federal Funds	Non-Federal Public Funds	Non-Federal Private Funds
			Percentage		
Bus	41	3	36	18	2
Cutaway	56	7	25	9	2
Van	52	6	25	12	5
Minivan	49	11	26	10	4
Automobile	28	10	12	23	28
School bus	15	2	21	31	31
Over-the-road bus	29	0	23	39	9
Sport utility vehicle	48	6	28	9	9
Total	51	7	27	11	3

NATIONAL RURAL TRANSIT PERFORMANCE MEASURES



A few performance measures can be calculated using data from the NTD. These include trips per mile, trips per hour, cost per mile, cost per trip, trips per vehicle, hours of service per vehicle, miles of service per vehicle, and the farebox recovery ratio.

Trips per vehicle mile decreased by 2% in 2018. As Table 27 shows, trips per mile was significantly higher for fixed-route service (0.61) than it was for demand-response (0.13). Trips per vehicle hour decreased slightly to 4.6 in 2018. The number of trips per hour was 10.6 for fixed-route service and 2.3 for demand-response.

Table 27. Trips per Mile and Trips per Hour

	2014	2015	2016	2017	2018	% Change 2017-2018
Trips Per Vehicle Mile	•					
Fixed-route	0.63	0.64	0.63	0.62	0.61	-2%
Demand-response	0.15	0.15	0.14	0.14	0.13	-1%
Van pool	0.15	0.14	0.13	0.12	0.11	-6%
Commuter bus	0.37	0.35	0.32	0.31	0.32	1%
Demand-response taxi	0.26	0.25	0.25	0.26	0.20	-22%
Total	0.27	0.27	0.26	0.25	0.24	-2%
Trips Per Vehicle Hour						
Fixed-route	11.0	11.2	10.9	10.9	10.6	-2%
Demand-response	2.7	2.6	2.5	2.4	2.3	-2%
Van pool	5.6	5.3	4.9	4.8	4.7	-1%
Commuter bus	10.1	9.7	8.8	8.6	8.5	-1%
Demand-response taxi	2.8	3.0	2.8	2.7	2.2	-18%
Total	4.7	4.8	4.7	4.7	4.6	-2%

These numbers represent industry averages, but there is variation between individual providers. There tends to be some variation in these measures based on the size of the operation. Table 28 groups the transit systems into six categories based on the number of vehicle miles provided. Trips per mile tends to increase with vehicle miles provided for fixed-route systems, as the larger systems provide more trips per mile, though the smallest systems also provide a high number of trips per mile. For demand-response systems, trips per mile continually decreases with increases in vehicle miles. The smaller demand-response systems, as well as the smallest fixed-route systems, provide more trips per mile, possibly because they serve a smaller area with more concentrated service.

There is a similar trend for trips per hour (Table 29). For fixed-route systems, trips per vehicle hour is the highest for the largest systems providing the greatest number of vehicle hours, while for demand-response systems, the number of trips per vehicle hour decreases with increases in vehicle hours of service provided.

Table 28. Trips per Mile by Number of Miles Provided, 2018

Percentile Rank	Vehicle Miles Provided	Average Trips per Vehicle Mile
Fixed-Route		
1-10	< 29,282	0.55
11-25	29,283-56,389	0.33
26-50	56,390-145,798	0.40
51-75	145,799-297,712	0.49
76-90	297,713-538,329	0.65
>90	> 538,329	0.72
Demand-Response)	
1-10	< 19,275	0.42
11-25	19,276-50,668	0.27
26-50	50,669-124,300	0.20
51-75	124,301-320,650	0.17
76-90	320,651-700,856	0.15
>90	> 700,856	0.11

Table 29. Trips per Hour by Number of Hours Provided, 2018

Percentile Rank	Vehicle Hours Provided	Average Trips per Vehicle Hour
Fixed-Route		
1-10	< 1,906	3.81
11-25	1,906-3,568	4.58
26-50	3,569-8,230	5.31
51-75	8,231-17,169	6.62
76-90	17,170-31,339	9.97
>90	> 31,339	14.76
Demand-Response	•	
1-10	< 1,581	3.70
11-25	1,581-3,443	3.37
26-50	3,444-8,491	2.72
51-75	8,492-19,133	2.56
76-90	19,134-40,944	2.52
>90	> 40,944	2.32

Fixed-route systems provided 18,105 trips per vehicle, 29,750 miles per vehicle, and 1,705 hours per vehicle in 2018 (Table 30). Demand-response agencies provided significantly fewer trips per vehicle (2,550) and also fewer miles and hours per vehicle (19,140 and 1,101, respectively).

Average operating cost per trip was \$11.41 in 2018, a 4% increase from the previous year (Table 31). The costs were significantly higher for demand-response service. The average operating cost fixed-route services increased 4% to \$6.81 per trip in 2018, while average operating cost for demand-response services increased 5% to \$18.85 per trip. Operating cost per vehicle revenue mile in 2018 was \$4.14 for fixed-route services, \$2.51 for demand-response, and \$2.90 overall. Operating cost per vehicle revenue hour in 2018 was \$72.25 for fixed-route services, \$43.67 for demand-response, and \$51.17 overall. Costs tend to be higher per vehicle mile and per vehicle hour for the fixed-route operators, but lower per trip because of the greater number of rides provided. Fare revenues in 2018 covered 9% of the operating costs. The farebox recovery ratio has been averaging 6-9% each year.

Table 30. Trips, Miles, and Hours per Vehicle, 2018

		Demand-
	Fixed-Route	Response
Trips Per Vehicle	18,105	2,550
Miles Per Vehicle	29,750	19,140
Hours Per Vehicle	1,705	1,101

Table 31. Operating Costs per Trip and per Mile and Farebox Recovery Ratio

					% Change
	2015	2016	2017	2018	2017-2018
Operating Expense per Trip					
Total	10.07	10.26	10.95	11.41	4%
Fixed-route	6.08	6.19	6.53	6.81	4%
Demand-response	15.69	16.67	18.00	18.85	5%
Operating Expense per Vehicle Mile					
Total	2.70	2.71	2.82	2.90	3%
Fixed-route	3.89	3.88	4.04	4.14	3%
Demand-response	2.36	2.34	2.43	2.51	3%
Operating Expense per Vehicle Hour					
Total	47.87	47.97	50.00	51.17	2%
Fixed-route	68.37	67.62	71.02	72.25	2%
Demand-response	41.35	41.24	42.76	43.67	2%
<u>Farebox Recovery Ratio</u>					
Total	0.09	0.06	0.07	0.09	24%

While Table 31 shows overall averages, there is significant variation in costs between transit agencies across the country. Table 32 shows percentile rankings for operating costs per trip, per vehicle mile, per vehicle hour, and for farebox recovery ratio, including both demand-response and fixed-route service. (The percentile rank is the percentage of transit operators with results at or below the reported number. For example, 10% of transit operators have an operating expense per trip at or below \$7.29, while 50% have an operating expense per trip at or below \$16.58, and 90% are at or below \$38.41.)

Table 32. Operating Costs per Trip, per Vehicle Mile, and per Vehicle Hour and Farebox Recovery Ratio, Percentile Rankings, 2018

	0	perating Exper	nse	Farebox
Percentile		Per Vehicle	Per Vehicle	Recovery
Rank	Per Trip	Mile	Hour	Ratio
Total				
10 th	7.29	1.59	26.91	0.02
25 th	11.09	2.09	34.53	0.03
50 th	16.58	2.93	47.93	0.06
75 th	25.29	4.18	66.99	0.11
90 th	38.41	5.77	89.38	0.18
Fixed-route				
10 th	4.08	1.89	32.19	-
25 th	7.11	2.61	44.60	-
50 th	12.33	3.64	62.36	-
75 th	21.11	5.06	80.47	-
90 th	40.99	6.55	105.12	-
Demand-resp	oonse			
10 th	9.03	1.55	25.82	-
25 th	13.04	2.01	32.91	-
50 th	18.67	2.83	43.77	-
75 th	28.80	4.14	60.80	-
90 th	43.19	6.04	82.06	

Some of the variations could be explained by the size of the operations. Table 33 categorizes transit agencies based on the number of vehicle miles provided. The operating expense per mile is lower for the larger systems, but expense per trip is not influenced as significantly by the number of miles provided, as the larger demand-response systems tend to have fewer trips per mile of service.

