

TOUGH CHOICES

FACING FLORIDA'S GOVERNMENTS



**MEETING THE NEEDS OF FLORIDA:
THE FLORIDA COLLEGE SYSTEM
PAST AND FUTURE**



SEPTEMBER 2016

Meeting the Needs of Florida: The Florida College System Past and Future

» Executive Summary

For nearly a century, Florida community colleges (now called state colleges) have provided an affordable and accessible option for further education and career preparation. The 28 state colleges serve over 800,000 students who are pursuing vocational preparation, certificates, associate degrees, and baccalaureate degrees—more than twice the enrollment of the 12 public universities in the state. Likewise, Florida's state colleges offer nearly twice as many degree programs at over twice as many community colleges than any other state. The state colleges have a legacy of innovation and leadership in working to meet local and state education and workforce needs. They rank at or near the top in a number of different community college rankings. But, they are under strain and there are some troubling trends.

This report, from the LeRoy Collins Institute, highlights both the achievements and threats to Florida's state college system. The report charts the history of the community college system, the varying missions of the colleges, the trends in state colleges' activities, funding, and the extent to which they are meeting the needs of the state of Florida. The report also looks at recent and possible future changes in Florida policy related to the state's colleges and the Florida College System.

Although there is much to admire about the FCS system, it can be improved and made even stronger.

- » The current system is not meeting the needs of the poorest students—the ones most in need of state college education. In recent years, nearly 60 percent of incoming students are identified as economically and/or academically disadvantaged; however, just over 40 percent of the graduating cohort is identified as such. Disadvantaged students in the FCS are not completing credentials at the same rate as students who are not disadvantaged.
- » State colleges, over time, have evolved from focusing almost exclusively on local community needs to meeting broader statewide purposes. They are frequently caught in the middle between local and statewide priorities, also balancing increasing student enrollment with relative reductions in state funding.
- » Florida's appropriations per FTE at the state colleges are roughly \$1,000 lower than average state funding per FTE for two-year institutions in the United States.
- » We find mixed results when analyzing the extent to which FCS graduates are meeting the workforce needs of the state.
- » The current (2015-2016) performance funding system does not reward colleges that serve large portions of low-income students and, thus, may not do enough to encourage the enrollment of low-income students.
- » While the Bright Futures Scholarship has done an excellent job keeping our best and brightest from leaving the state for college, Florida has not devoted similar resources to encourage the enrollment of underserved populations, those populations most likely to attend an FCS institution. Making college accessible for these children is important to the state's economic future.
- » A number of recent state policies have affected the state colleges, including performance measures, changes in developmental education, and Bright Futures. While it is too early to judge their impacts, it is important to recognize the long-term effects of these policies and their impact on the neediest students and the colleges' local missions.

The FCS institutions are, as President Obama said about community colleges nationwide, the heroes of our education system. However, to fully realize their potential as access points to the American dream and engines of the state's economy, they require a state fiscal and policy environment conducive to their success and to the future of Florida.

» Meeting the Needs of Florida: The Florida College System Past and Future

Over the last century, community colleges have grown as an affordable and accessible option for further education and career preparation. In addition, community colleges have evolved into centers for career preparation, adult and further education, and provision of other community service, particularly for low-income students—a population of young people that is growing at a much faster rate in Florida than the rest of the nation. Degree completion at community colleges can be tied to not only employment growth but also regional economic growth. States, such as Florida, strategize and implement policies to encourage directed improvement in degree completion with the hopes of consequently improving regional employment and economic growth.

The Florida College System (FCS) is in many ways a model for the rest of the nation. With graduation rates that top just about every other state in the country, the colleges appear to perform at a high level. Nevertheless, Florida's educational attainment rate lags the national average (percentage of the adult population with an associate degree or higher), meaning that the state is forfeiting the benefits which flow from having a more highly educated society. For example, Florida's median household income is below the national median and it has a relatively large percentage of people below the poverty level. Fortunately, these issues may, in part, be addressed by moving more people into postsecondary education, especially from populations that are currently underserved (low-income and minority groups). The primary access point for these individuals, and where the largest boost in enrollments is likely to occur, is in Florida's state colleges.

