



Commuting Trends in Florida

A Special Report from FDOT Forecasting and Trends Office



February 2018

Summary

This special report describes commuting trends in Florida and the United States based on the 2016 American Community Survey (ACS). In 2016, there were 118,163 Florida households interviewed, and 7,560 people living in group quarters surveyed. In general, the trends reaffirm the strong influence of built infrastructure and the general appeal of auto commuting given the competitiveness of the available options. They also show the growing popularity of work-at-home.

Florida's commuting trends as of 2016 are summarized as follows:

- **Increased auto availability** – Florida's zero-vehicle households decreased to 6.6% in 2016, down from 6.8% in 2015 and from the peak of 7.4% in 2012. This compares with a national level of 8.7% in 2016, down from 8.9% in 2015.
- **Continued dominance in commuting by driving alone** – In Florida, 79.2% of commuters drove alone, slightly lower than that of 2015 and 2.9% above the national average. The number of commuters driving alone in Florida grew by 147,514 in 2016.
- **Slightly More Carpooling** – Carpooling remains the second most common means of commuting. Its share rose slightly from 8.9% in 2015 to 9.2% in 2016 for Florida. The carpool share for the U.S. remained the same at 9.0% in 2016.
- **No significant change in commuting by transit, walking or bicycling** – From 2015 to 2016, transit use for commuting decreased by 0.1% in both Florida and nationally. Commuting by walking increased by 0.1% in Florida and decreased by 0.1% nationally. The bicycle commuting share dropped by 0.1% in Florida but remained unchanged at 0.6% nationally.
- **Working at home at record levels** – Working at home grew to 6.0% in Florida and 5.0% nationally – both record levels. This translates into 50,059 more Floridians working at home since 2015.
- **Slight increase in overall commute times** – The average one-way commute in Florida was 27.4 minutes, 0.8 minutes longer than the national average. The Florida and national commute times have increased 5.8% and 5.1% respectively in the past decade. In Florida, 17.4% of commuters made commute trips 45 minutes or longer.
- **Mobile work force** – In Florida, 18.8% of commuters worked outside their county or the state, compared with 27.6% nationally who worked outside their county or state of residence.
- **No worker households** – The share of households with zero workers was 32.0% in Florida and 26.6% in the nation, a decrease of 0.2% from 2016 for both Florida and nationally.

While commuting is critically important in studying travel, it is only a portion of overall travel. Fuel price levels, economic conditions, household composition and activity patterns, development patterns, and travel option availability are among the factors that influence travel behavior.

Detailed Commuting Trends

Although fundamental travel behaviors remain intact, the most notable changes in the data for recent years reflect the influence of the economy on several measures. The following tables and figures contain detailed information supporting the above summary. Due to relatively small sample sizes (approximately 1.27% of the Florida households), many of the small differences over time and between locations may not be statistically significant.

Ten-Year Commuting Trends in Florida and the United States

Table 1 shows the commuting trends for Florida since 2007. For information on data collection, sampling design, non-sampling error, definitions, and the concept of Margin of Errors (MOE) related to the data, see <https://www.census.gov/programs-surveys/acs/methodology.html/>.

