

2017

Commuting Trends in Florida

A Special Report from FDOT Forecasting and Trends Office

2017 FLORIDA

COMMUTING TRENDS SUMMARY



BASED ON 2017 AMERICAN COMMUNITY SURVEY

FTO FORECASTING & TRENDS OFFICE

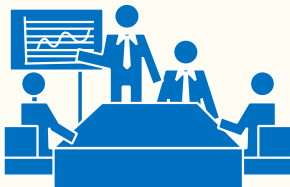
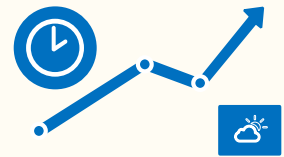


INCREASED AUTO AVAILABILITY

Florida's zero-vehicle households decreased to 6.3% in 2017, down from 6.6% in 2016 and from the peak of 7.4% in 2012. This compares with a national level of 8.6% in 2017.

INCREASE IN OVERALL COMMUTE TIMES

The average one-way commute in Florida continued to grow from 27.4 minutes in 2016 to 27.8 minutes in 2017. The same trend is observed nationally as the average commute time grew from 26.6 minutes to 26.9 minutes. The Florida and national commute times have increased 7.3% and 5.1% respectively in the past decade. In Florida, 18.0% of commuters made commute trips 45 minutes or longer.



MOBILE WORK FORCE

In 2017, 19.2% of Florida commuters worked outside their county or the state, compared to 18.8% in 2016. Nationally, 27.7% of commuters worked outside their county or state of residence, a slight increase of 0.1% compared to 2016.

DECREASE IN NO-WORKER HOUSEHOLDS

In 2017, the share of households with zero workers was 31.9% in Florida and 26.5% in the nation, a slight decrease of 0.1% from 2016 for both Florida and nationally.



WORK-AT-HOME CONTINUED TO INCREASE

The work-at-home population had a slight increase both in Florida and nationally. In 2017, 6.1% of workers in Florida worked from home, up by 0.1% from 2016. In the US, 5.2% workers worked at home, up by 0.2% from 2016.

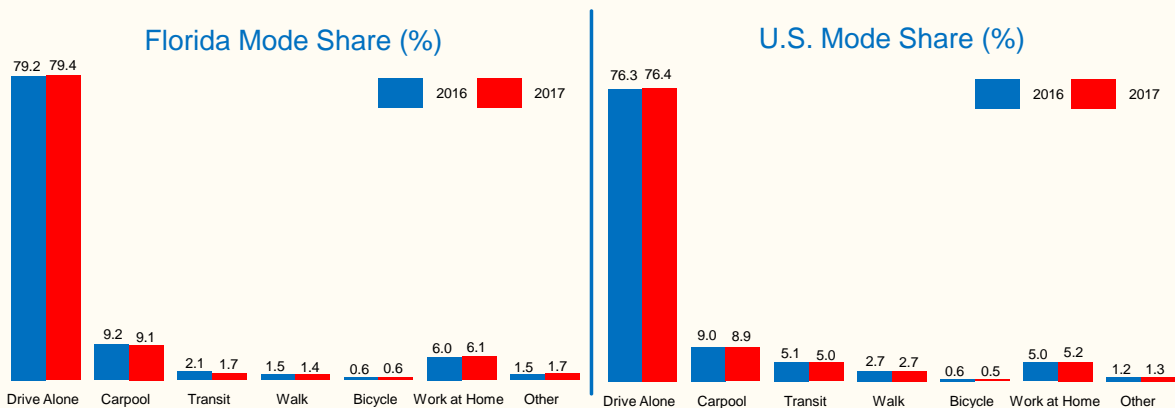
COMMUTING TRENDS SUMMARY



BASED ON 2017 AMERICAN COMMUNITY SURVEY

FTO FORECASTING & TRENDS OFFICE

CHANGES IN COMMUTING MODE SHARES



Continued dominance by driving alone – In Florida, 79.4% of commuters drove alone, slightly higher than 2016 and 3.0% above the national average. The number of commuters driving alone in Florida grew by 202,816 in 2017.



Slightly More Carpooling – Carpooling remains the second most common means of commuting. Its share fell from 9.2% in 2016 to 9.1% in 2017 for Florida. The share for the U.S. decreased from 9.0% in 2016 to 8.9% in 2017.



Significant decline in commuting by transit – From 2016 to 2017, transit use for commuting decreased by 0.4% in Florida. Nationally, transit use also saw a decline by 0.1% to 5.0%.



No significant change in commuting by walking – Commuting by walking decreased by 0.1% in Florida from 2016 to 2017 but remained unchanged at 2.7% nationally.



No significant change in commuting by bicycling – In 2017, the bicycle commuting share remained at 0.6% in Florida but fell slightly by 0.1% to 0.5% nationally from 2016.

