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## **Commuting Trends in Florida**

This special report of the FDOT Trends and Conditions series highlights commuting trends in Florida and the United States. The 2015 trends are summarized below:

- Increased auto availability Florida's zero-vehicle households decreased to 6.8% in 2015, down from 6.9% in 2014. This compares with a national level of 8.9% in 2015, down from 9.1% in 2014.
- Continued dominance in commuting by driving alone In Florida, 79.7% of commuters drove alone, unchanged from the 2014 level and 3.1 percentage points above the national average. The number of commuters driving alone in Florida grew by 189,325 in 2015.
- *Slightly Less Carpooling* Carpooling remains the second most common means of commuting. However, its share reached an all-time low at 8.9% for Florida and 9.0% for the U.S. These numbers have dropped 2% for Florida and 1.7% nationally since 2006.
- Little to no changes in commuting by transit, walking, or bicycling Commuting by transit increased 0.1% to reach a 2.2% share in Florida and remained unchanged at 5.2% nationally. Commuting by walking was unchanged in Florida and increased 0.1% nationally. The bicycle commuting share, both in Florida and nationally, has remained unchanged since 2012.
- Working at home at record levels Working at home grew to 5.6% in Florida and 4.6% nationally both record levels. This translates into 27,450 more Floridians working at home since 2014.
- Slight increase in overall commute times The average one-way commute in Florida was 27.0 minutes, 0.6 minutes longer than the national average. The Florida and national commute times have increased 4.2% and 5.6% respectively in the past decade. In Florida, 16.8% of commuters had trips 45 minutes or longer.
- Mobile work force In Florida, 18.7% 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 32.2% in Florida and 26.8% in the nation, up 0.1% and down 0.1% respectively from 2014.

This analysis is based on data from the 2015 American Community Survey (ACS). In 2015, 120,642 Florida households were interviewed, and 7,574 people living in group quarters¹ were 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. However, the growing popularity of work-at-home and the continuing decline in carpooling indicate some changes in traveler preferences.

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.

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<sup>&</sup>lt;sup>1</sup> Group quarters include such places as college residence halls, residential treatment centers, skilled nursing facilities, group homes, military barracks, correctional facilities, and worker dormitories.

This report was prepared by the Center for Urban Transportation Research at the University of South Florida. It is part of a continuing Florida Transportation Trends process to support the needs of decision-makers, transportation professionals, and the interested public.



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 1.31% of the Florida households), many of the small differences over time and between locations may not be statistically significant. The difference between the adjacent values in the tables is not necessarily statistically significant at the 95% confidence level. For information on data collection, sampling design, non-sampling error, and definitions, see <a href="https://www.census.gov/programs-surveys/acs/methodology.html/">https://www.census.gov/programs-surveys/acs/methodology.html/</a>. Table 1 presents commuting trends for Florida since 2006. Readers are encouraged to familiarize themselves with margins of errors by reviewing ACS guidance.