TABLE 1 - FLORIDA AND U.S. ACS TRENDS

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
VEHICLES AVAILABLE – FLORIDA										
No vehicles available	6.2%	6.6%	6.6%	7.0%	7.3%	7.4%	7.2%	6.9%	6.8%	6.6%
1 vehicle available	39.7%	40.5%	41.2%	41.1%	41.7%	42.2%	41.6%	41.2%	41.0%	40.4%
2 vehicles available	38.8%	38.5%	38.3%	37.9%	37.8%	37.4%	37.7%	38.2%	38.0%	38.1%
3 or more vehicles available	15.3%	14.4%	14.0%	13.7%	13.1%	13.0%	13.5%	13.7%	14.2%	14.9%
VEHICLES AVAILABLE – U.S.										
No vehicles available	8.7%	8.8%	8.9%	9.1%	9.3%	9.2%	9.1%	9.1%	8.9%	8.7%
1 vehicle available	33.1%	33.4%	33.7%	33.8%	34.1%	34.1%	33.9%	33.7%	33.5%	33.2%
2 vehicles available	38.1%	37.8%	37.6%	37.6%	37.5%	37.3%	37.3%	37.3%	37.2%	37.1%
3 or more vehicles available	20.1%	20.0%	19.9%	19.5%	19.1%	19.3%	19.7%	19.9%	20.3%	21.0%
COMMUTING TO WORK – FLORIDA										
Car, truck, or van – drove alone	79.6%	79.5%	79.3%	79.9%	79.7%	79.3%	79.6%	79.7%	79.7%	79.2%
Car, truck, or van – carpooled	10.5%	10.3%	10.4%	9.6%	9.9%	9.7%	9.4%	9.1%	8.9%	9.2%
Public transportation (not taxi)	1.9%	2.0%	1.9%	2.1%	2.1%	2.2%	2.1%	2.1%	2.2%	2.1%
Walked	1.7%	1.5%	1.5%	1.7%	1.5%	1.6%	1.5%	1.4%	1.4%	1.5%
Bicycle	0.5%	0.6%	0.7%	0.6%	0.6%	0.7%	0.7%	0.7%	0.7%	0.6%
Other means	1.6%	1.7%	1.6%	1.5%	1.6%	1.6%	1.5%	1.5%	1.5%	1.5%
Worked at home	4.2%	4.5%	4.8%	4.6%	4.6%	5.0%	5.1%	5.4%	5.6%	6.0%
COMMUTING TO WORK – U.S.										
Car, truck, or van -- drove alone	76.1%	75.5%	76.1%	76.6%	76.4%	76.3%	76.4%	76.5%	76.6%	76.3%
Car, truck, or van -- carpooled	10.4%	10.7%	10.0%	9.7%	9.7%	9.7%	9.4%	9.2%	9.0%	9.0%
Public transportation (not taxi)	4.9%	5.0%	5.0%	4.9%	5.0%	5.0%	5.2%	5.2%	5.2%	5.1%
Walked	2.8%	2.8%	2.9%	2.8%	2.8%	2.8%	2.8%	2.7%	2.8%	2.7%
Bicycle	0.5%	0.5%	0.6%	0.5%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
Other means	1.2%	1.3%	1.2%	1.2%	1.2%	1.2%	1.3%	1.2%	1.2%	1.2%
Worked at home	4.1%	4.1%	4.3%	4.3%	4.3%	4.4%	4.4%	4.5%	4.6%	5.0%
ZERO-WORKER HOUSEHOLDS										
Florida	30.0%	29.5%	31.6%	32.5%	32.9%	33.0%	32.7%	32.1%	32.2%	32.0%
U.S.	25.8%	24.5%	26.3%	27.2%	27.5%	27.3%	27.0%	26.9%	26.8%	26.6%
MEAN TRAVEL TIME TO WORK										
Florida (mins)	25.9	25.9	25.4	25.5	25.8	26.2	26.1	26.4	27.0	27.4
U.S. (mins)	25.3	25.5	25.1	25.3	25.5	25.7	25.8	26.0	26.4	26.6

The work-at-home population has grown in the past decade across the nation and particularly in Florida (**Figure 1**). This was among the fastest-changing aspects of commuting. Work-at-home has a profound impact on the commuting share of overall travel demand. Work-at-home is just one of the numerous ways that communication is being substituted for travel. In 2016, the work-at-home share of the population reached an all-time high of 6.0% in Florida and 5.0% in the nation.

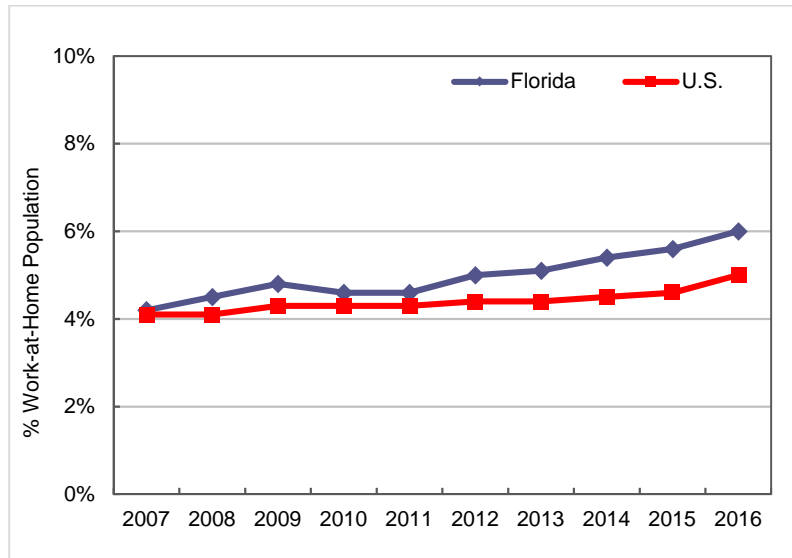


FIGURE 1 - WORK-AT-HOME POPULATION SHARE, FLORIDA VS U.S.

Florida has a higher share of households with no workers due to its concentration of retirees. The share of households that have no workers (**Figure 2**) has decreased slightly to 32.0% in Florida and 26.6% in the U.S, respectively. This is relevant to transportation policy in that the residential location preferences and travel decisions of these households are not necessarily influenced by access to work considerations. This combined with work-at-home households, resulted in approximately 38.0% of Floridian households not involved in commuting.