Detailed Commuting Trends

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. 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.

Ten-Year Commuting Trends in Florida and the United States

Table 1 shows the commuting trends for Florida since 2008. 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

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
VEHICLES AVAILABLE – FLORIDA										
No vehicles available	6.6%	6.6%	7.0%	7.3%	7.4%	7.2%	6.9%	6.8%	6.6%	6.3%
1 vehicle available	40.5%	41.2%	41.1%	41.7%	42.2%	41.6%	41.2%	41.0%	40.4%	39.7%
2 vehicles available	38.5%	38.3%	37.9%	37.8%	37.4%	37.7%	38.2%	38.0%	38.1%	38.5%
3 or more vehicles available	14.4%	14.0%	13.7%	13.1%	13.0%	13.5%	13.7%	14.2%	14.9%	15.5%
VEHICLES AVAILABLE – U.S.										
No vehicles available	8.8%	8.9%	9.1%	9.3%	9.2%	9.1%	9.1%	8.9%	8.7%	8.6%
1 vehicle available	33.4%	33.7%	33.8%	34.1%	34.1%	33.9%	33.7%	33.5%	33.2%	32.7%
2 vehicles available	37.8%	37.6%	37.6%	37.5%	37.3%	37.3%	37.3%	37.2%	37.1%	37.3%
3 or more vehicles available	20.0%	19.9%	19.5%	19.1%	19.3%	19.7%	19.9%	20.3%	21.0%	21.5%
COMMUTING TO WORK – FLORIDA										
Car, truck, or van – drove alone	79.5%	79.3%	79.9%	79.7%	79.3%	79.6%	79.7%	79.7%	79.2%	79.4%
Car, truck, or van – carpooled	10.3%	10.4%	9.6%	9.9%	9.7%	9.4%	9.1%	8.9%	9.2%	9.1%
Public transportation (not taxi)	2.0%	1.9%	2.1%	2.1%	2.2%	2.1%	2.1%	2.2%	2.1%	1.7%
Walked	1.5%	1.5%	1.7%	1.5%	1.6%	1.5%	1.4%	1.4%	1.5%	1.4%
Bicycle	0.6%	0.7%	0.6%	0.6%	0.7%	0.7%	0.7%	0.7%	0.6%	0.6%
Other means	1.7%	1.6%	1.5%	1.6%	1.6%	1.5%	1.5%	1.5%	1.5%	1.7%
Worked at home	4.5%	4.8%	4.6%	4.6%	5.0%	5.1%	5.4%	5.6%	6.0%	6.1%
COMMUTING TO WORK – U.S.										
Car, truck, or van -- drove alone	75.5%	76.1%	76.6%	76.4%	76.3%	76.4%	76.5%	76.6%	76.3%	76.4%
Car, truck, or van -- carpooled	10.7%	10.0%	9.7%	9.7%	9.7%	9.4%	9.2%	9.0%	9.0%	8.9%
Public transportation (not taxi)	5.0%	5.0%	4.9%	5.0%	5.0%	5.2%	5.2%	5.2%	5.1%	5.0%
Walked	2.8%	2.9%	2.8%	2.8%	2.8%	2.8%	2.7%	2.8%	2.7%	2.7%
Bicycle	0.5%	0.6%	0.5%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.5%
Other means	1.3%	1.2%	1.2%	1.2%	1.2%	1.3%	1.2%	1.2%	1.2%	1.3%
Worked at home	4.1%	4.3%	4.3%	4.3%	4.4%	4.4%	4.5%	4.6%	5.0%	5.2%
ZERO-WORKER HOUSEHOLDS										
Florida	29.5%	31.6%	32.5%	32.9%	33.0%	32.7%	32.1%	32.2%	32.0%	31.9%
U.S.	24.5%	26.3%	27.2%	27.5%	27.3%	27.0%	26.9%	26.8%	26.6%	26.5%
MEAN TRAVEL TIME TO WORK										
Florida (mins)	25.9	25.4	25.5	25.8	26.2	26.1	26.4	27.0	27.4	27.8
U.S. (mins)	25.5	25.1	25.3	25.5	25.7	25.8	26.0	26.4	26.6	26.9

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 2017, the work-at-home share of the population reached an all-time high of 6.1% in Florida and 5.2% in the nation.