Table 1 - Florida and U.S. ACS Trends

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
VEHICLES AVAILABLE – FLOR	VEHICLES AVAILABLE – FLORIDA									
No vehicles available	6.6%	6.2%	6.6%	6.6%	7.0%	7.3%	7.4%	7.2%	6.9%	6.8%
1 vehicle available	39.4%	39.7%	40.5%	41.2%	41.1%	41.7%	42.2%	41.6%	41.2%	41.0%
2 vehicles available	39.0%	38.8%	38.5%	38.3%	37.9%	37.8%	37.4%	37.7%	38.2%	38.0%
3 or more vehicles available	15.1%	15.3%	14.4%	14.0%	13.7%	13.1%	13.0%	13.5%	13.7%	14.2%
VEHICLES AVAILABLE – U.S.	VEHICLES AVAILABLE – U.S.									
No vehicles available	8.8%	8.7%	8.8%	8.9%	9.1%	9.3%	9.2%	9.1%	9.1%	8.9%
1 vehicle available	33.2%	33.1%	33.4%	33.7%	33.8%	34.1%	34.1%	33.9%	33.7%	33.5%
2 vehicles available	38.0%	38.1%	37.8%	37.6%	37.6%	37.5%	37.3%	37.3%	37.3%	37.2%
3 or more vehicles available	20.0%	20.1%	20.0%	19.9%	19.5%	19.1%	19.3%	19.7%	19.9%	20.3%
COMMUTING TO WORK – FLO	RIDA									
Car, truck, or van – drove alone	79.3%	79.6%	79.5%	79.3%	79.9%	79.7%	79.3%	79.6%	79.7%	79.7%
Car, truck, or van – carpooled	10.9%	10.5%	10.3%	10.4%	9.6%	9.9%	9.7%	9.4%	9.1%	8.9%
Public transportation (not taxi)	2.0%	1.9%	2.0%	1.9%	2.1%	2.1%	2.2%	2.1%	2.1%	2.2%
Walked	1.7%	1.7%	1.5%	1.5%	1.7%	1.5%	1.6%	1.5%	1.4%	1.4%
Bicycle	0.5%	0.5%	0.6%	0.7%	0.6%	0.6%	0.7%	0.7%	0.7%	0.7%
Other means	1.7%	1.6%	1.7%	1.6%	1.5%	1.6%	1.6%	1.5%	1.5%	1.5%
Worked at home	4.0%	4.2%	4.5%	4.8%	4.6%	4.6%	5.0%	5.1%	5.4%	5.6%
COMMUTING TO WORK – U.S.										
Car, truck, or van drove alone	76.0%	76.1%	75.5%	76.1%	76.6%	76.4%	76.3%	76.4%	76.5%	76.6%
Car, truck, or van carpooled	10.7%	10.4%	10.7%	10.0%	9.7%	9.7%	9.7%	9.4%	9.2%	9.0%
Public transportation (not taxi)	4.8%	4.9%	5.0%	5.0%	4.9%	5.0%	5.0%	5.2%	5.2%	5.2%
Walked	2.9%	2.8%	2.8%	2.9%	2.8%	2.8%	2.8%	2.8%	2.7%	2.8%
Bicycle	0.5%	0.5%	0.5%	0.6%	0.5%	0.6%	0.6%	0.6%	0.6%	0.6%
Other means	1.2%	1.2%	1.3%	1.2%	1.2%	1.2%	1.2%	1.3%	1.2%	1.2%
Worked at home	3.9%	4.1%	4.1%	4.3%	4.3%	4.3%	4.4%	4.4%	4.5%	4.6%
ZERO-WORKER HOUSEHOLDS										
Florida	30.2%	30.0%	29.5%	31.6%	32.5%	32.9%	33.0%	32.7%	32.1%	32.2%
U.S.	25.8%	25.8%	24.5%	26.3%	27.2%	27.5%	27.3%	27.0%	26.9%	26.8%
MEAN TRAVEL TIME TO WORK										
Florida (mins)	25.9	25.9	25.9	25.4	25.5	25.8	26.2	26.1	26.4	27.0
U.S. (mins)	25.0	25.3	25.5	25.1	25.3	25.5	25.7	25.8	26.0	26.4



The work-at-home population has grown in the past decade across the nation, 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 2015, the work-at-home share of the commuting population reached an all-time high of 5.6% in Florida and 4.6% in the nation.

Florida has a higher share of households with no workers, at least partially, due to its concentration of retirees. The share of households that have no workers (Figure 2) has increased to 32.2% in Florida and decreased to 26.8% in the U.S. 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-athome households, resulted in approximately 37.7% of Floridian households not involved in commuting.

Figure 3 contrasts Florida and U.S. zero-vehicle household trends. Over the past decade the shares of zero-vehicle households have witnessed small changes for both the state and nationally, with the national share remaining above the Florida share. Vehicle availability improved in Florida and nationally between 2014 and 2015 with zero-vehicle households at 6.8% and 8.9%, respectively. As zero-vehicle households are typically smaller — often single persons — the share of the population that resided in zero-vehicle households is quite small, 4.6% in Florida and 6.3% in the U.S.

Figure 1 – Work-at-Home Population

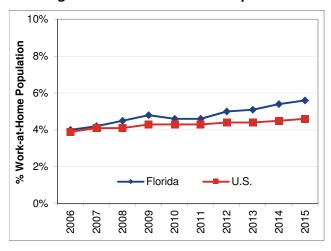


Figure 2 – Zero-Worker Households

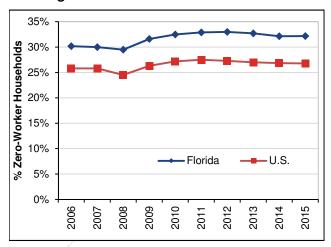


Figure 3 – Zero-Vehicle Household

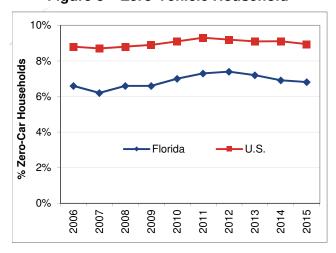




Figure 4 contrasts Florida and national trends with respect to carpool or sharedride commuting and transit use. Reliance on driving or being a privatevehicle passenger remained the dominant means of commuting in Florida, with "drive alone" being 3.1% higher than in the rest of the country (Table 1). Commuting by both public transit and carpool in Florida were below the national averages. Transit use increased very slightly in both Florida and the U.S. in the past decade. In contrast, carpooling demonstrated a relatively persistent decrease over the past decade.