Table 33. Operating Statistics and Performance Measures by Size of Operation, 2018

Size of	Number of	Vehic	le Miles	- Total	Total	Fare	Operating	Operatin	g Expense	Farebox Recovery
Agency*	agencies	Min	Max	Miles	Trips	revenues	expenses	Per Trip	Per Mile	Ratio
				Th	nousands-					
Very small	128	0	27	1,878	721	1,479	10,678	14.81	5.69	0.14
Small	192	27	68	8,904	2,774	5,353	38,538	13.89	4.33	0.14
Medium-small	320	68	191	38,710	9,834	11,087	126,246	12.84	3.26	0.09
Medium-large	320	191	422	91,885	25,395	22,555	285,807	11.25	3.11	0.08
Large	192	422	853	114,287	34,265	30,952	352,534	10.29	3.08	0.09
Very large	128	853	-	238,087	52,710	52,623	620,932	11.78	2.61	0.08

^{*}Agency size is determined by vehicle miles of service provided using the following categorization: smallest 10% is very small, 10th to 25th percentile is small, 25th to 50th percentile is medium-small, 50th to 75th percentile is medium-large, 75th to 90th percentile is large, and largest 10% is very large.

While the performance measures presented in this section are important, they mostly measure efficiency and total ridership. Efficient use of transportation funds is one of the goals of rural transit agencies, but they also have several other goals. The program goals for the section 5311 program, as stated by the FTA (2014), are as follows:

- a. enhancing access in rural areas to health care, shopping, education, employment, public services, and recreation;
- b. assisting in the maintenance, development, improvement, and use of public transportation systems in rural areas;
- encouraging and facilitating the most efficient use of all transportation funds used to
 provide passenger transportation in rural areas through the coordination of programs and
 services;
- d. providing financial assistance to help carry out national goals related to mobility for all, including seniors, individuals with disabilities, and low-income individuals;
- e. increasing availability of transportation options through investments in intercity bus services;
- f. assisting in the development and support of intercity bus transportation
- g. encouraging mobility management, employment-related transportation alternatives, joint development practices, and transit-oriented development; and
- h. providing for the participation of private transportation providers in rural public transportation.

Progress in meeting many of these goals cannot be measured using data from the Rural NTD, outside of performance measures for efficiency, cost effectiveness, and total ridership. Data presented earlier in the *Fact Book* provide some additional insight into how well rural providers are meeting these goals. The coverage statistics presented earlier provides information on the geographic coverage of service and the percentage of the rural population with access to transit. These are also important performance measures.

Also important is the quality of service that is being provided. The *Transit Capacity and Quality of Service Manual Third Edition* (Kittelson & Associates, Inc. et al. 2013) defines quality of service for demandresponse transit based on the following measures: response time, service span, service coverage, reliability, travel time, and no-shows. The first three are measures of availability and the last three are measures of comfort and convenience. For fixed-route transit providers, service frequency is another important measure of the quality of service. The Rural NTD does not have data for any of these measures. Data on the measures of availability were obtained by reviewing rural transit agency websites across the country.

Response time refers to how long in advance passengers must schedule a trip. Most rural demand-response agencies require that trips be scheduled at least one day in advance. Some indicate that they can provide same-day trips if available, but most recommend previous-day reservations. Some agencies also require reservations two or more days in advance. Rough estimates based on information obtained from the websites of a sample of rural transit agencies (data from 305 agencies), originally reported in the 2017 *Rural Transit Fact Book*, show that about 5%-10% allow same-day reservations, about 75%-80% require reservations one day in advance, and about 15% require reservations two or more days in advance. Some agencies, though, say that they can provide same-day trips if available but recommend a

reservation at least one day in advance, so it is difficult to categorize them. Many agencies do not have information on their websites regarding reservations requirements. Therefore, these are rough estimates.

Service span refers to the days per week and hours per day that service is available. This is an important measure of service availability and how well the transit agency is meeting the needs of the community. Providing a greater span of service gives users greater flexibility and serves a wider range of trip types. Collecting data on service span is difficult because some agencies provide different hours or days of service to different service areas. However, data were collected from a sample of rural agencies across the country for the 2017 *Rural Transit Fact Book*. These agencies most commonly provide service five days a week, with no weekend service. Based on data from 577 agencies, 72% provide service five days a week, 17% provide service six days a week, and 10% provide service seven days a week. Just 2% provide fewer than five days of service. Based on data from 375 agencies, most (78%) provide 8-12 hours of service per day, and 18% provide more than 12 hours of service.

Service coverage refers to geographic coverage, and the collected data were presented earlier. Data on measures of comfort and convenience, while important measures of quality of service, are difficult to collect. These include reliability, travel time, and no shows. Reliability can be assessed based on on-time performance and how often trips are turned down due to lack of vehicle capacity or unavailability of drivers.

REGIONAL AND STATE STATISTICS



The data described in the previous sections are aggregate national data, but there may be some regional differences. Therefore, data in this section are presented at the regional and state levels. The regions used are based on the FTA's regional classification. The FTA divides the country into 10 regions, as shown in Figure 18. Table 34 shows how rural transit statistics vary between those regions.

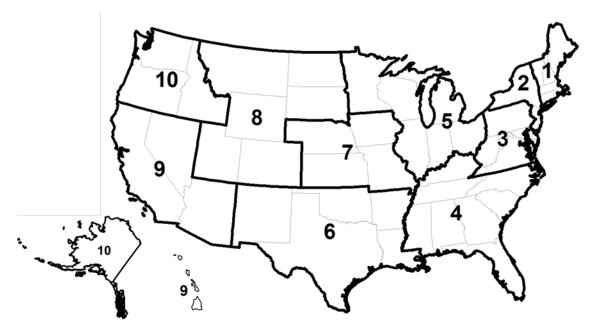


Figure 18. FTA Regions

The greatest number of rural transit agencies is in regions 4, 5, and 7, followed by regions 8 and 6. The operators in these regions are mostly demand-response providers. The northeast and far western regions have a greater orientation toward fixed-route service.

Annual ridership in 2018 was highest in regions 8 (25.3 million rides), 5 (22.3 million rides), and 4 (20.3 million rides) (Figure 19). Region 4 provided the highest level of service, by a significant margin, with 122.8 million vehicle miles and 6.8 million vehicle hours of service, most of it being demand-response (Figures 20 and 21). Region 4 also had the greatest number of vehicles in service, many of them being vans, along with many cutaways.

Trips per mile and per hour were highest in region 8, according to the data, and region 8 also provided the most rides per vehicle. The region 8 data are influenced by a few high-ridership agencies in Colorado. These agencies provide fixed-route and commuter bus services in popular resort areas. One agency operates an aerial tramway, and another operates bus rapid transit.

Operating cost per trip was the highest in region 6 and lowest in region 8. Cost per mile ranged between \$2.08 in region 4 to \$4.35 in region 9.

State-level statistics are shown in Tables 35-39 and Figures 22-25. Table 35 shows vehicle miles of service, by state, categorized by fixed-route, demand-response, and other service. While most service is fixed-route or demand-response, some states also have a significant amount of service categorized as other. This includes significant van pool service in Washington, Texas, and Florida; commuter bus in Hawaii, Oregon, Colorado, California, and Vermont; demand-response taxi in Wisconsin and Maine; and aerial tramway and bus rapid transit in Colorado.