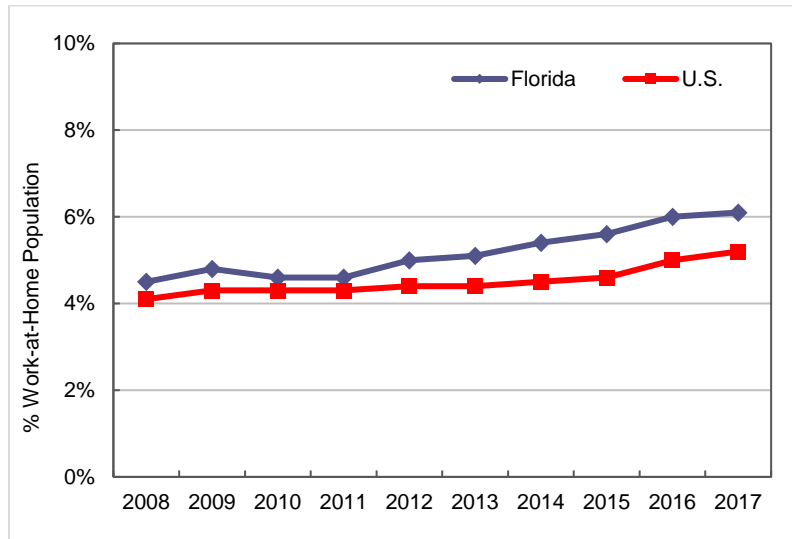


FIGURE 1 - WORK-AT-HOME POPULATION SHARE, FLORIDA VS U.S.

Florida has a higher share of households with no workers in large part due to its concentration of retirees. The share of households that have no workers (**Figure 2**) has decreased slightly to 31.9% in Florida and 26.5% 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 households in Florida not involved in commuting.

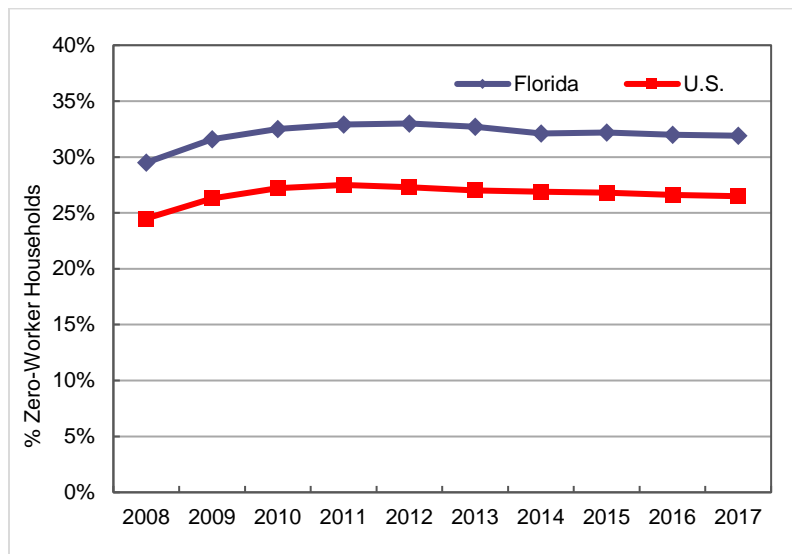


FIGURE 2 – HOUSEHOLDS WITH NO-WORKERS

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 2016 to 2017, the shares of zero-car households in both Florida and the U.S. decreased to 6.3% and 8.6% 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, 4.2% in Florida and 5.7% in the U.S.

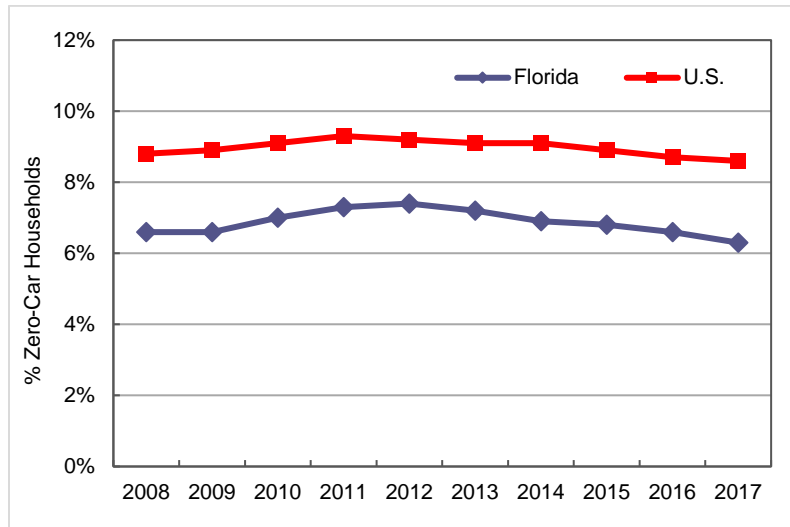


FIGURE 3 - ZERO-CAR HOUSEHOLDS

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 “drove alone” being 3.0% higher than in the rest of the country (**Table 1**). Commuting by carpool in Florida was slightly higher than the national average while commuting by transit in Florida was lower than the national average. Between 2016 and 2017, transit use decreased by 0.4% in Florida compared to 0.1% nationally. Carpooling saw a slight decrease of 0.1% both in Florida and in the rest of the country.