Florida and national shares of walk and bike commuting exhibited slight fluctuations, less than 0.3%, 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 in 2015. While bicycle travel has garnered much attention lately, the share of bicycle commuters remained very modest at 0.7% in Florida and 0.6% in the U.S. in 2015.

Mean commute times increased for both Florida and the U.S. (Figure 6), with Florida's average commute 0.6 minutes longer than the national average in 2015. Florida's average commute time increased from 26.4 minutes in 2014 to 27.0 minutes in 2015. The national average also continued to increase to an all-time high of 26.4 minutes. This measure does not allow discernment of the relative contributions of trip length changes versus trip speed changes.



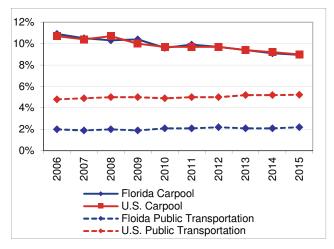


Figure 5 – Walk and Bicycle Commuting

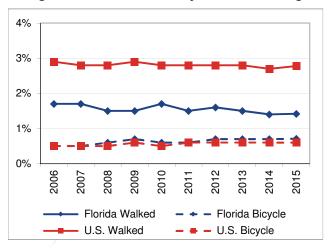


Figure 6 – Mean Commute Times

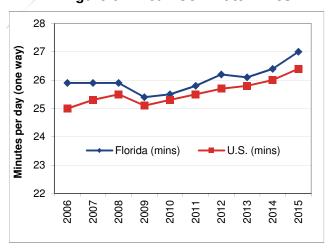




Table 2 shows the comparative transit mode shares for commuting for several metropolitan statistical areas (MSAs) in Florida. Transit use in all Florida MSAs is below the national average. The transit ridership commuting share in the Orlando-Kissimmee-Sanford MSA was equivalent to the state share. Seven of the top 17 MSAs in Florida had transit commute shares less than 1%.

Table 2 – Top Florida MSA's Ranked by Transit Mode Share to Work, 2015

Rank	Metro Area	Transit %
1	Gainesville	4.4%
2	Miami-Fort Lauderdale-West Palm Beach	3.8%
3	Naples-Immokalee-Marco Island	3.0%
4	Orlando-Kissimmee-Sanford	2.2%
5	Sebring	1.6%
6	North Port-Sarasota-Bradenton	1.5%
6	Tallahassee	1.5%
8	Jacksonville	1.4%
8	Tampa-St. Petersburg- Clearwater	1.4%
10	Lakeland-Winter Haven	1.0%
11	Cape Coral-Fort Myers	0.9%
11	Deltona-Daytona Beach- Ormond Beach	0.9%
13	Palm Bay-Melbourne-Titusville	0.6%
13	Pensacola-Ferry Pass-Brent	0.6%
15	Port St. Lucie	0.3%
16	Crestview-Fort Walton Beach- Destin	0.1%
16	Ocala	0.1%
	Florida	2.2%
	United States	5.2%

Table 3 provides transit commute share data at the county geographic level. Miami-Dade County was the only Florida County whose transit share exceeded the U.S. average in 2015. Manatee County had a share equal to that of the state average.

Table 3 – Top Florida Counties Ranked by Transit Mode Share to Work, 2015

Rank	County	Transit %	
1	Miami-Dade County	5.5%	
2	Alachua County	4.6%	
3	Orange County	3.2%	
4	Collier County	3.0%	
4	Broward County	3.0%	
6	Manatee County	2.2%	
7	Duval County	2.0%	
8	Bay County	1.9%	
9	Leon County	1.8%	
9	Palm Beach County	1.8%	
11	Pinellas County	1.8%	
12	Hillsborough County	1.7%	
13	Monroe County	1.4%	
	Florida	2.2%	
	United States	5.2%	

Table 4 provides data for 20 Florida counties with the highest average commute times. Of the 20 counties, 17 had commute times equal to or higher than the Florida average, and 19 had commute times equal to or higher than the national average. Miami-Dade and Osceola Counties had the highest average commute time in the state in 2015. Four counties - Lee, Marion, Orange and St. Lucie - all had average commute times equal to the average commute time in Florida, 27.0 minutes.



Table 4 – Top Florida Counties Ranked by Travel Time to Work, 2015

Rank	County	Minutes
1	Miami-Dade County	31.9
1	Osceola County	31.9
3	Pasco County	31.6
4	Clay County	31.5
5	Hernando County	30.4
6	Nassau County	29.7
7	Lake County	29.5
8	Putnam County	28.4
9	Broward County	28.0
9	Santa Rosa County	28.0
11	Martin County	27.7
12	Flagler County	27.5
13	Hillsborough County	27.2
14	Lee County	27.0
14	Marion County	27.0
14	Orange County	27.0
14	St. Lucie County	27.0
18	Seminole County	26.8
19	Manatee County	26.4
20	St. Johns County	25.9
	Florida	27.0
	United States	26.4

Table 5 provides rank data on cross-county commuting for selected states. Thirty-eight states plus D.C. had more cross-county commuting than Florida in 2015. Virginia and Maryland had the highest shares of cross-county commuting, at nearly 52% and 46%, respectively. In contrast, the lowest share of cross-county commuting occurred in Hawaii at less than 1%. Florida's share of cross-county commuters equaled nearly 19% in 2015, while the national average was closer to 28%.