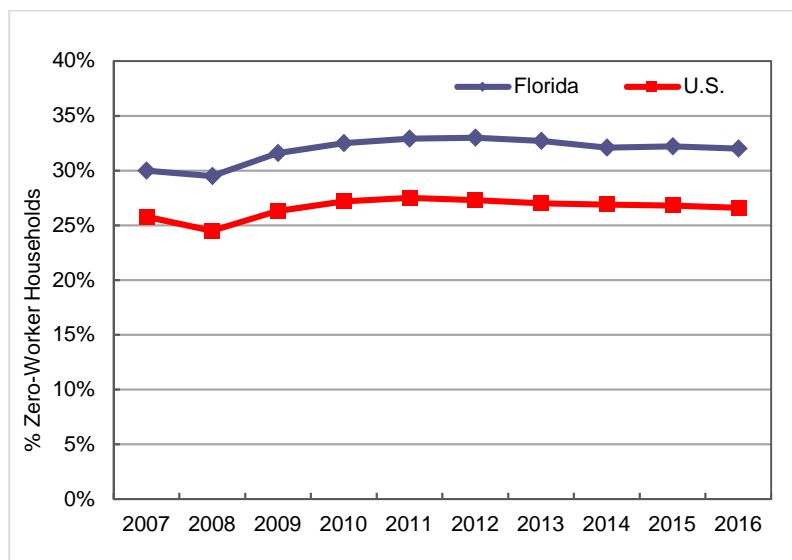


FIGURE 2 – HOUSEHOLDS WITH NO-WORKERS

Figure 3 contrasts Florida and U.S. zero-car household trends. Over the past decade the shares of zero-car households have been fluctuating for both the state and nationally, with the national share remaining above the Florida share. From 2015 to 2016, the shares of zero-car households in both Florida and nationally decreased to 6.6% and 8.7%, respectively. As zero-car households are typically smaller — often single persons — the share of the population that resided in zero-car households was quite small, 4.5% in Florida and 6.0% in the U.S.

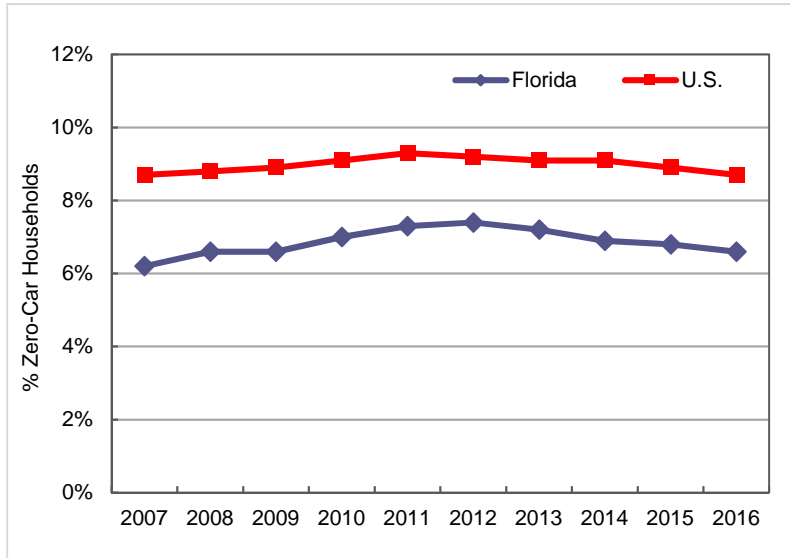


FIGURE 3 - ZERO-CAR HOUSEHOLDS

Figure 4 contrasts Florida and national trends with respect to carpool and transit use. Reliance on driving or being a private-vehicle passenger remained the dominant means of commuting in Florida, with “drive alone” being 2.9% higher than in the rest of the country (**Table 1**). Commuting by both public transit and carpool in Florida were below the national averages. Transit use decreased slightly in both Florida and the U.S. during the previous year. Carpooling showed a slight increase in Florida from 8.9% to 9.2% while it remained the same for the U.S. at 9.0%.