In Spring 2015, the LeRoy Collins Institute board authorized a study to investigate the extent to which the FCS is meeting the employment and economic development needs of the state. Using employment data provided by the state of Florida, enrollment, completion and revenue data provided by the Integrated Postsecondary Education Data System (IPEDS) and the FCS, interviews with prior and current FCS campus and system leaders, and historical information, this report looks at the relationship between state college activity such as enrollment and degree completion, funding of community colleges, specific state policies and the fulfillment of the mission of community colleges in career preparation and contribution to regional economic growth. This report also looks at recent and possible future changes in Florida policy related to the Florida College System. The report is organized as follows:

In *Section I: Context and Policy History of the Florida College System*, we look at the history of community colleges generally and the FCS specifically, bringing context to the current operation of community colleges across the U.S. and in Florida. This section documents Florida's important role in the growth of the community college model nationwide and provides evidence of the successes of Florida College System institutions over time.

Section II: Evolution of the Mission of the Florida College System reviews the foundations of community colleges in Florida through examining the official institutional missions of each college. We analyze the language of each mission, paying particular attention to how the mission matches the expectations set by the FCS. Additionally, we report on interviews conducted with former and current campus and system leaders as they reflected on their work during the development of the system. We pay particular attention to how their experiences match the history and trajectory of the FCS and the individual college mission statements.

In *Section III: Data Analysis: Alignment Between Current Missions and Outcomes*, we analyze data available from both the state of Florida and the National Center for Educational Statistics (NCES) on factors that affect the fulfillment of the community college mission. These factors, including program enrollment, program completion, revenue sources, and regional employment growth figures, illustrate some of the ways that FCS institutions contribute to community needs and the effectiveness with which they are doing so. We provide tables and charts that narrate the roles that community colleges have played in their communities.

Then, in *Section IV: State Policy and the Florida College System*, we discuss current and ongoing policy issues and considerations in Florida. This discussion includes:

- » the 2+2 program,
- » the state college baccalaureate (or the community college baccalaureate - CCB),
- » the Bright Futures Scholarship program,
- » performance funding,

- » the \$10,000 degree,
- » state college governance,
- » free community college, and
- » developmental education.

We close with conclusions and possible implications from the study for future research and consideration.

Section I

» Context and Policy History of the Florida College System

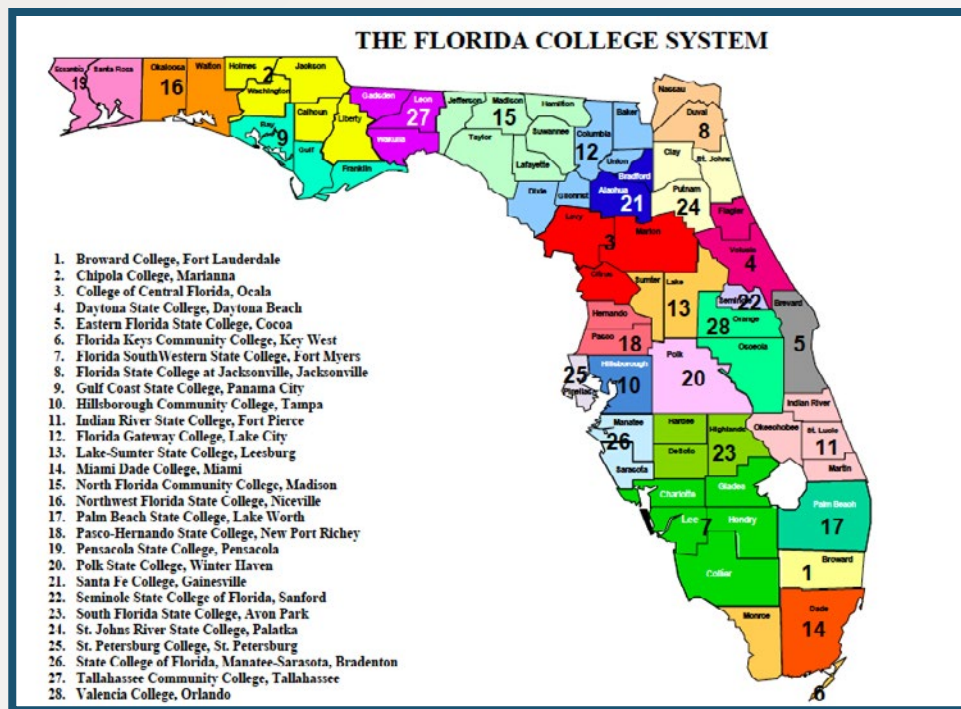
Community colleges, over time, have evolved from focusing almost exclusively on local community needs to meeting broader statewide purposes. They are frequently caught in the middle between local and statewide priorities, also balancing increasing student enrollment with reductions in state funding. Today's community colleges serve a variety of purposes, some more recently developed than others. From basic academic preparation and provision of undergraduate education to community development and economic stimulation, community colleges are often at the center of state-level and national-level policy reform. The multidimensional mission of community colleges closely connects them with community improvement, such as regional economic development, improving community educational standards, and raising regional employability and employment. State policymakers, eager to enact community improvement, often focus their efforts on developing policy that enables the community college to open access to further education, prepare students for the workforce, invest in the local economy and businesses, and provide other services to promote community health and wellbeing.