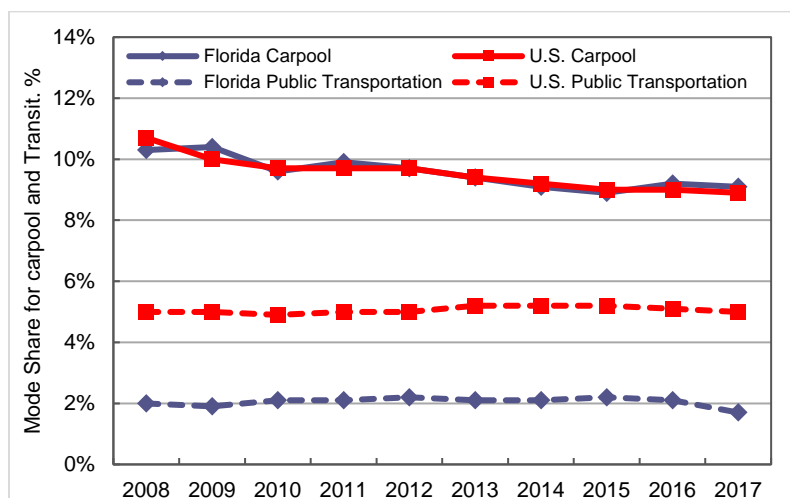


FIGURE 4 - TRANSIT AND CARPOOL COMMUTING

Florida and national shares of walk and bike commuting exhibited slight fluctuations over the past decade (**Figure 5**). While Florida consistently had 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. In 2017, the share of bicycle commuters remained low at 0.6% in Florida whereas the share in the U.S. fell by 0.1% to 0.5%.

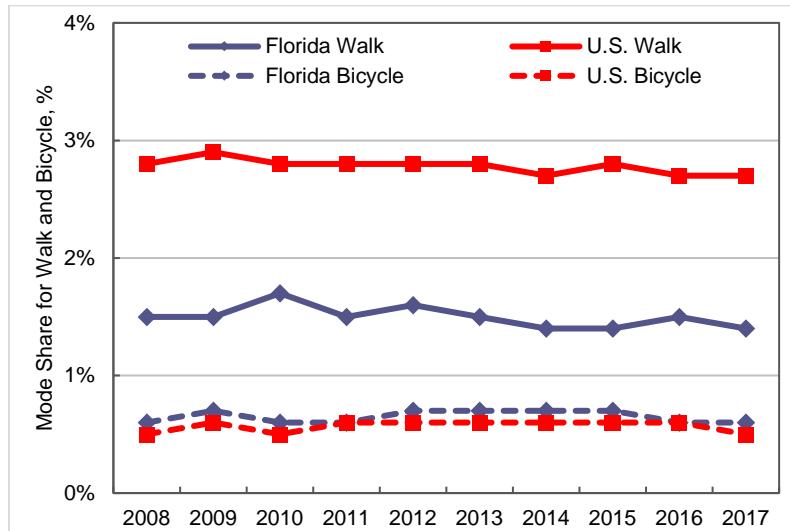


FIGURE 5 - WALK AND BICYCLE COMMUTING

Mean commute times continued to increase for both Florida and the U.S. (**Figure 6**), with Florida’s average commute time being 0.9 minute longer than the national average in 2017. Florida’s average commute time increased from 27.4 minutes in 2016 to 27.8 minutes for 2017. The national average reached to an all-time high of 26.9 minutes in 2017.

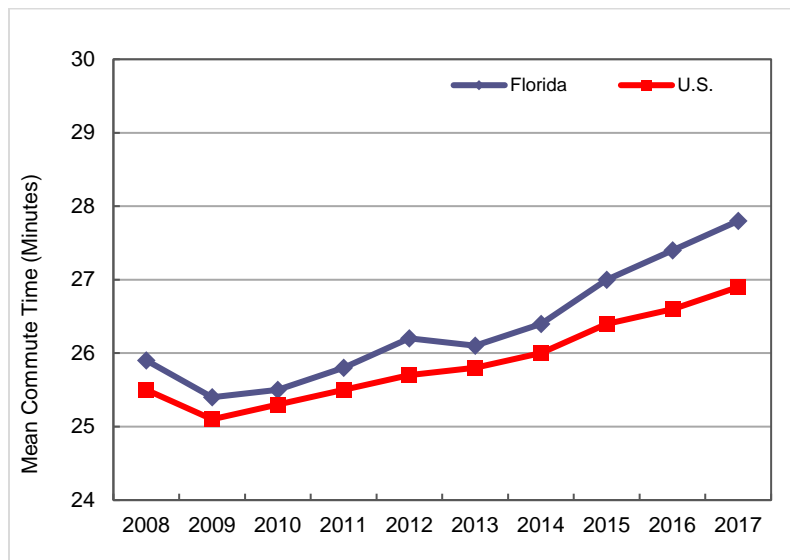


FIGURE 6 - MEAN COMMUTE TIMES

Year 2017 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 19 MSAs in Florida had transit commute shares less than 1%.