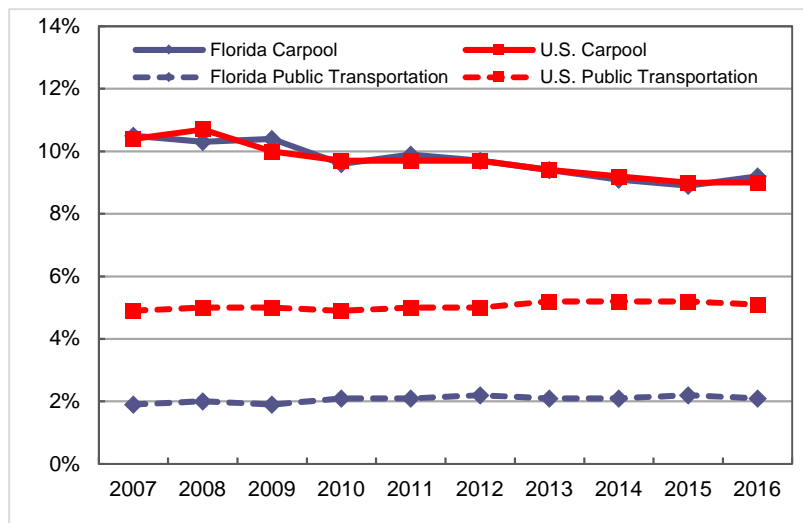


FIGURE 4 - TRANSIT AND CARPOOL COMMUTING

Florida and national shares of walk and bike commuting exhibited slight fluctuations over the past decade (**Figure 5**). While Florida consistently has a smaller share of walking commuters than the national average, Florida’s share of bicycle commuters remained equal to or marginally greater than the national share. With that said, the share of bicycle commuters remained low at 0.6% in both Florida and the U.S. in 2016 even though bicycle travel has garnered much attention lately.

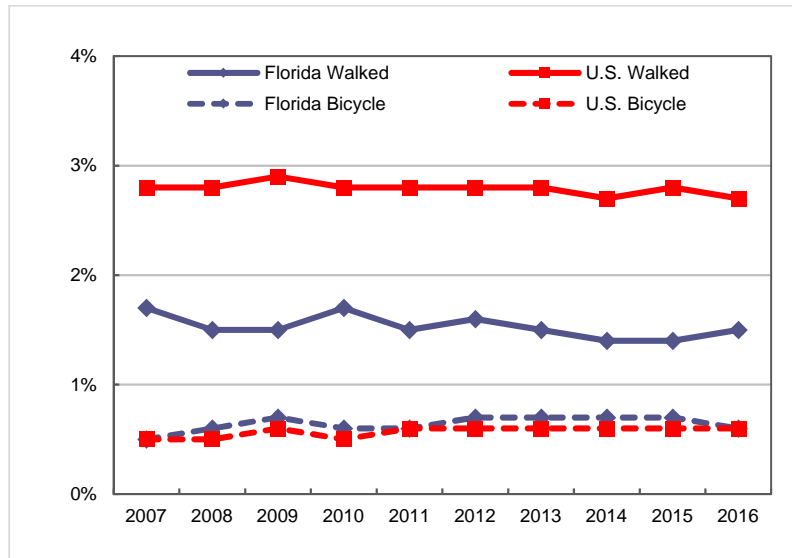


FIGURE 5 - WALK AND BICYCLE COMMUTING

Mean commute times increased for both Florida and the U.S. (**Figure 6**), with Florida’s average commute 0.8 minutes longer than the national average in 2016. Florida’s average commute time increased from 27.0 minutes in 2015 to 27.4 minutes for 2016. The national average also continued to increase to an all-time high of 26.6 minutes in 2016. This measure does not allow discernment of the relative contributions of trip length changes versus trip speed changes.

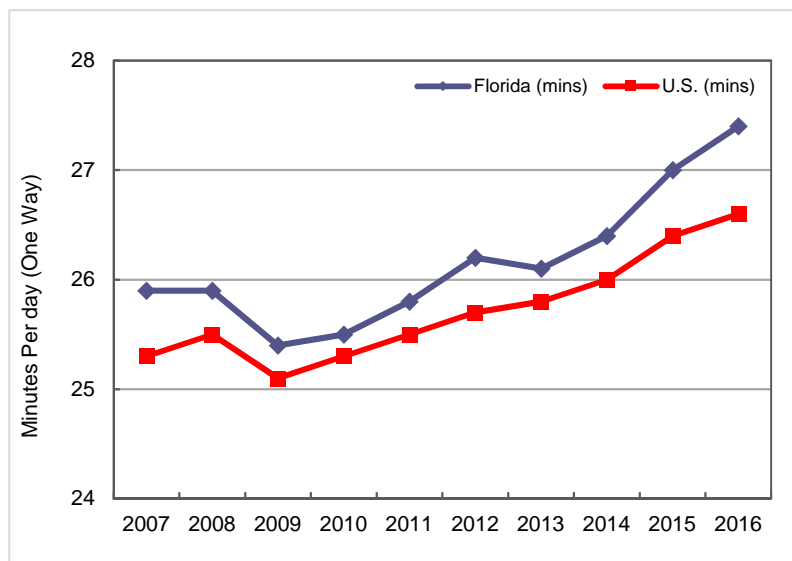


FIGURE 6 - MEAN COMMUTE TIMES

Year 2016 Commuting Characteristics in Florida

Table 2 shows the comparative transit mode shares for commuting for several Metropolitan Statistical Areas (MSAs) in Florida. Transit use in all Florida MSAs is below the national average. The transit ridership commuting share in the Orlando-Kissimmee-Sanford MSA was close to the state share. Half of the 18 MSAs in Florida had transit commute shares less than 1%.