Table 5 – Percent of Workers Who Worked Outside County or State of Residence, Selected States, 2015

Rank	State	Percent			
1	Virginia	51.8%			
2	Maryland	46.1%			
3	New Jersey	45.7%			
4	Georgia	41.4%			
5	Rhode Island	37.3%			
6	Minnesota	36.7%			
7	Mississippi	36.1%			
8	New York	36.0%			
9	New Hampshire	35.7%			
10	Massachusetts	34.8%			
	United States	27.6%			
35	Texas	22.6%			
36	Nebraska	21.9%			
37	Delaware	21.6%			
38	Idaho	20.8%			
39	South Dakota	19.9%			
40	Florida	18.7%			
41	Washington	18.7%			
42	Utah	17.5%			
43	California	17.3%			
44	North Dakota	15.4%			
45 /	New Mexico	15.3%			
46	Montana	8.5%			
47	Wyoming	8.1%			
48	Alaska	7.2%			
49	Arizona	5.8%			
50	Nevada	5.2%			
51	Hawaii	0.9%			

Figure 7 and Figure 8 provide comparisons across states in single occupant vehicle (SOV) shares and mean travel times. For SOV shares, Florida ranked above the mean (Figure 7). When it comes to mean commute time, eleven states and the District of Columbia had longer commute times than Florida, as can be seen in Figure 8. In both cases, Florida was higher than the national average.



Figure 7 - Percent SOV, 2015

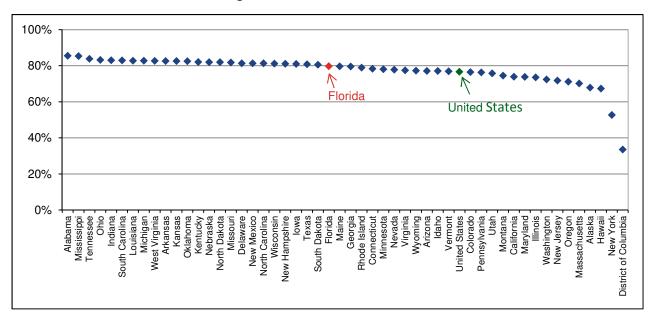


Figure 8 - Mean Commute Time, 2015

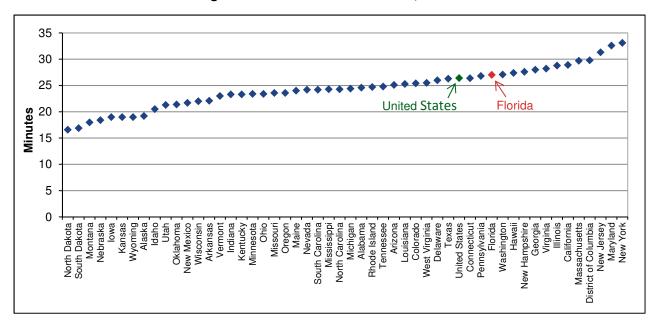


Figure 9 shows the distribution of one-way commute travel time in Florida by mode. About 60% of commuters who drove alone to work had commute times less than 30 minutes in 2015. Carpooling average commute times were slightly longer than drive-alone commute times with 57% of carpool commutes less than 30 minutes. Transit trips are noticeably longer due to a combination of wait time, the vehicle stopping for other passengers, and transfers. As a consequence of transit commute characteristics, 77% of transit commutes are longer than 30 minutes.



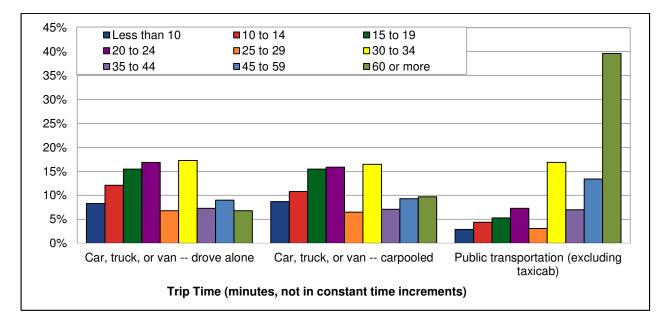


Figure 9 - Commute Time by Mode, 2015

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. Policy makers at all levels can make better informed decisions with a well informed understanding of the characteristics which influence travel demand.