TABLE 2 - TOP FLORIDA MSAS RANKED BY TRANSIT MODE SHARE TO WORK, 2017

Rank	Metropolitan Statistical Area (MSA)	Transit, %
1	Gainesville	3.9%
2	Miami-Fort Lauderdale-West Palm Beach	3.1%
3	Sebring	2.1%
4	Orlando-Kissimmee-Sanford	1.8%
5	Naples-Immokalee-Marco Island	1.3%
5	Ocala	1.3%
7	Deltona-Daytona Beach-Ormond Beach	1.2%
7	Tampa-St. Petersburg-Clearwater	1.2%
9	Jacksonville	1.1%
9	Tallahassee	1.1%
11	Cape Coral-Fort Myers	0.9%
12	Palm Bay-Melbourne-Titusville	0.6%
13	North Port-Sarasota-Bradenton	0.5%
14	Crestview-Fort Walton Beach-Destin	0.4%
14	Lakeland-Winter Haven	0.4%
14	Panama City	0.4%
17	Pensacola-Ferry Pass-Brent	0.3%
17	Port St. Lucie	0.3%
19	Homosassa Springs	0.1%
	Florida	1.7%
	United States	5.0%

Table 3 provides transit commute share data at the county level. In 2017, there were 31 urban fixed-route systems operating in Florida providing transit services for 32 counties. Of the 32 counties, seven (7) had a transit commute share equal to or greater than the state average. Miami-Dade County had the highest transit share of 4.7% in Florida, but it still fell below the national average of 5.0%. In addition to Miami-Dade, Alachua and Orange counties had the highest transit commute shares, while Monroe, Indian River, Martin, Citrus, and Hernando counties had the lowest transit commute shares in 2017.

TABLE 3 - FLORIDA COUNTIES RANKED BY TRANSIT MODE SHARE TO WORK, 2017

Rank	County	Transit %	Rank	County	Transit %
1	Miami-Dade County	4.7%	18	Sarasota County	0.5%
2	Alachua County	4.1%	18	Escambia County	0.5%
3	Orange County	2.4%	18	Okaloosa County	0.5%
4	Highlands County	2.1%	21	Polk County	0.4%
5	Broward County	2.0%	21	St. Lucie County	0.4%
6	Pinellas County	1.7%	21	Bay County	0.4%
6	Duval County	1.7%	21	Manatee County	0.4%
8	Palm Beach County	1.6%	21	Charlotte County	0.4%
8	Osceola County	1.6%	26	Pasco County	0.3%
10	Volusia County	1.4%	26	Lake County	0.3%
11	Leon County	1.3%	28	Monroe County	0.2%
11	Collier County	1.3%	28	Indian River County	0.2%
11	Hillsborough County	1.3%	28	Martin County	0.2%
11	Marion County	1.3%	31	Citrus County	0.1%
15	Lee County	0.9%	31	Hernando County	0.1%
16	Seminole County	0.8%		Florida	1.7%
17	Brevard County	0.6%		United States	5.0%

Table 4 provides data for 27 Florida counties with the highest average commute times. Of the 27 counties, 10 had commute times higher than the Florida average, and 12 had commute times higher than the national average. Osceola, Pasco, and Miami-Dade Counties had the highest average commute time in the state in 2017. Escambia, Alachua, and Leon Counties had the lowest average commute time in Florida for approximately 23 minutes or less.

TABLE 4 - TOP FLORIDA COUNTIES RANKED BY TRAVEL TIME TO WORK, 2017

Rank	County	Minutes	Rank	County	Minutes
1	Osceola County	34.0	16	Collier County	25.4
2	Pasco County	33.4	17	Volusia County	25.4
3	Miami-Dade County	32.7	18	Duval County	25.1
4	Clay County	31.9	18	Marion County	25.1
5	Lake County	30.5	20	Brevard County	24.9
6	Broward County	28.9	21	Okaloosa County	24.4
7	Orange County	28.7	22	Pinellas County	24.2
8	Hillsborough County	28.3	23	Sarasota County	24.1
9	Polk County	28.0	24	Bay County	23.8
10	Lee County	27.9	25	Escambia County	23.2
11	St. Lucie County	27.7	26	Alachua County	22.4
12	Seminole County	27.5	27	Leon County	21.1
13	Manatee County	26.3			
14	Palm Beach County	25.9		Florida	27.8
15	St. Johns County	25.8		United States	26.9

Figure 7 shows the distribution of one-way commute travel time in Florida by mode. About 56% of commuters who drive alone to work had commute times less than 30 minutes in 2017. Carpooling average commute times were slightly shorter than drive-alone commute times with 57% 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 the transit commute characteristics, 74% of transit commutes took longer than 30 minutes.