Table 34. Regional Data, 2018

					FTA Re	gion				
	1	2	3	4	5	6	7	8	9	10
Number of Agencies										
Fixed-route	24	42	32	56	82	23	19	49	69	72
Demand-response	30	15	34	231	250	110	177	133	76	80
Total	34	46	42	241	264	114	179	152	104	106
Counties Served	85%	73%	72%	54%	84%	79%	88%	92%	79%	91%
Annual Ridership (million rides	s)									
Fixed-route	5.4	3.3	6.2	9.5	6.9	2.3	1.7	15.9	6.5	9.0
Demand-response	1.3	0.4	1.6	10.6	14.4	5.7	6.6	3.5	1.7	1.3
Total	7.2	3.8	7.9	20.3	22.3	8.5	8.3	25.3	10.5	11.8
Annual Vehicle Miles (million	miles)									
Fixed-route	6.1	11.8	10.8	9.4	16.5	4.0	3.1	14.9	17.2	15.9
Demand-response	24.0	2.2	11.1	112.1	77.1	51.8	44.0	15.5	6.6	9.7
Total	32.6	14.5	22.3	122.8	94.1	60.6	47.1	39.6	29.6	32.2
Annual Vehicle Hours (million	hours)									
Fixed-route	0.4	0.6	0.6	0.7	1.0	0.3	0.2	0.9	8.0	8.0
Demand-response	0.9	0.2	0.6	6.1	4.8	2.8	2.6	1.2	0.5	0.6
Total	1.4	0.8	1.3	6.8	5.8	3.2	2.8	2.7	1.6	1.6
Number of Vehicles										
Fixed-route										
Bus	151	183	262	229	152	71	37	331	150	222
Cutaway	126	249	174	169	151	91	97	142	325	155
Van	11	1	17	34	8	6	4	10	22	1
Other	2	3	14	19	14	18	2	9	21	1
Total	290	436	467	451	325	186	140	492	518	379
Demand-response										
Bus	17	26	5	116	615	38	63	81	35	5
Cutaway	192	131	489	2139	2496	1474	1723	587	398	379
Van	66	7	96	1413	224	394	172	162	64	60
Minivan	78	7	108	864	868	890	749	414	86	117
Other	19	0	10	192	121	155	54	65	12	18
Total	372	171	708	4724	4324	2951	2761	1309	595	579
Vehicles ADA Accessible	81%	91%	94%	76%	92%	83%	88%	79%	85%	76%

Table 34. Regional Data, 2018 (continued)

					FTA Re	gion				
	1	2	3	4	5	6	7	8	9	10
Average Vehicle Age	6.9	5.8	6.1	5.8	6.7	7.1	7.9	8.6	6.7	7.3
Average Vehicle Length	24.0	18.5	24.2	21.0	23.2	20.3	22.1	24.8	24.9	22.7
Average Vehicle Capacity	17.6	19.0	16.9	12.0	14.5	11.5	12.1	17.6	19.4	17.1
Trips Per Mile										
Total	0.22	0.26	0.36	0.17	0.24	0.14	0.18	0.64	0.35	0.37
Fixed-route	0.89	0.28	0.58	1.00	0.42	0.57	0.54	1.07	0.38	0.56
Demand-response	0.06	0.17	0.14	0.09	0.19	0.11	0.15	0.23	0.26	0.14
Trips Per Hour										
Total	4.99	4.91	6.15	2.97	3.85	2.65	2.92	9.55	6.57	7.19
Fixed-route	13.05	5.53	9.80	14.34	7.09	8.80	7.48	17.28	7.98	11.62
Demand-response	1.45	2.40	2.45	1.72	3.04	2.02	2.52	3.04	3.26	2.14
Trips Per Vehicle	7,993	6,031	6,664	3,860	4,761	2,586	2,864	11,971	7,872	8,535
Miles Per Vehicle	36,068	23,140	18,733	23,322	20,117	18,446	16,249	18,689	22,240	23,280
Hours Per Vehicle	1,603	1,229	1,084	1,298	1,238	977	980	1,253	1,198	1,188
Operating Expense Per Trip	11.21	13.99	9.68	12.60	12.99	16.27	14.27	6.36	12.28	11.56
Operating Expense Per Mile	2.48	3.65	3.44	2.08	3.07	2.28	2.51	4.07	4.35	4.24
Farebox Recovery Ratio	0.05	0.08	0.11	0.04	0.10	0.05	0.17	0.08	0.11	0.10

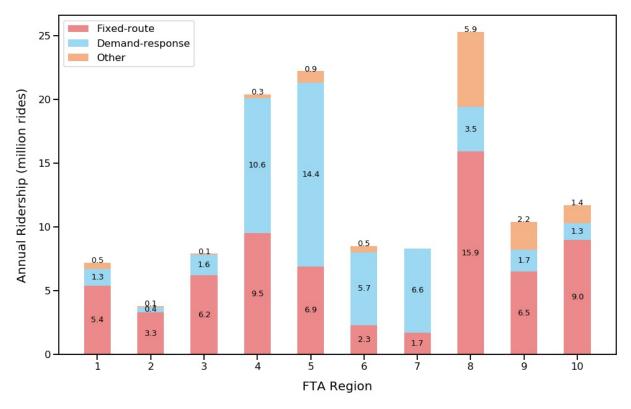


Figure 19. Ridership by Region

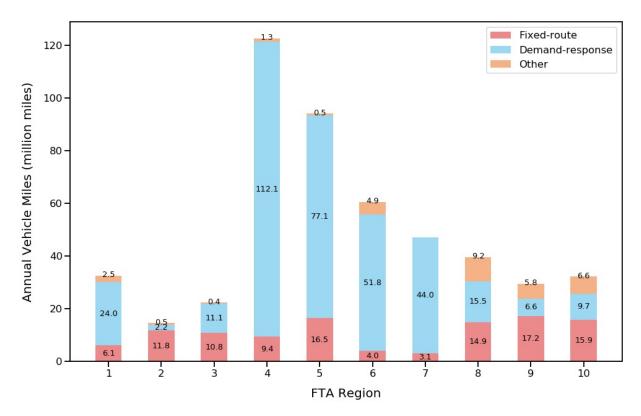


Figure 20. Vehicle Revenue Miles by Region

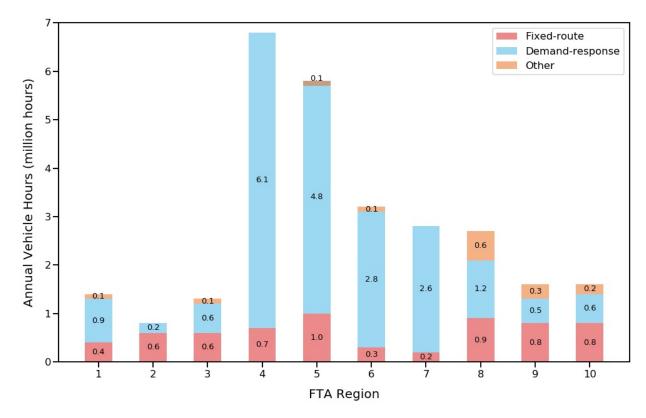


Figure 21. Vehicle Revenue Hours by Region

Table 35. Rural Transit Vehicle Revenue Miles of Service by State, 2015-2018 (million miles)