TABLE 2 - TOP FLORIDA MSAS RANKED BY TRANSIT MODE SHARE TO WORK, 2016

Rank	Metropolitan Statistical Area (MSA)	Transit, %
1	Gainesville	4.1%
2	Miami-Fort Lauderdale-West Palm Beach	3.8%
3	Orlando-Kissimmee-Sanford	1.9%
4	Naples-Immokalee-Marco Island	1.8%
5	Jacksonville	1.7%
6	Tampa-St. Petersburg-Clearwater	1.4%
7	Deltona-Daytona Beach-Ormond Beach	1.2%
7	Panama City	1.2%
9	North Port-Sarasota-Bradenton	1.0%
10	Tallahassee	0.9%
11	Lakeland-Winter Haven	0.6%
11	Pensacola-Ferry Pass-Brent	0.6%
13	Cape Coral-Fort Myers	0.5%
13	Crestview-Fort Walton Beach-Destin	0.5%
13	Ocala	0.5%
16	Palm Bay-Melbourne-Titusville	0.4%
16	Port St. Lucie	0.4%
18	Homosassa Springs	0.1%
	Florida	2.1%
	United States	5.1%

Table 3 provides transit commute share data at the county level. Of the 31 counties, six (6) had a transit commute share equal to or greater than the state average. Miami-Dade County was the only Florida County whose transit share exceeded the U.S. average in 2016. Miami-Dade, Alachua, and Broward Counties had the highest transit commute shares, while Martin, Citrus, and St. Johns Counties had the lowest transit commute shares.

TABLE 3 - FLORIDA COUNTIES RANKED BY TRANSIT MODE SHARE TO WORK, 2016

Rank	County	Transit %	Rank	County	Transit %
1	Miami-Dade County	5.3%	18	Polk County	0.6%
2	Alachua County	4.3%	19	Clay County	0.5%
3	Broward County	2.9%	19	Lee County	0.5%
4	Orange County	2.7%	19	Marion County	0.5%
5	Duval County	2.5%	19	Osceola County	0.5%
6	Monroe County	2.1%	19	St. Lucie County	0.5%
7	Collier County	1.8%	24	Brevard County	0.4%
7	Palm Beach County	1.8%	24	Hernando County	0.4%
9	Hillsborough County	1.6%	24	Lake County	0.4%
9	Pinellas County	1.6%	24	Okaloosa County	0.4%
11	Volusia County	1.4%	24	Pasco County	0.4%
12	Bay County	1.3%	29	Martin County	0.3%
12	Sarasota County	1.3%	30	Citrus County	0.1%
14	Leon County	1.2%	30	St. Johns County	0.1%
15	Seminole County	1.1%			
16	Escambia County	0.9%		Florida	2.1%
17	Manatee County	0.8%		United States	5.1%

Table 4 provides data for 40 Florida counties with the highest average commute times. Of the 40 counties, 16 had commute times equal to or higher than the Florida average, and 18 had commute times equal to or higher than the national average. Clay, Osceola, and Nassau Counties had the highest average commute time in the state in 2016. Leon, Highlands, and Monroe Counties had the lowest average commute time in Florida for approximately 20 minutes or less.

TABLE 4 - TOP FLORIDA COUNTIES RANKED BY TRAVEL TIME TO WORK, 2016

Rank	County	Minutes	Rank	County	Minutes
1	Clay County	36.3	21	Martin County	26.0
2	Osceola County	33.1	23	Polk County	25.7
3	Nassau County	33.0	24	Sarasota County	25.6
4	Miami-Dade County	32.6	25	Palm Beach County	25.0
5	Pasco County	30.6	25	Marion County	25.0
6	Hernando County	30.1	27	Brevard County	24.9
7	St. Johns County	29.1	28	Duval County	24.7
8	Broward County	28.7	29	Pinellas County	24.6
9	Santa Rosa County	28.4	30	Collier County	24.5
10	St. Lucie County	28.2	31	Charlotte County	24.2
11	Orange County	28.0	32	Columbia County	23.3
11	Seminole County	28.0	33	Okaloosa County	22.9
13	Putnam County	27.9	34	Alachua County	22.6
13	Walton County	27.9	35	Bay County	22.5
15	Lake County	27.7	36	Escambia County	22.4
16	Hillsborough County	27.5	37	Indian River County	21.4
17	Lee County	27.1	38	Leon County	20.3
18	Volusia County	26.7	39	Highlands County	18.9
19	Manatee County	26.3	40	Monroe County	17.6
20	Citrus County	26.1		Florida	27.4
21	Flagler County	26.0		United States	26.6

Comparison of Commuting Characteristics between Florida and Other States

Table 5 provides rank data on cross-county commuting for the U.S in 2016. Forty states plus D.C. had more cross-county commuting than Florida in 2016. Virginia and New Jersey had the highest shares of cross-county commuting, at over 51% and nearly 47%, respectively. Not surprisingly, the lowest share of cross-county commuting occurred in Hawaii at less than 1%. Florida's share of cross-county commuters was nearly 19% in 2016, while the national average was close to 28%.