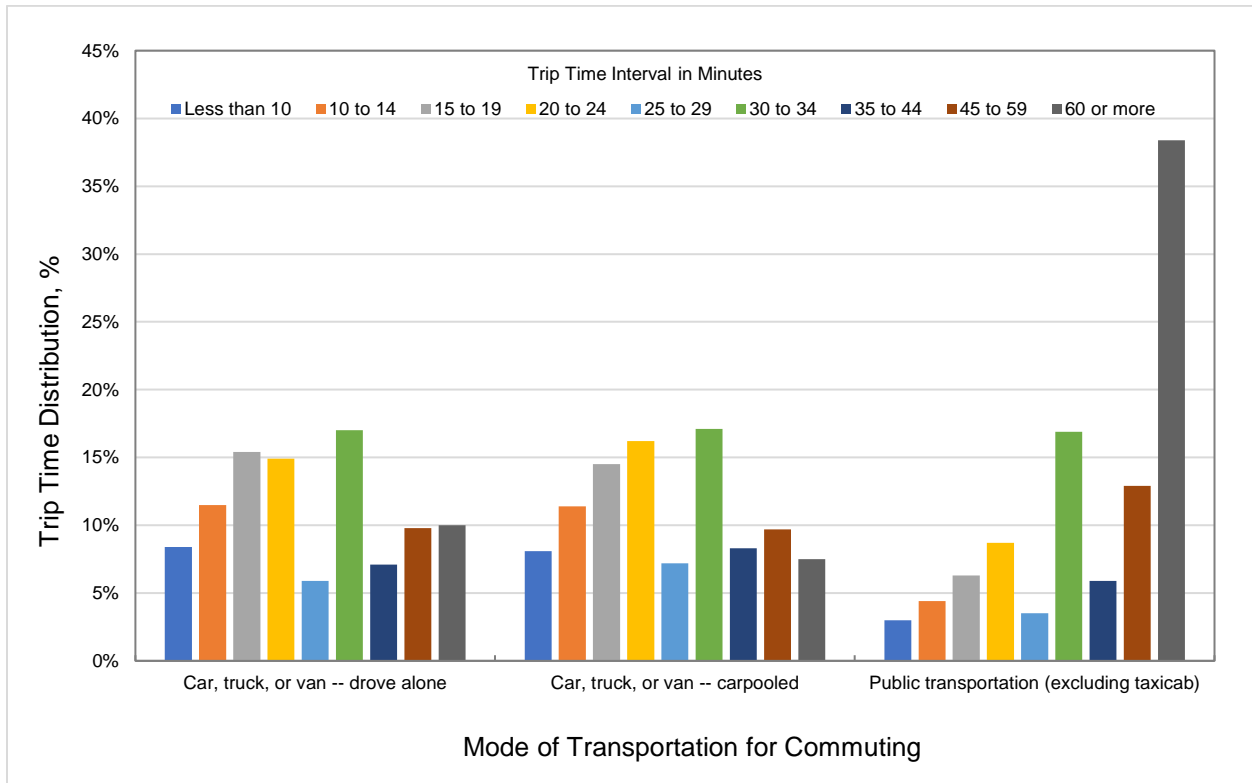


FIGURE 7 – COMMUTE TIME BY MODE

Comparison of Commuting Characteristics between Florida and Other States

Table 5 provides rank data on cross-county commuting for the U.S in 2017. Thirty-nine states had more cross-county commuting than Florida in 2017. Virginia and New Jersey had the highest shares of cross-county commuting, at over 51% and nearly 46%, 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 2017, while the national average was close to 28%.