		Tota	al		Fixe	d-Route	e Service	;	Dema	nd-Resp	onse Se	rvice	(Other S	ervice	
	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018
Alabama	4.6	3.9	3.7	3.7	.0	.0	.0	.1	4.6	3.9	3.7	3.6	.0	.0	.0	.0
Alaska	2.9	2.8	2.5	2.4	1.6	1.5	1.3	1.5	.8	.8	.8	.9	.5	.5	.4	.0
Arizona	2.2	2.6	2.8	2.8	1.8	2.0	2.0	2.0	.1	.2	.5	.4	.4	.4	.4	.4
Arkansas	10.3	11.2	11.4	12.3	.2	.2	.2	.2	10.1	11.0	11.2	12.1	.0	.0	.0	.0
California	16.5	16.8	16.6	17.0	11.1	11.6	11.5	11.8	3.4	3.5	3.2	3.2	2.0	1.7	1.9	2.0
Colorado	17.2	18.4	19.1	20.0	6.2	7.1	7.6	8.2	3.2	3.6	3.4	3.2	7.7	7.7	8.1	8.7
Connecticut	1.7	1.7	1.6	1.0	.9	.9	.9	.4	.7	.6	.6	.4	.1	.2	.2	.1
Delaware	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Florida	12.8	11.5	13.3	13.8	2.9	2.1	1.9	2.1	8.7	8.3	10.5	10.9	1.1	1.0	.9	3.
Georgia	16.1	16.5	16.0	15.9	.0	.0	.0	.0	16.1	16.5	16.0	15.9	.0	.0	.0	.0
Hawaii	5.5	5.6	5.3	4.6	1.5	1.5	1.0	1.2	.6	.7	.8	.8	3.3	3.4	3.4	2.6
Idaho	2.5	2.5	2.4	1.6	1.2	1.2	1.3	.9	.7	.7	.6	.3	.6	.6	.5	.3
Illinois	16.3	16.6	16.7	16.6	1.1	2.6	2.3	2.3	15.2	14.1	14.4	14.3	.0	.0	.0	.0
Indiana	13.3	13.5	13.6	11.2	.8	1.1	1.0	.8	12.4	12.5	12.6	10.4	.0	.0	.0	.0
lowa	13.7	13.9	14.4	14.4	1.7	1.8	1.3	1.3	11.9	12.1	13.1	13.1	.0	.0	.0	.0
Kansas	6.4	7.3	7.4	7.0	1.2	1.8	1.6	1.4	4.8	5.5	5.8	5.6	.3	.0	.0	.0
Kentucky	35.1	26.1	28.2	28.5	1.0	.8	1.0	1.1	34.1	25.4	27.2	27.4	.0	.0	.0	.0
Louisiana	5.1	4.9	4.9	5.0	.0	.0	.0	.0	5.1	4.9	4.9	5.0	.0	.0	.0	.0
Maine	10.9	11.7	12.0	11.9	.9	.9	.8	.9	8.7	9.5	10.3	10.1	1.3	1.2	.9	.9
Maryland	3.8	3.6	3.5	3.3	1.9	1.9	1.9	1.8	1.9	1.6	1.6	1.5	.0	.0	.0	.С
Massachusetts	2.0	2.0	2.0	2.0	1.6	1.7	1.7	1.7	.4	.4	.3	.3	.0	.0	.0	.0
Michigan	23.1	23.3	24.6	25.7	.0	2.5	3.0	3.2	23.1	20.8	21.5	22.4	.0	.0	.0	.0
Minnesota	11.6	12.0	13.2	13.5	4.1	4.5	5.3	5.3	7.4	7.5	8.0	8.3	.0	.0	.0	.0
Mississippi	8.8	10.5	10.6	11.6	.9	1.1	1.2	1.5	7.9	9.3	9.4	10.0	.0	.0	.0	.0
Missouri	19.8	20.9	21.2	21.6	.5	.5	.5	.0	19.3	20.4	20.7	21.6	.0	.0	.0	.0
Montana	3.7	3.7	3.8	3.8	1.4	1.4	1.4	1.6	1.9	1.8	1.9	1.9	.5	.5	.5	.3
Nebraska	2.7	2.8	2.8	3.2	.0	.0	.0	.2	2.7	2.8	2.8	3.0	.0	.0	.0	.0
Nevada	1.7	1.7	1.6	1.6	.5	.6	.5	.5	1.0	.9	1.0	1.0	.2	.1	.1	.1
New Hampshire	1.5	1.6	1.2	1.2	.9	.9	.8	.8	.6	.7	.3	.4	.0	.0	.0	۰۰.
New Jersey	2.0	1.8	1.8	1.8	.5	.3	.3	.5	1.5	1.5	1.5	1.3	.0	.0	.0	.0.
New Mexico	4.8	4.5	4.6	2.5	3.2	3.3	3.5	1.5	1.6	1.2	1.1	1.0	.0	.0	.0	.0.
New York	12.4	12.2	12.2	12.5	11.1	10.8	10.8	11.1	1.0	.9	.9	.8	.3	.5	.5	.5
North Carolina	26.3	26.2	26.3	26.8	1.6	1.8	2.0	2.0	24.7	24.3	24.3	24.7	.0	.0	.1	.1
North Dakota	20.3	2.9	2.9	2.8	.2	.2	.2	.2	2.4	2.6	2.7	2.6	.1	.1	.1	 1.
Ohio	12.5	12.5	13.9	13.9	.4	.7	1.0	1.4	12.1	11.9	13.0	12.5	.0	.0	.0	۰۰.
Oklahoma	18.9	17.7	17.1	16.7	.7	.7	.7	.8	18.2	17.0	16.4	15.9	.0	.0	.0	.c .c
		7.9	8.1		2.2	2.3	2.3	.o 2.4		2.8			2.4	2.8	2.8	2.9
Oregon Pennsylvania	7.6 8.2	7.9 7.8	7.7	8.4 7.7	3.5	3.5	3.6	3.4	3.0 4.3	3.9	3.0 3.7	3.1 3.8	.4	2.0 .4		
Rhode Island															.4	.4
	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
South Carolina	5.0	5.4	5.3	5.7	.3	.4	.4	.4	4.2	4.5	4.4	4.8	.5	.5	.4	.4
South Dakota	3.9	4.0	4.1	4.0	.0	.0	.0	.0	3.9	4.0	4.1	4.0	.0	.0	.0	.0
Tennessee	18.6	18.5	16.0	15.3	1.8	1.6	1.7	1.7	16.9	16.9	14.4	13.6	.0	.0	.0	.0
Texas	19.0	18.4	20.3	20.5	1.7	.9	1.1	1.0	14.9	14.1	14.3	14.6	2.4	3.3	4.8	4.9
Utah	1.5	1.6	1.6	2.4	1.4	1.4	1.5	2.2	.1	.1	.2	.2	.0	.0	.0	.0
Vermont	14.0	15.8	16.6	16.1	2.1	2.3	2.4	2.2	10.6	12.3	13.0	12.5	1.2	1.2	1.2	1.4
Virginia	7.0	7.0	7.4	6.9	3.2	2.8	2.9	2.7	3.8	4.2	4.6	4.1	.0	.0	.0	0.
Washington	14.9	15.5	15.7	16.1	6.7	7.3	7.8	8.6	4.6	4.8	4.7	4.7	3.5	3.4	3.2	2.8
West Virginia	4.5	4.6	4.5	4.4	3.1	2.9	2.7	2.8	1.4	1.7	1.9	1.7	.0	.0	.0	.0
Wisconsin	8.5	8.8	9.0	9.4	2.6	2.2	2.1	2.2	.3	1.1	1.2	6.8	5.6	5.5	5.7	.4
Wyoming	2.6	2.8	2.7	2.8	1.3	1.4	1.4	1.4	1.2	1.4	1.4	1.4	.0	.0	.0	.0