TABLE 5 - PERCENT WORKERS WHO WORKED OUTSIDE COUNTY OR STATE OF RESIDENCE, 2016

Rank	State	Percent	Rank	State	Percent
1	Virginia	51.4%	27	Arkansas	25.3%
2	New Jersey	46.5%	27	District of Columbia	25.3%
3	Maryland	46.1%	27	Oklahoma	25.3%
4	Georgia	41.4%	30	Vermont	24.3%
5	Rhode Island	37.1%	31	Kansas	23.9%
6	Minnesota	36.5%	32	Iowa	23.8%
6	Mississippi	36.5%	33	Maine	23.1%
8	New York	36.3%	34	Oregon	22.7%
9	New Hampshire	35.2%	34	Texas	22.7%
10	Missouri	34.7%	36	Nebraska	21.9%
11	Massachusetts	34.4%	37	Delaware	21.3%
12	West Virginia	33.2%	38	South Dakota	20.9%
13	Colorado	33.1%	39	Idaho	20.7%
14	Kentucky	32.5%	40	Washington	19.1%
15	Indiana	32.2%	41	Florida	18.8%
16	Michigan	30.7%	42	Utah	18.1%
17	Louisiana	30.4%	43	California	17.3%
18	Ohio	30.1%	44	North Dakota	15.8%
19	Pennsylvania	30.0%	45	New Mexico	14.9%
20	South Carolina	29.9%	46	Montana	8.1%
21	North Carolina	29.0%	47	Wyoming	7.0%
22	Tennessee	28.3%	48	Alaska	6.6%
23	Wisconsin	28.2%	49	Arizona	5.8%
24	Alabama	27.5%	50	Nevada	5.2%
25	Connecticut	26.7%	51	Hawaii	0.8%
26	Illinois	26.5%		United States	27.6%

Figure 7 provides comparisons across states in Single Occupant Vehicle (SOV) shares. The SOV share in Florida was 79.2% in 2016, which was lower than that of 29 other states but still higher than the national average of 76.3%.