The Florida College System (FCS) is comprised of 28 individual colleges that offer an array of educational opportunities, from certificate, associate, and baccalaureate degrees to recreational, and adult-learning classes. Each individual college serves a different population and, consequently, offers its own mix of services and educational opportunities. These colleges currently serve over 800,000 students, pursuing vocational preparation, certificates, associate degrees, and baccalaureate degrees—more than twice the enrollment of the State University System of Florida.

The FCS is widely regarded as one of the premier community college systems in the country. The FCS institutions have a legacy of innovation and leadership in working to meet local and state education and workforce needs. Institutions in the FCS routinely rank at or near the top on community college national rankings, most notably the Aspen Prize for Community College Excellence. In 2011 and 2015, Valencia College and Santa Fe College, respectively, were awarded the Aspen Prize, as the best community college in the country. In 2011, a total of 14 Florida colleges finished in the top 10 percent of the Aspen Prize rankings, marking the strongest showing by any state in the country (Holcombe, 2012). Likewise, based on data released in 2010 by the National Center for Education Statistics (2010), FCS institutions can boast of having associate degree graduation rates of 48 percent that rank near the top nationally (surpassed by only South Dakota and Wyoming), far above the national average of 29 percent. Despite this record of achievement, challenges remain.

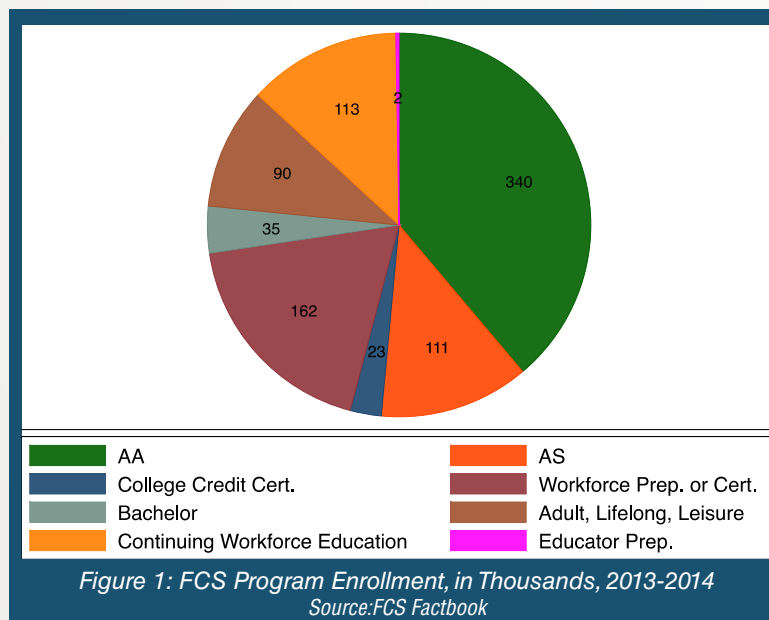
One challenge is educational attainment rates. Statewide in Florida, for adults ages 25 to 64, only 38 percent have an associate degree or higher. This is below the national average of 40 percent and puts Florida 29th nationally. Another is that the percentage of Floridians living below the poverty line remains stubbornly above the national average (17 percent versus 16 percent). Florida, also home to an increasingly diverse population, is traditionally underrepresented in postsecondary education: 23 percent of Floridians are Hispanic, placing Florida 3rd nationally. It is within this context of accomplishment and challenge that we examine the FCS institutions.