 Table 36. State Operating Statistics, 2018

	Nila a.u. a.f.	C	Anr	nual Riders	hip	Annu	al Vehicle	Miles	Annu	al Vehicle	Hours
	Number of Agencies	Served (%)	Total	Fixed- Route	Demand- Response	Total	Fixed- Route	Demand- Response	Total	Fixed- Route	Demand- Response
			the	ousand rid	es	tho	ousand mi	les	th	ousand ho	urs
Alabama	21	76%	1,017	3	1,015	3,653	68	3,584	200	2	197
Alaska	10	50%	1,759	1,610	102	2,414	1,500	869	148	87	56
Arizona	14	93%	927	748	98	2,807	1,989	438	166	113	38
Arkansas	8	79%	998	125	872	12,311	202	12,108	650	18	632
California	53	98%	6,231	4,434	1,102	17,004	11,842	3,198	878	537	264
Colorado	34	83%	17,255	10,772	626	20,025	8,151	3,212	1,339	540	253
Connecticut	3	50%	291	221	48	1,033	449	445	64	30	27
Delaware	-	33%	-	-	-	-	-	-	-	-	-
Florida	20	93%	1,933	860	988	13,751	2,083	10,907	1,012	143	854
Georgia	79	70%	1,590	-	1,590	15,873	-	15,873	907	-	907
Hawaii	2	75%	1,696	685	139	4,610	1,185	785	252	55	64
Idaho	11	98%	901	787	73	1,550	940	293	88	58	25
Illinois	39	91%	3,757	1,645	2,111	16,645	2,328	14,316	899	127	772
Indiana	39	73%	2,018	571	1,447	11,172	791	10,381	732	59	673
lowa	22	100%	3,928	1,080	2,848	14,397	1,280	13,116	1,035	105	929
Kansas	75	78%	1,470	542	928	6,996	1,415		391	92	300
Kentucky	21	86%	2,689	555	2,135	28,493	1,142		1,625	83	1,541
Louisiana	31	58%	471	_	471	4,964	_		283	_	283
Maine	10	100%	1,400	700	529	11,891	858	10,121	529	59	413
Maryland	6	71%	2,810	2,566	243	3,337	1,828	1,509	241	142	99
Massachusetts	3	43%	1,793	1,749	44	1,982	1,666		135	109	26
Michigan	60	89%	6,771	1,184	4,768	25,659	3,182		1,535	200	1,316
Minnesota	30	99%	3,998	1,536	2,463	13,549	5,264		888	296	592
Mississippi	18	68%	3,075	1,966	1,109	11,555	1,512		496	102	394
Missouri	22	99%	2,202	7,700	2,195	21,603	23		1,170	2	1,168
Montana	31	68%	1,269	791	446	3,827	1,610	1,887	275	90	1,160
Nebraska	54	90%	643	23	620	3,159	1,010		214	9	205
Nevada	13	70%	550	344	198	1,650	487	1,042	111	31	75
New Hampshire	6	71%	939	880	58	1,202	815		101	60	40
		70%					481		119	22	96
New Jersey	4		341	166 824	175	1,828		1,347		99	
New Mexico	14	88%	1,071		247	2,459	1,474		172		73
New York	41	73%	3,431	3,163	186	12,477	11,101	830	646	576	54
North Carolina	54	97%	4,425	2,067	2,352	26,758	2,008	24,682	1,429	139	1,287
North Dakota	22	100%	562	87	457	2,830	159	2,606	200	11	184
Ohio	34	41%	2,597	851	1,746	13,863	1,364		802	106	696
Oklahoma	20	94%	2,518	569	1,949	16,733	796	15,937	972	50	922
Oregon	25	92%	2,436	1,244	550	8,422	2,440	3,124	467	139	218
Pennsylvania	9	45%	2,455	1,841	495	7,650	3,446	3,769	431	215	203
Rhode Island	0	40%		-	-		-	-	-	-	-
South Carolina	10	87%	727	85	444	5,676	412		302	26	258
South Dakota	19	89%	1,322	-	1,322	3,981	-		304	-	304
Tennessee	8	100%	4,624	3,784	840	15,293	1,681	13,612	748	121	627
Texas	27	97%	3,017	617	1,855	20,481	1,040	14,576	966	66	769
Utah	3	45%	2,398	2,369	29	2,411	2,234	177	137	124	13
Vermont	8	100%	2,479	1,545	636	16,120	2,179	12,539	591	141	395
Virginia	16	61%	1,622	974	648	6,874	2,734		366	136	230
Washington	28	79%	5,910	4,861	567	16,095	8,617		771	378	298
West Virginia	11	45%	1,044	858	182	4,432	2,752	1,679	252	142	108
Wisconsin	47	83%	2,690	975	1,626	9,394	2,153	6,793	762	126	599
Wyoming	23	61%	2,085	1,721	363	2,814	1,423	1,391	226	104	123

Table 37. State Financial Statistics, 2018

	Ca	pital Funding		Ope	erating Funding	
	Local	State	Federal	Local	State	Federal
	-		thousand do	ollars		
Alabama	268		929	4,314		6,148
Alaska	521	115	3,863	5,853	1,019	5,838
Arizona	152		1,360	3,393		7,532
Arkansas	172	567	3,461	7,307	768	12,049
California	1,168	6,029	1,253	30,819	16,944	16,934
Colorado	8,651	4,170	4,104	59,094	1,034	11,363
Connecticut		304	396	505	1,233	1,527
Delaware						
Florida	266	994	4,143	3,911	13,076	17,475
Georgia	348	394	3,203	13,497		13,654
Hawaii	38		103	16,582		750
Idaho	60	57	161	1,611	43	3,816
Illinois	8	645	3,904	3,713	30,031	8,830
Indiana	765	12	2,985	7,692	5,822	13,826
lowa	1,777	286	7,942	4,120	7,531	11,817
Kansas	422		1,750	3,865	2,517	8,218
Kentucky			11,335	38,107	•	13,813
Louisiana	467	22	2,768	5,478		7,993
Maine	254	100	1,982	2,894	1,828	12,738
Maryland	780	702	5,964	3,853	2,189	3,406
Massachusetts	, 55	5,495	178	1,789	2,941	3,400
Michigan		1,881	8,346	22,900	32,728	16,790
Minnesota	1,142	4,461	1,630	1,133	27,501	13,619
Mississippi	242	202	2,286	3,712	328	13,917
Missouri	1,022	202	5,255	7,694	7,441	16,899
Montana	258		1,519	5,142	7,171	6,957
Nebraska	279	134	1,606	1,617	1,628	5,858
Nevada	19	134	102	1,412	596	4,899
New Hampshire	82	196	2,403	813	461	3,204
New Jersey	02	212	967	1,220	2,929	1,784
New Mexico	121	212	592	2,895	2,727	4,980
New York	105	105	872	15,340	15,305	8,913
					11,873	
North Carolina	1,920	867	10,559	7,099		14,090
North Dakota	153	72	1,314	1,443	2,158	4,868
Ohio	423	13	4,973	12,161	3,920	26,708
Oklahoma	612	007	4,132	3,195	3,254	22,432
Oregon	1,005	886	1,902	7,525	4,537	12,287
Pennsylvania	92	2,217	6,148	1,189	26,460	5,730
Rhode Island	0.40	1.045	01.4	1.550	1.007	, ,70
South Carolina	360	1,265	314	1,559	1,936	6,479
South Dakota	154		618	1,719	834	7,481
Tennessee	694	583	3,141	2,742	6,939	11,734
Texas	105	975	14,531	4,460	12,391	32,755
Utah	7,567		2,686	11,378		2,969
Vermont	332	406	2,359	3,854	7,881	20,207
Virginia	154	620	3,084	4,846	3,063	8,509
Washington	2,585	2,420	4,757	40,149	15,707	11,736
West Virginia	111	523	1,946	3,801	2,309	6,357
Wisconsin	212		848	4,932	4,720	11,947
Wyoming	624		62	3,868	613	5,970

