

5.3 OCCUPATION AND EMPLOYMENT OUTLOOK

According to the Bureau of Labor Statistics, the civil engineering profession is expected to flourish from 2012 to 2022, growing 20 percent, faster than the average for all other occupations. Therefore, civil engineer training programs can expect a growing number of candidates applying and entering these programs as graduates enter the field. Similarly, the demand for civil engineers will grow in demand as states’ infrastructures age and require inspection, maintenance, repair, development and expansion. The population in Florida is also projected to grow steadily, as depicted in **Exhibit 5-12**.

EXHIBIT 5-12: FLORIDA POPULATION GROWTH ESTIMATES, 2015-2025

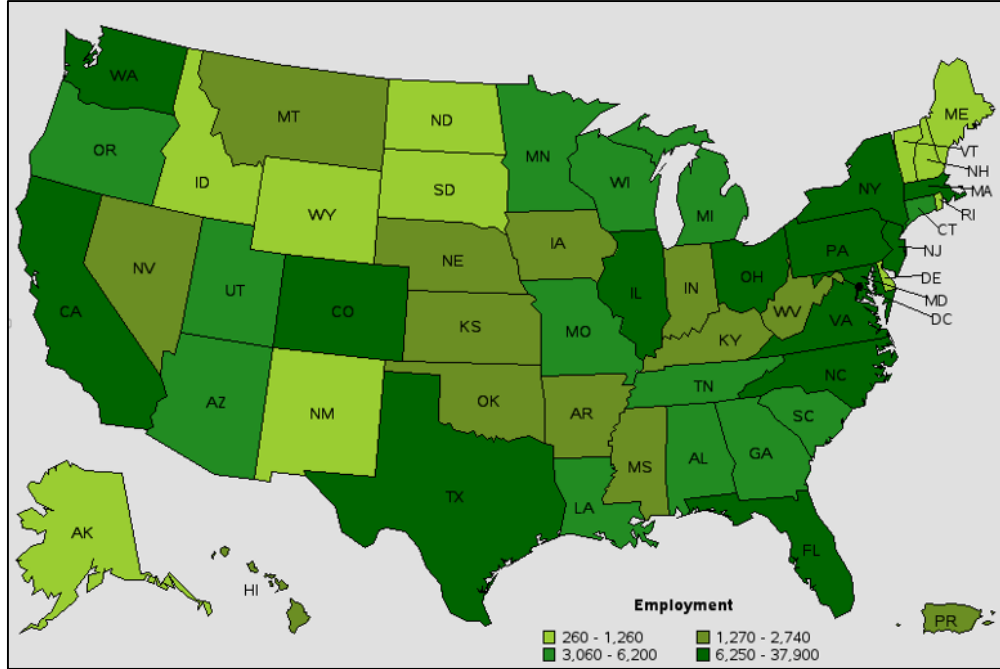
	2015	2020	2025	2030
Florida Population Estimates:	21,204,132	23,406,525	25,912,458	28,685,769
Estimated Percent Change:				35.3%

Sources: Population Division, U.S. Census Bureau website, 2014.

In consideration of the state’s continuous need for transportation maintenance, repairs, and construction, and the growing population and prominent tourism industry, transportation officials can expect an increasing need to attract and retain quality civil engineers to maintain the state’s infrastructure.

Exhibit 5-13 presents the number of civil engineers employed in each state as of May 2013. As shown, Florida is one of the 14 states employing the most engineers nationwide.

EXHIBIT 5-13: EMPLOYMENT OF CIVIL ENGINEERS NATIONWIDE, MAY 2013



Source: Occupational Employment Statistics, Bureau of Labor Statistics website, 2014.

As shown in **Exhibit 5-14**, all other southeastern states, with the exception of West Virginia, project to experience population growth from 2015 to 2030. The states projected to have the greatest growth include North Carolina (22.1%), Georgia (17.5%), and Virginia (16.0%).

EXHIBIT 5-14: SOUTHEASTERN STATES POPULATION GROWTH ESTIMATES, 2015-2030

STATE	2015	2020	2025	2030	ESTIMATED % CHANGE
North Carolina	10,010,770	10,709,289	11,449,153	12,227,739	22.1%
Georgia	10,230,578	10,843,753	11,438,622	12,017,838	17.5%
Virginia	8,466,864	8,917,395	9,364,304	9,825,019	16.0%
Tennessee	6,502,017	6,780,670	7,073,125	7,380,634	13.5%
South Carolina	4,642,137	4,822,577	4,989,550	5,148,569	10.9%
Arkansas	2,968,913	3,060,219	3,151,005	3,240,208	9.1%
Kentucky	4,351,188	4,424,431	4,489,662	4,554,998	4.7%
Alabama	4,663,111	4,728,915	4,800,092	4,874,243	4.5%
Louisiana	4,673,721	4,719,160	4,762,398	4,802,633	2.8%
Mississippi	3,014,409	3,044,812	3,069,420	3,092,410	2.6%
West Virginia	1,822,758	1,801,112	1,766,435	1,719,959	-5.6%

Source: Population Division, U.S. Census Bureau website, 2014.

The projected growth in Georgia indicates the potential for increased state-to-state travel, transportation demands, and civil engineering recruiting as it is a neighboring and competing state of Florida.

CONCLUSIONS:

- Turnover of P.E. Training participants has been relatively low over the 10-year period (2003-2012) based upon data collected by FDOT. However, there were significant economic issues during that period that may have influenced this low turnover.
- Florida provides a very comprehensive program compared to other southeastern states, offering a 48-month EIT program as compared to other states whose programs run from 12 to 24 months
- Florida salaries are, on average, below that of other southeastern states. Florida average DOT salaries rank fifth among the peers analyzed in this study and fall slightly below the overall peer average.
- FDOT may consider an increase to the starting salary of P.E. Trainees to at least equal the average paid by other southeastern states (average: \$45,406), an increase of \$652.
- Overall, FDOT's P.E. Training Program's pay raise system is relatively competitive in comparison to other southeastern states, and is specifically comparable to the pay raise system reported by North Carolina. As such, it should maintain this system of rewards to facilitate retention.
- Demand for engineers will continue to increase with projected population growth. Florida's population is projected to grow at a higher rate than any other southeastern state. This expansion likely will result in the need for more infrastructure enhancements requiring a strong workforce of civil engineers.
- National average salaries of Engineer-In-Trainees and Engineer Interns are very competitive compared to FDOT salary averages.