Most colleges have multiple campuses, while some, like North Florida Community College and Tallahassee Community College, have only one main campus. Polk State College operates two branch campuses in addition to the main campus; Miami-Dade College operates nine branch campuses in addition to the main campus. The number of branch campuses, and programs and services offered depend on the area the college serves. These areas largely reflect economic regions, called workforce regions. For instance, Workforce Region 5 includes the three counties, Leon, Gadsden, and Wakulla that Tallahassee Community College serves. Below is a map of the FCS institutions and the counties they serve.



Not surprisingly, enrollment at the various colleges (as of Fall 2013) varies greatly. Florida Gateway College has only 1,139 students; Miami Dade College has 66,298. The average number of students attending a FCS college in the Fall of 2013 was 16,600. Most students (58 percent) are female. Forty-five percent of students enrolled in an FCS college identified as white; 26 percent (118,821 students) identified as Hispanic; and, 18 percent (83,666 students) identified as black or African American.

Figure 1 provides the breakdown of enrollment by program. For the 2013-2014 academic year, of the 813,509 students enrolled in the FCS, by far the largest number were pursuing an Associate in Arts degrees. Some 42 percent were enrolled in AA degree programs. Around 14 percent were pursuing Associates in Science degrees and a similar percentage vocational or workforce preparation or certificates. Only 34,528 were pursuing bachelor degree programs at an FCS college but as we will note later in this report, this category is growing at a fast rate. (Note: students may be enrolled in more than one program; Figure 1). In each case the number and percent of students in the various credential programs varied significantly by college.



» Policy History of Florida's College System

Over the last 115 years, public community colleges in the United States have experienced tremendous growth, incredible obstacles, and a continuous cycle of evolution to meet the needs of local communities. The first publicly-supported two-year postsecondary institution in the United States was founded in 1901 by William Rainey Harper, then president of the University of Chicago (Joliet Junior College, n.d.). Harper and his colleagues believed that the nation's universities were best positioned to provide advanced education, and that a more efficient system of higher education should also include the provision of basic academic skills during the first two years of postsecondary work. Harper is generally credited with coining the phrase *junior college* and opened the first such institution in Joliet, Illinois as a partnership with a local high school that would provide two years of academic preparation beyond the 12th grade with the goal of sending pupils on to the University of Chicago to complete their last two years of college (Sterling, 2001).

A quarter century later, as junior colleges began to spring to life across the country, Florida would see the establishment of its first junior college and experience a growing demand for postsecondary education across the state.

In Florida, the community college system began with St. Petersburg Junior College, founded in 1927 as a private, two-year institution. Several other similar institutions were founded around this time, including Jacksonville Junior College, Orlando Junior College, Casements Junior College, and Edison Junior College, but St. Petersburg Junior College would be the lone survivor from among this early cohort (Wattenbarger & Albertson, 2007). The state's first publicly-funded two-year institution was Palm Beach Junior College, founded in 1933. That college's general organization was overseen by the local Board of Public Instruction while the University of Florida provided consulting on course selection and faculty appointments. Palm Beach Junior College operated out of Palm Beach High School under the administration of its principal, Howell L. Watkins (Palm Beach State College, 2015; Wattenbarger & Albertson, 2007).

These early institutions and their governance highlight the local community roots of Florida's college system. This form of local governance was in contrast to Florida's four-year universities (the State University System), which had some degree of leadership centralized at the state level beginning with the establishment of the Florida Board of Control in 1905, and arguably dating back to the state's constitution in 1838, which established higher education and normal education programs. Thus, the junior colleges were quite distinct in that they existed exclusively at the local level, with little or no organization at the state level. While local governance of junior colleges had been a historical feature among Florida's junior colleges, the state legislature would soon take steps to provide for a more uniform distribution of two-year colleges throughout the state.