 Table 38. State Fleet Statistics, 2018

	Total	ADA	Average	Average Vehicle	Average			
	Active	Vehicles	Vehicle	Length	Vehicle	Trips Per	Miles Per	Hours Per
A Louis ourse ou	Vehicles	(%) 75%	Age 7.4	(ft) 21.3	Capacity	Vehicle	Vehicle	Vehicle
Alabama	248				16.1	4,103	14,729	805
Alaska	128	80%	6.0	21.8	18.6	13,741	18,860	1,154
Arizona	123	98%	6.7	24.8	17.1	7,536	22,819	1,347
Arkansas	490	76%	8.0	21.2	10.8	2,036	25,124	1,327
California	762	89%	6.6	27.3	21.4	8,177	22,315	1,152
Colorado	842	85%	9.1	27.6	23.3	20,492	23,782	1,590
Connecticut	52	96%	6.7	24.7	17.1	5,601	19,866	1,229
Delaware	0	_	-	_	-	-	-	-
Florida	747	76%	6.5	21.2	11.4	2,587	18,409	1,355
Georgia	486	86%	3.3	21.7	12.1	3,272	32,661	1,865
Hawaii	143	77%	3.9	15.0	17.0	11,858	32,240	1,763
Idaho	97	71%	7.7	23.2	17.6	9,284	15,981	912
Illinois	973	95%	8.0	22.9	13.9	3,861	17,107	924
Indiana	711	90%	6.7	19.8	9.2	2,839	15,713	1,030
lowa	997	92%	8.8	24.9	15.4	3,939	14,440	1,038
Kansas	430	88%	6.4	19.5	11.0	3,419	16,269	910
Kentucky	1,273	73%	5.8	20.4	10.4	2,113	22,383	1,276
Louisiana	284	91%	5.9	20.7	10.1	1,660	17,478	995
Maine	257	63%	7.3	18.6	14.2	5,449	46,268	2,057
Maryland	198	95%	8.3	29.7	21.4	14,190	16,852	1,217
Massachusetts	110	95%	6.0	27.8	21.5	16,301	18,015	1,226
Michigan	1,251	93%	7.2	26.1	18.1	5,412	20,510	1,227
Minnesota	583	100%	6.1	25.8	20.0	6,858	23,240	1,523
Mississippi	481	59%	6.0	21.0	16.7	6,392	24,023	1,030
Missouri	1,148	88%	7.8	21.5	10.4	1,918	18,818	1,019
Montana	295	70%	8.5	23.8	15.2	4,302	12,974	934
Nebraska	285	77%	7.7	19.6	9.9	2,256	11,084	751
Nevada	102	91%	9.6	22.6	13.8	5,388	16,173	1,092
New Hampshire	72	96%	7.3	28.6	20.1	13,036	16,688	1,398
New Jersey	112	97%	7.3	25.4	16.7	3,044	16,320	1,059
New Mexico	168	90%	8.0	23.5	16.1	6,377	14,639	1,037
New York	490	91%	5.6	16.9	19.9	7,002	25,464	1,319
North Carolina	993	71%	5.7	20.1	10.6	4,456	26,947	1,439
North Dakota								
	188	89%	7.2	20.6	11.0	2,988	15,052	1,062
Ohio	597	93%	4.4	21.6	10.8	4,350	23,220	1,343
Oklahoma	940	86%	7.8	20.6	11.1	2,679	17,801	1,034
Oregon	377	95%	6.5	21.0	17.1	6,463	22,338	1,240
Pennsylvania	400	100%	6.4	23.5	17.2	6,137	19,126	1,077
Rhode Island	0	-	-	-	-	-	-	-
South Carolina	220	85%	6.3	23.7	16.3	3,306	25,798	1,373
South Dakota	343	73%	9.5	23.1	13.3	3,854	11,606	886
Tennessee	687	89%	6.5	21.3	10.8	6,731	22,261	1,088
Texas	1,219	84%	6.5	19.4	12.1	2,475	16,801	793
Utah	68	93%	6.6	30.0	17.1	35,260	34,768	2,016
Vermont	296	97%	6.3	25.9	18.8	8,373	54,459	1,997
Virginia	329	99%	4.3	23.7	15.0	4,930	20,892	1,113
Washington	780	66%	7.9	23.6	16.8	7,577	20,635	989
West Virginia	242	81%	5.4	21.5	14.5	4,312	18,314	1,040
Wisconsin	364	82%	6.3	19.4	10.4	7,389	25,806	2,093
Wyoming	213	77%	8.6	22.8	15.3	9,787	13,211	1,062

Table 39. State Performance Measures, Median Agencies Values, 2018

<u>Idble 37. Slale F</u>		ips Per Mile			ips Per Hour		Operating	Operating	Farebox
		Fixed-	Demand-		Fixed-	Demand-	Expense	Expense	Recovery
	Total	Route	Response	Total	Route	Response	Per Trip	Per Mile	Ratio
Alabama	0.19	0.07	0.19	3.13	2.69	3.08	17.17	3.25	0.06
Alaska	0.52	0.54	0.12	6.34	6.90	1.77	17.08	5.09	0.10
Arizona	0.22	0.22	0.26	3.42	3.42	2.47	15.45	3.96	0.05
Arkansas	0.07	0.55	0.06	1.41	6.80	1.36	21.49	1.73	0.06
California	0.30	0.26	0.32	5.39	5.43	3.54	16.69	5.29	0.10
Colorado	0.54	1.13	0.16	8.49	13.96	2.39	8.13	4.12	0.04
Connecticut	0.22	0.53	0.07	4.45	6.12	1.38	14.49	3.18	0.08
Delaware	_	_	_	_	_	-	_	_	_
Florida	0.10	0.20	0.08	1.60	3.00	1.42	27.04	2.92	0.03
Georgia	0.12	_	0.12	1.77	_	1.77	17.85	1.99	0.04
Hawaii	0.39	0.58	0.18	7.03	12.41	2.12	11.38	4.34	0.10
Idaho	0.38	0.51	0.24	6.56	10.82	2.72	8.08	3.09	0.09
Illinois	0.14	0.23	0.13	2.53	4.44	2.25	17.85	2.79	0.04
Indiana	0.16	0.47	0.14	2.29	4.61	2.22	16.68	2.76	0.06
lowa	0.27	0.85	0.24	4.46	9.96	2.82	10.46	3.63	0.08
Kansas	0.22	0.32	0.20	3.36	4.67	2.92	12.02	2.53	0.09
Kentucky	0.08	0.46	0.08	1.48	6.04	1.20	22.82	1.93	0.03
Louisiana	0.09	-	0.09	1.58	-	1.58	24.41	2.50	0.03
Maine	0.18	0.35	0.06	2.99	4.80	1.28	23.62	3.32	0.04
Maryland	0.15	0.16	0.17	2.62	2.70	1.99	17.08	2.79	0.08
Massachusetts	1.16	1.24	0.17	13.31	14.90	1.94	7.20	5.03	0.23
Michigan	0.24	0.27	0.13	3.59	4.31	3.35	14.68	3.35	0.10
Minnesota	0.24	0.27	0.35	4.33	4.06	4.12	12.33	3.95	0.10
Mississippi	0.12	1.25	0.11	3.14	20.32	2.87	13.56	1.74	0.10
Missouri	0.12	0.33	0.11	2.43	3.72	2.40	14.86	2.41	0.03
Montana	0.23	0.33	0.24	2.43	5.94	2.40	15.83	3.16	0.07
Nebraska	0.23	0.17	0.18	2.43	2.94	2.24	19.74	3.18	0.00
Nevada	0.18	0.17	0.10	3.18	2.61	2.74	16.40	3.64	0.07
New Hampshire	0.23	0.20	0.15	4.25	5.09	1.67	11.46	4.39	0.03
New Jersey	0.32	0.34	0.13	2.04	7.33	1.62	28.88		0.08
New Mexico	0.14	0.33	0.12	4.81	7.33 5.85	2.72	13.24	3.43	0.01
New York	0.28	0.43	0.20	4.24	4.24	3.15	18.18	3.41 4.27	0.06
North Carolina	0.22	0.24		2.01	3.08	1.93	18.97	2.02	0.08
North Dakota			0.10						
Ohio	0.14 0.17	0.55	0.14	2.31	7.71	2.17	19.59	3.52	0.09
		0.31	0.14	2.47	3.58	2.31	20.26	3.02	0.05
Oklahoma	0.15	0.29	0.15	2.41	4.39	2.32	14.53	2.35	0.06
Oregon	0.25	0.39	0.20	3.52	5.90	2.76	15.43	3.34	0.08
Pennsylvania	0.38	0.51	0.20	5.70	6.20	2.37	14.88	4.41	0.07
Rhode Island	-	0.15	- 0.00	1.70	- 0.20	1.74	- 00.44	1 /7	- 0.02
South Carolina	0.08	0.15	0.08	1.70	2.32	1.74	22.46	1.67	0.03
South Dakota	0.39	1.00	0.39	4.39	15.10	4.39	9.70	3.69	0.12
Tennessee	0.07	1.28	0.06	1.46	15.12	1.42	26.27	2.01	0.04
Texas	0.12	0.29	0.11	2.42	3.61	1.93	21.80	2.76	0.05
Utah	0.61	0.68	0.20	3.54	4.57	2.48	7.30	4.45	0.02
Vermont	0.13	0.59	0.05	3.52	8.79	1.59	16.10	1.79	0.02
Virginia	0.21	0.34	0.18	4.54	6.15	2.70	10.61	2.52	0.05
Washington	0.14	0.26	0.14	3.33	5.54	1.79	22.78	3.66	0.04
West Virginia	0.17	0.17	0.12	2.79	3.62	1.82	16.02	3.23	0.06
Wisconsin	0.27	0.48	0.27	2.86	6.31	2.69	9.68	2.66	0.32
Wyoming	0.25	0.75	0.24	3.12	11.77	2.69	11.80	2.67	0.06