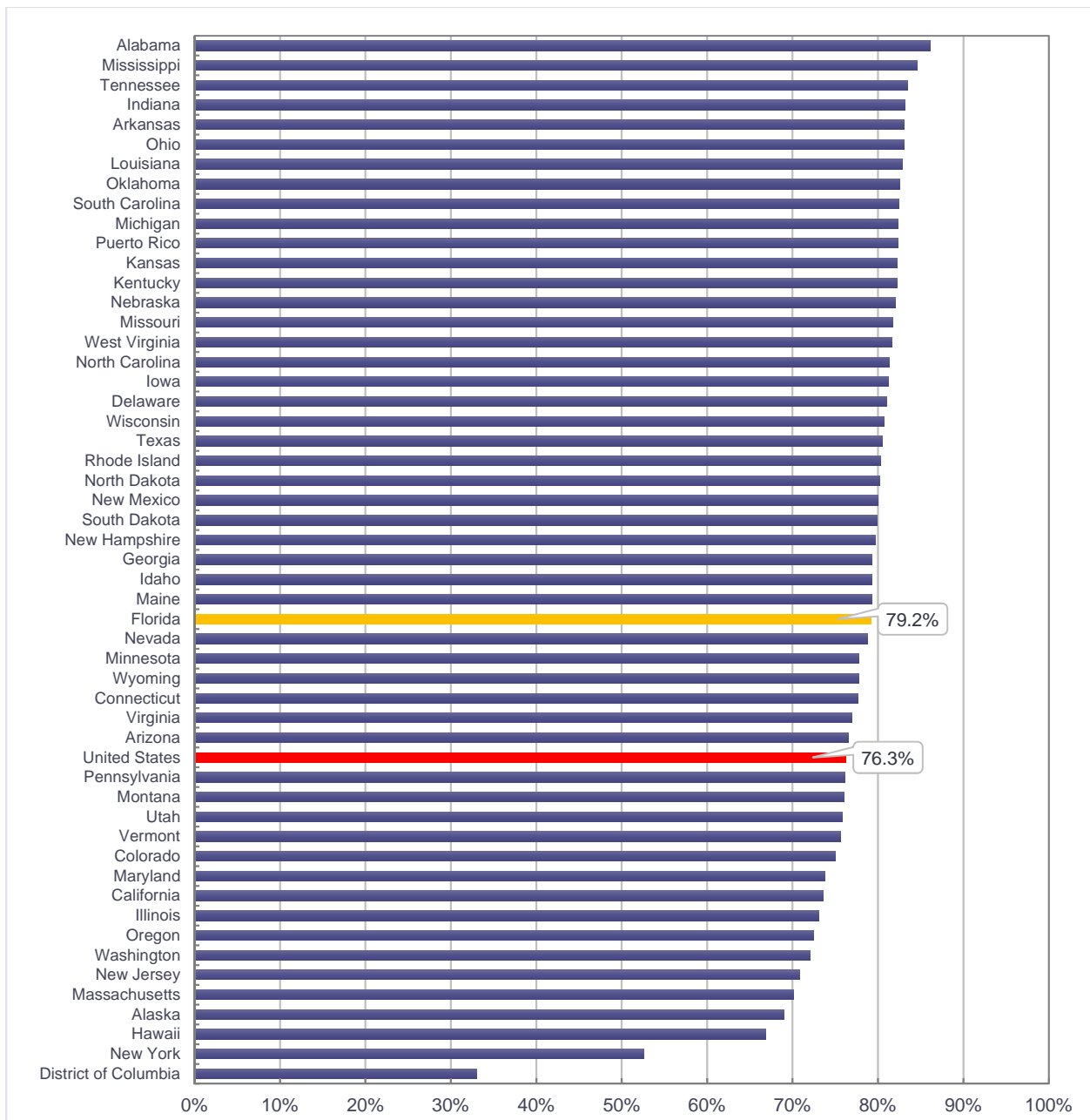


FIGURE 7 - PERCENT SOV FOR ALL STATES AND THE U.S., 2016

Figure 8 presents a comparison of mean commute times across the nation in 2016. With an average commute time of 27.4 minutes, Florida was among the states that had the longest travel times to work. Eleven states and the District of Columbia had longer commute times than Florida. The national average commute time was slightly shorter than the Florida average at 26.6 minutes.