TABLE 5 - PERCENT WORKERS WHO WORKED OUTSIDE COUNTY OR STATE OF RESIDENCE, 2017

Rank	State	Percent	Rank	State	Percent
1	Virginia	51.3%	27	Oklahoma	25.6%
2	New Jersey	46.3%	28	Iowa	25.3%
3	Maryland	45.9%	29	Arkansas	25.2%
4	Georgia	41.3%	30	Maine	24.4%
5	Mississippi	37.3%	31	Kansas	24.0%
5	Rhode Island	37.0%	32	District of Columbia	23.9%
7	Minnesota	36.8%	33	Texas	23.0%
8	New Hampshire	36.2%	34	Vermont	22.8%
9	New York	35.9%	35	Idaho	22.1%
10	Missouri	35.0%	35	Oregon	22.1%
11	Colorado	34.8%	37	Delaware	22.0%
12	Massachusetts	34.7%	38	Nebraska	21.7%
13	West Virginia	34.6%	39	South Dakota	21.2%
14	Indiana	32.9%	40	Florida	19.2%
15	Kentucky	32.3%	41	Washington	18.8%
16	Michigan	30.8%	42	Utah	18.7%
17	Louisiana	30.5%	43	California	17.7%
18	Ohio	30.4%	44	New Mexico	15.3%
19	Pennsylvania	29.5%	45	North Dakota	14.6%
20	South Carolina	28.9%	46	Montana	8.5%
21	North Carolina	28.8%	47	Alaska	6.9%
22	Tennessee	28.7%	47	Wyoming	6.9%
23	Wisconsin	28.6%	49	Nevada	5.4%
24	Alabama	27.3%	50	Arizona	5.3%
25	Illinois	27.1%	51	Hawaii	0.7%
26	Connecticut	27.0%		United States	27.7%

Figure 8 provides comparisons across states in Single Occupancy Vehicle (SOV) shares. The SOV share in Florida was 79.4% in 2017, which was lower than that of 26 other states but still higher than the national average of 76.4%.

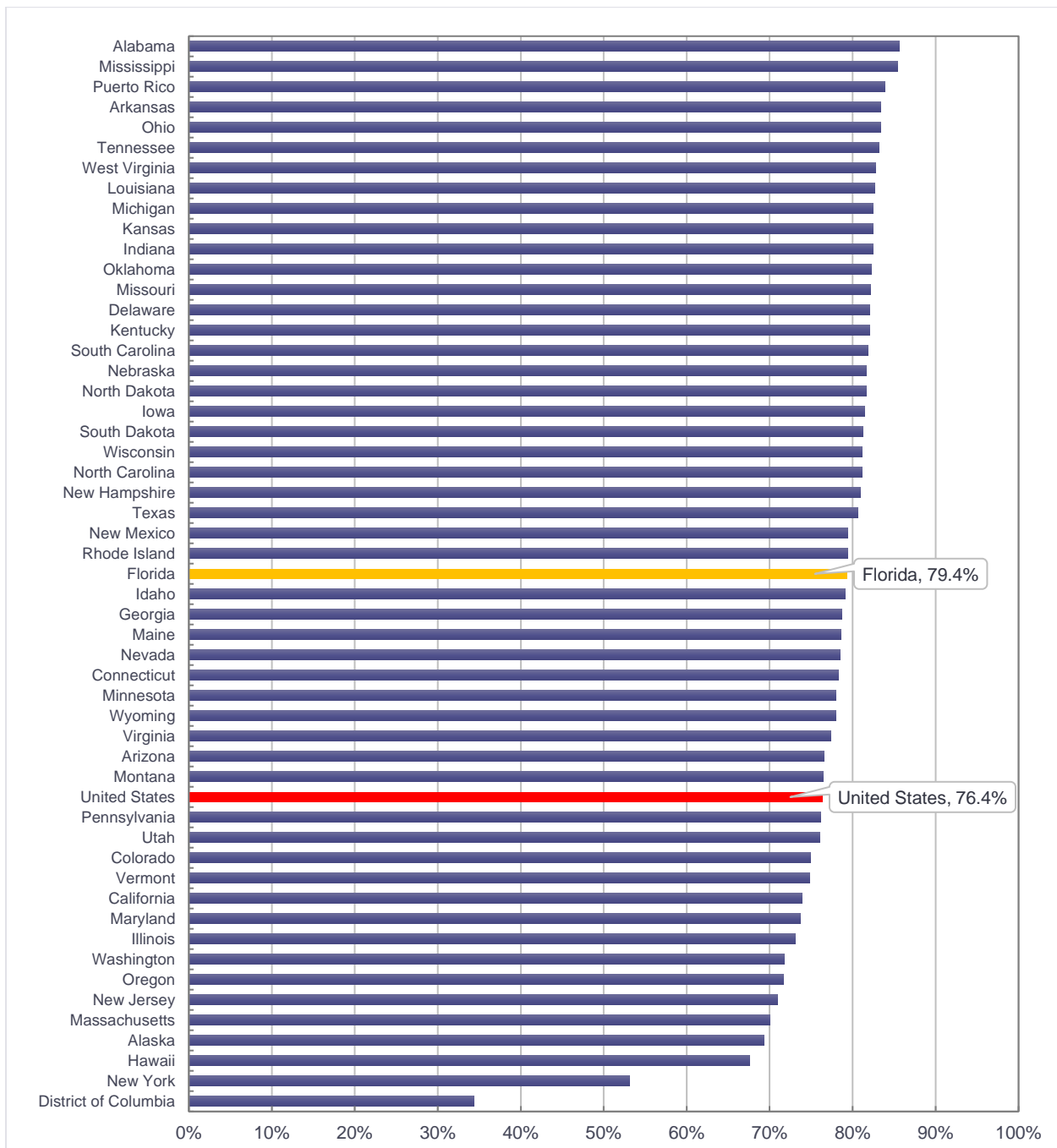


FIGURE 8 - PERCENT SOV FOR ALL STATES AND THE U.S., 2017

Figure 9 presents a comparison of mean commute times by all modes across the nation in 2017. With an average commute time of 27.8 minutes, Florida was among the states that had the longest travel times to work. Ten (10) 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 26.9 minutes.