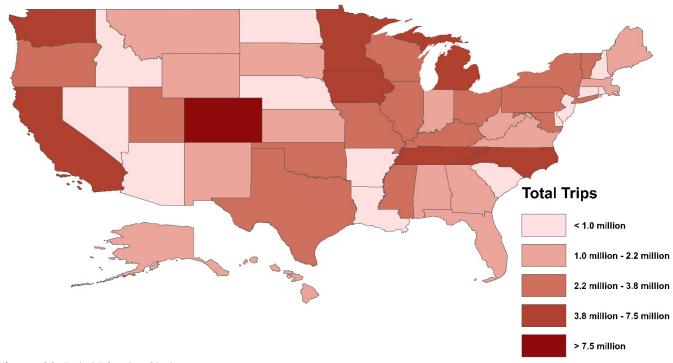


Figure 22. Total Trips by State

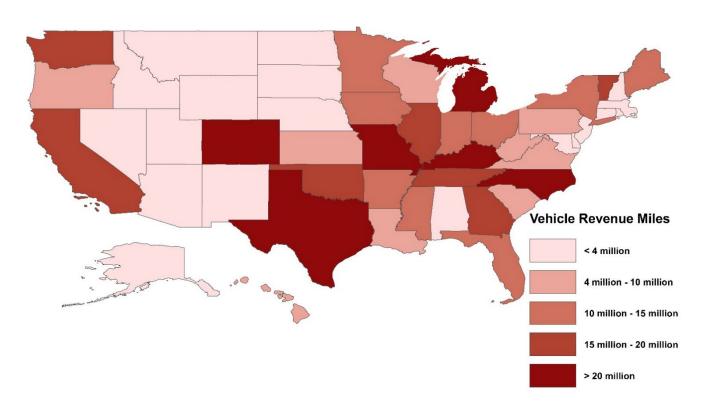


Figure 23. Total Vehicle Revenue Miles by State

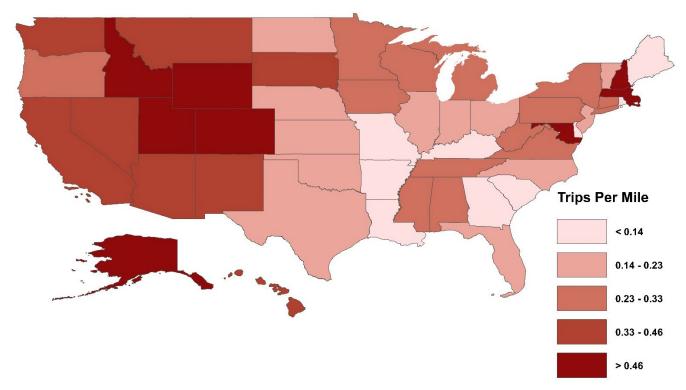


Figure 24. Trips per Vehicle Revenue Mile by State

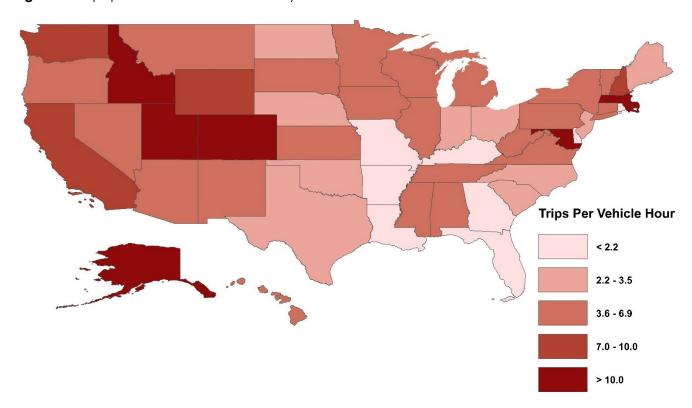


Figure 25. Trips per Vehicle Revenue Hour by State

TRIBAL TRANSIT



There are several geographic and demographic indicators that suggest providing transit services should be a high priority on many reservations (Mielke 2011). These indicators include low population densities, long travel distances, and a higher percentage of low-income households. Data from the ACS show that the percentage of population below the poverty level on reservations is twice the U.S. average (Table 40). Reservations also have a higher percentage of school-aged youth. While the percentage of households without a vehicle is similar to the U.S. average, it is more than twice as high as in other rural areas. The average data, however, do not convey the variation in demographics. For example, some reservations have much higher rates of poverty. In 25% of reservations, the poverty rate is 35% or higher, and in 10% of reservations, the poverty rate is 42% or higher. Some reservations also have a high concentration of zero-vehicle households, indicating a need for transit services.

Table 40. Demographic Data for Native American Reservations, compared to U.S. Average Metro and Non-Metro Counties

			American Indian Reservation and
	United States	Rural Areas	Trust Lands
		Percentage-	
Population Aged 5-17	17	17	21
Population Aged 65 or Older	15	19	14
Population with a Disability	13	15	15
Population Below the Poverty Level	14	12	28
Households with No Vehicle	9	4	9

Source: American Community Survey, 2018 5-year estimates

There is also significant geographic variation in reservations. Figure 26 maps American Indian, Alaska Native, and Native Hawaiian areas. Some are located in metro areas with higher population densities, while many are in rural, remote areas.

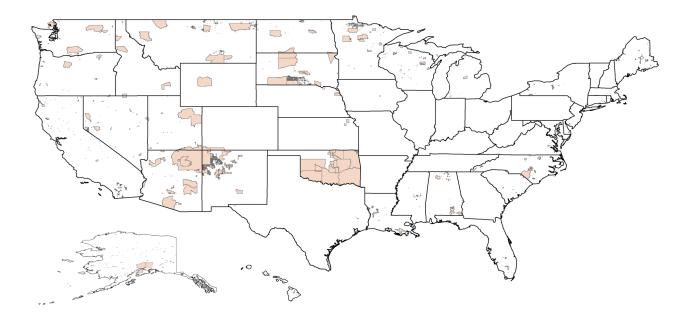


Figure 26. American Indian, Alaska Native, and Native Hawaiian Areas

The number of tribal transit providers has grown significantly over the past several years. Figure 27 shows, in green, the counties that have tribal transit systems, based on data collected in 2017. As shown in Table 41, there were 134 rural tribal transit agencies that submitted data to the 2018 rural NTD, an increase from previous years. These agencies provided a total of 3.5 million rides in 2018, a decrease from 3.6 million in 2017. Tribal transit agencies provided 20.9 million vehicle miles of service and 971 thousand vehicle hours of service, operating 1,008 vehicles in 2018. Fleet statistics and performance measures are provided in Table 42.