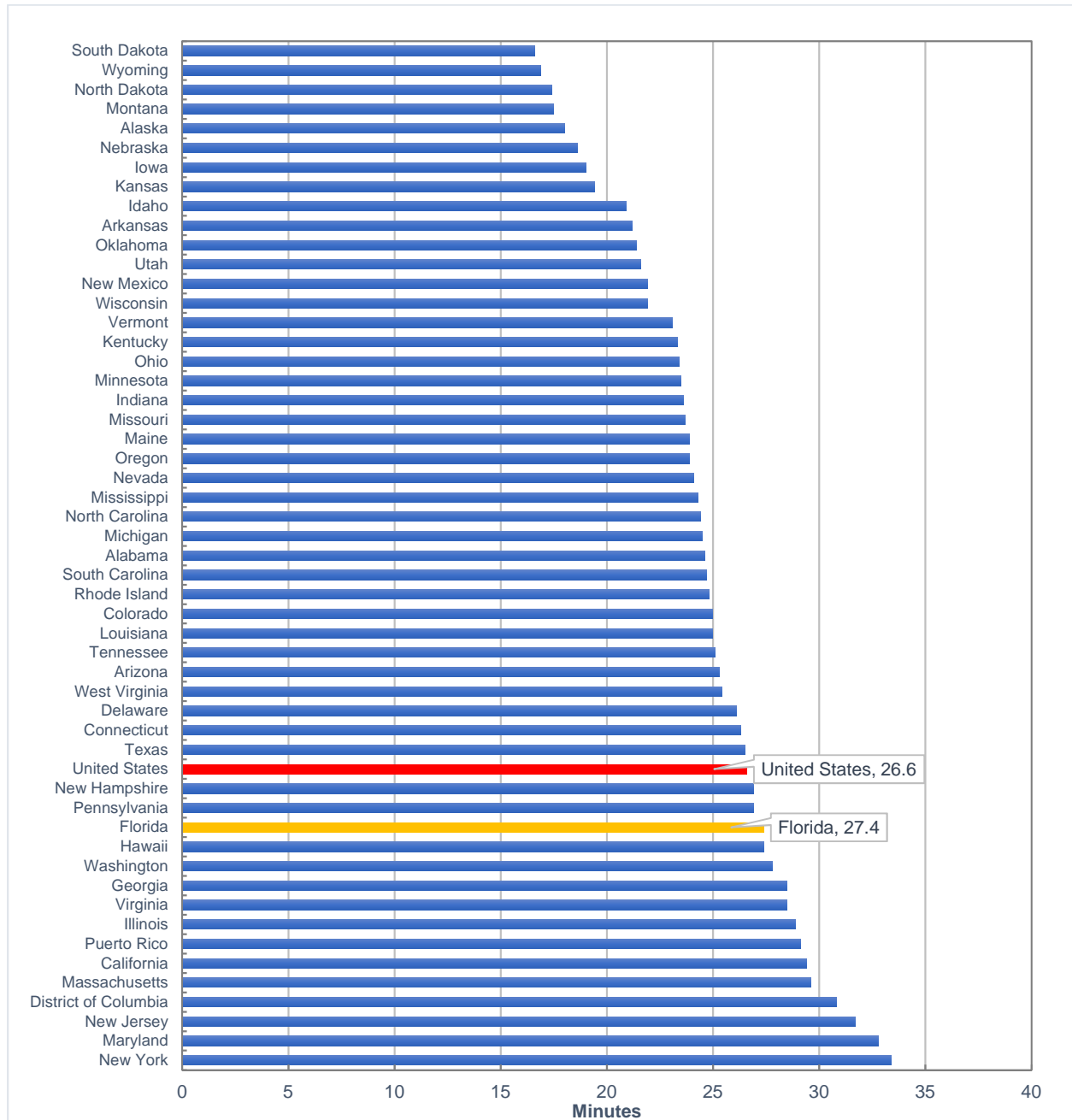


FIGURE 8 - MEAN COMMUTE TIME FOR ALL STATES AND THE U.S., 2016

Figure 9 shows the distribution of one-way commute travel time in Florida by mode. About 59% of commuters who drove alone to work had commute times less than 30 minutes in 2016. Carpooling average commute times were slightly longer than drive-alone commute times with 56% of carpool commutes less than 30 minutes. Transit trips are noticeably longer due to a combination of wait time, the vehicle stopping for other passengers, and transfers. Because of transit commute characteristics, 74% of transit commutes took longer than 30 minutes.

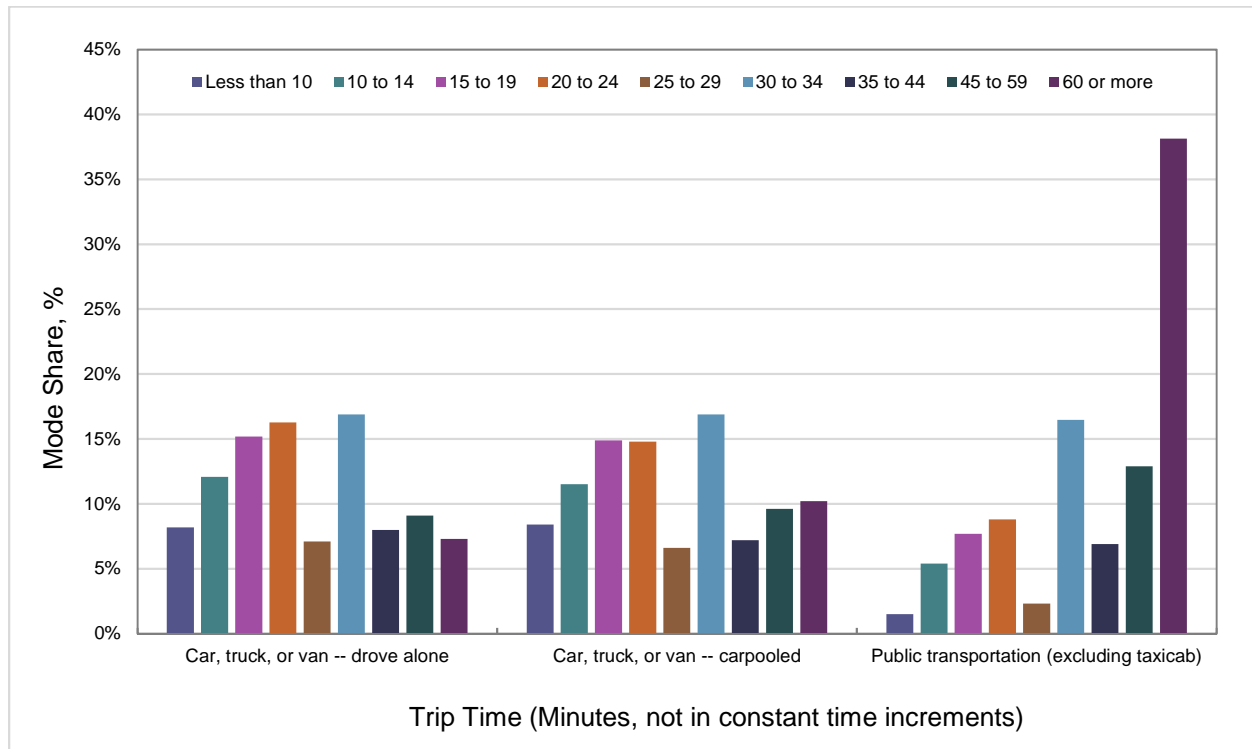


FIGURE 9 - COMMUTE TIME BY MODE

While commuting only constitutes a portion of overall travel demand, understanding commuting trends allows for a richer insight into peak travel demand which often governs system design. Travel demand is complex and influenced by multiple continuously evolving characteristics. These dynamic interrelated characteristics make forecasting travel demand challenging. Understanding the trends of travel demand coupled with the factors which influence travel allows for more precise forecasting, a better understanding of future needs, and more informed decision making at the state and local levels.