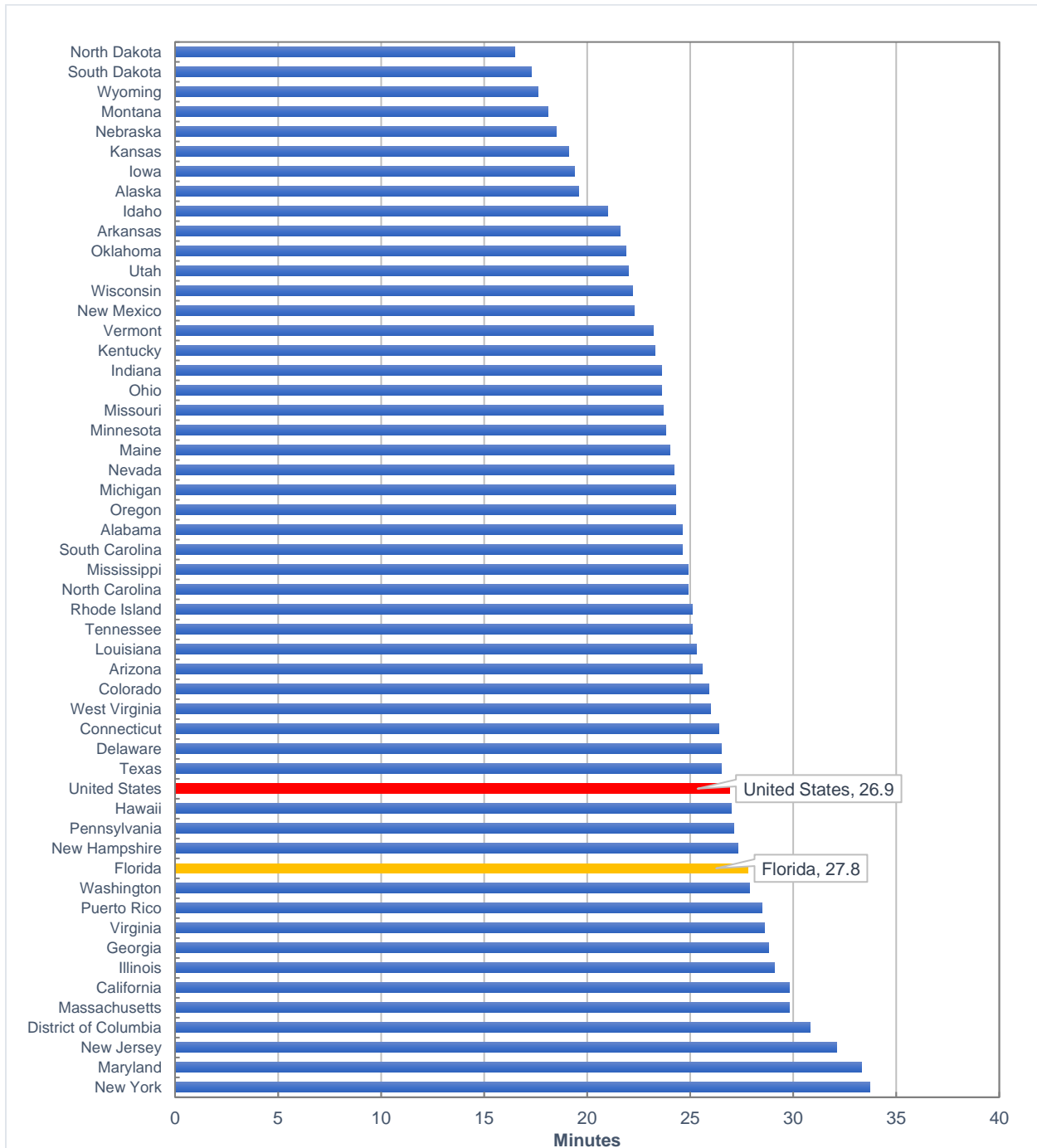


FIGURE 9 - MEAN COMMUTE TIME BY ALL MODES FOR ALL STATES AND THE U.S., 2017

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 tables and figures in the report provide detailed information to support the findings. Due to relatively small sample sizes (approximately 1.21% of the Florida households), many of the small differences over time and between locations may not be statistically significant.