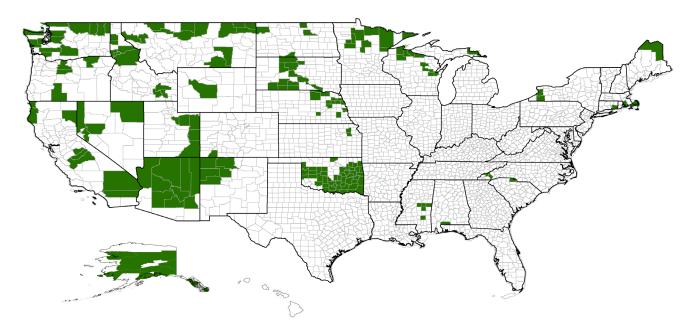


Figure 27. Counties with Tribal Transit Service

 Table 41. Tribal Transit Operating Statistics, 2013-2018

	2013	2014	2015	2016	2017	2018
Number of Agencies	103	128	132	127	132	134
Annual Ridership (thousand rides)						
Fixed-route	1,348	853	1,472	1,436	1,703	1,531
Demand-response	973	1,098	1,278	1,053	1,067	1,153
Vanpool	33	21	27	28	30	13
Commuter bus	120	332	296	226	214	196
Demand-response taxi	0	8	6	1	0	0
Ferryboat	367	569	559	638	631	620
Total	2,841	2,882	3,638	3,383	3,645	3,514
Annual Vehicle Miles (thousand miles)						
Fixed-route	7,452	6,526	7,361	7,027	7,995	8,039
Demand-response	9,158	10,273	12,104	11,205	11,128	11,415
Vanpool	379	205	234	223	125	84
Commuter bus	869	1,579	1,523	1,248	1,215	1,282
Demand-response taxi	0	77	40	11	0	0
Ferryboat	51	65	60	172	74	82
Total	17,909	18,726	21,323	19,885	20,537	20,901
Annual Vehicle Hours (thousand hours)						
Fixed-route	340	326	340	319	361	371
Demand-response	455	518	545	504	511	547
Vanpool	16	6	7	7	4	2
Commuter bus	37	47	44	35	35	38
Demand-response taxi	0	5	1	0	0	0
Ferryboat	9	13	12	19	13	14
Total	857	916	950	885	925	971

Table 42. Tribal Transit Fleet Statistics and Performance Measures, 2013-2018

	2013	2014	2015	2016	2017	2018
Number of Vehicles						
Fixed-route	-	245	292	319	377	305
Demand-response	-	463	558	588	625	648
% Vehicles ADA	67%	67%	64%	63%	63%	60%
Average Vehicle Age (years)	5.3	5.5	5.7	5.0	4.2	6.5
Average Vehicle Length (feet)	22.2	22.2	22.1	21.8	21.9	22.1
Average Vehicle Capacity	14.6	14.3	13.9	13.6	13.9	14.4
Trips per Vehicle						
Fixed-route	-	3,473	4,954	4,503	4,518	5,020
Demand-response	-	2,371	2,290	1,791	1,707	1,779
Miles per Vehicle						
Fixed-route	-	26,380	25,055	22,027	21,206	26,357
Demand-response	-	22,187	21,691	19,056	17,805	17,616
Hours per Vehicle						
Fixed-route	-	1,327	1,158	1,001	957	1,215
Demand-response	-	1,118	977	858	818	845
Trips per Mile						
Total	0.16	0.15	0.17	0.17	0.18	0.17
Fixed-route	0.18	0.13	0.20	0.20	0.21	0.19
Demand-response	0.11	0.11	0.11	0.09	0.10	0.10
Trips per Hour						
Total	3.3	3.2	3.8	3.8	3.9	3.7
Fixed-route	4.0	2.6	4.3	4.5	4.7	4.1
Demand-response	2.1	2.1	2.3	2.1	2.1	2.1
Operating Expense Per Trip	14.74	15.95	15.81	18.19	18.20	17.93
Operating Expense Per Mile	2.34	2.46	2.69	3.10	3.23	3.01
Farebox Recovery Ratio	0.05	0.05	0.04	0.03	0.03	0.05

Figures 28-30 show tribal transit vehicle revenue miles, vehicle revenue hours, and total trips mapped across the country. These maps show the reservations providing the most trips and greatest levels of service, which tend to be in Oklahoma, the upper Midwest, the northwest, and the southwest, with a few large systems in the east. The red dots represent tribal lands without a tribal transit service. The data in these maps are averaged over the 2013-2017 period.

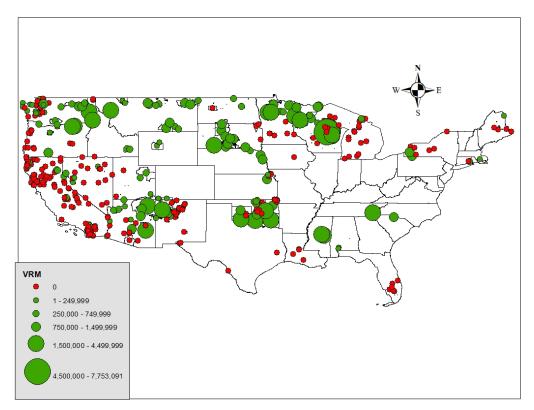


Figure 28. Tribal Transit Total Vehicle Revenue Miles, 2013-2017 Source: Ndembe et al. forthcoming

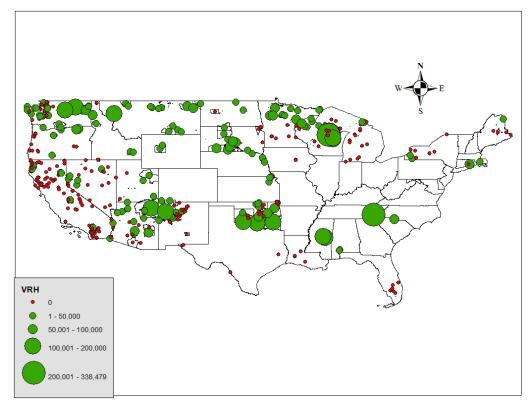


Figure 29. Total Tribal Transit Vehicle Revenue Hours, 2013-2017 Source: Ndembe et al. forthcoming

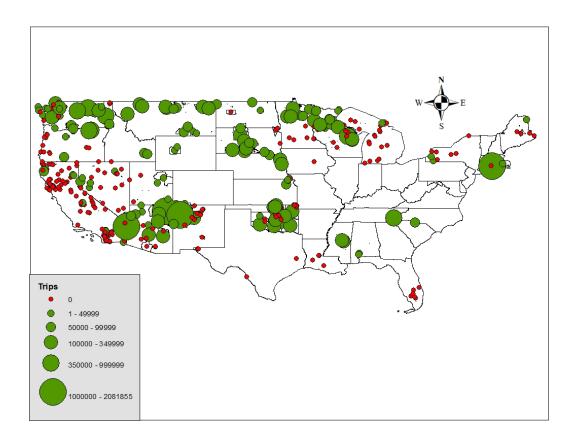


Figure 30. Total Tribal Transit Unlinked Passenger Trips, 2013-2017 Source: Ndembe et al. forthcoming

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