In 1939, the Florida Legislature gave authority to the State Board of Education to approve the establishment of junior colleges in individual or neighboring counties with populations exceeding 50,000, with administration and oversight of the institutions themselves delegated to local boards (Wattenbarger & Albertson, 2007). The new law established requirements for the local creation of junior colleges, but did not provide support—fiscal or otherwise. Thus, while the framework had been established for creating additional junior colleges, no new public junior colleges would emerge for nearly a decade due, in part, to the lack of state support, but also to the outbreak and conclusion of World War II.

» Rapid Expansion Following World War II

Following the war, community colleges and universities saw expansion thanks to enactment of the Serviceman's Readjustment Act of 1944 (the G.I. Bill) that gave returning veterans cash payments for tuition and living expenses to attend college (Olson, 1974). In 1945, Governor Spessard Holland issued an executive order establishing the Florida Citizens Committee on Education (Preuss, 2009). The Committee was charged with conducting "a comprehensive study and survey of education in Florida" (Florida Citizens Committee on Education, 1947a, p. iii). The committee's work resulted in a report entitled *Education and the Future of Florida: A Report of the Comprehensive Study of Education in Florida* that was also published more succinctly in a book intended for public consumption (Florida Citizens Committee on Education, 1947b). The report was presented to the Florida

Legislature in 1947 by Drs. Edgar Morphet and Roe Lyell “R. L.” Johns. Morphet had served as the director of administration and finance with the Alabama Department of Education and later held the same post in Florida. From 1945-1947 he was Executive Secretary of the Florida Citizens Committee on Education (University of California System Academic Senate, 1991). Johns was a professor of education at the University of Florida and fiscal consultant to the committee (Charbonnet, 1984).

Chapter IV of the full report, entitled “Secondary Schools and Junior Colleges” (Florida Citizens Committee on Education, 1947b), was authored by James L. Wattenbarger, then a graduate student at the University of Florida (Wattenbarger & Albertson, 2007). Wattenbarger’s recommendations included that junior colleges should be part of the local school systems and should provide a balance of both preparatory education, for students intending to continue on to “senior college,” and terminal training, for those planning to enter a career immediately upon completion of a junior college curriculum. Many of Wattenbarger’s recommendations were included in the Minimum Foundation Program legislation, passed in 1947 with the support of then Senator LeRoy Collins, providing a mechanism for funding of the “thirteenth and fourteenth years” of education (Wattenbarger, 1953) alongside local K-12 systems.

The Minimum Foundation Program was based on a similar plan that had been in place in New York since the 1920s. The plan “used a combination of state and local revenue to provide a minimum level of funding for public schools. School boards could then supplement the basic program with revenue from discretionary millage levied on nonexempt property” (Florida TaxWatch, 2006, p. 2). The inclusion of public junior colleges in state and local funding formulas provided an opportunity for communities to pursue the establishment of postsecondary institutions in earnest.

Following the legislative acts of the 1940s, local interest in establishing community-focused two-year colleges grew. The Pinellas County Board of Public Instruction quickly requested permission to incorporate St. Petersburg Junior College under the authority of its local school board, a request that was granted in 1947, making St. Petersburg Junior College the second public two-year institution in Florida (Wattenbarger & Albertson, 2007). Chipola Junior College had opened its doors as a private institution in 1947, but with the passage of the Minimum Foundation Program, a consortium of Jackson, Calhoun, and Washington Counties was approved to operate Chipola Junior College as a public institution under their new college district. Chipola became Florida’s third public junior college in 1948. Holmes and Liberty Counties would later join the district (Chipola College, n.d.). Also in 1948, Pensacola Junior College earned the distinction of being the first new junior college chartered by the State of Florida under the Minimum Foundation Program, serving Escambia and Santa Rosa Counties (Pensacola State College, 2013; Pensacola State College, 2014).

In his years as a state legislator, LeRoy Collins was instrumental in constructing the state’s system of junior colleges. Collins also had an interest in K-12 education and economic development in the state, demonstrated by his advocacy of state-supported industry, agriculture, and tourism efforts (Museum of Florida History, 2015). Collins would serve as Florida’s governor from 1955-1961, helping to facilitate the adoption of statewide two-year college legislation in 1957. That plan contained within the legislation, based heavily on the work of James L. Wattenbarger, called for a community college system consisting of 28 institutions. The plan would put a postsecondary institution within 30 miles of 99 percent of the state’s residents (Holcombe, 2006). According to Wattenbarger’s 1953 report, Florida residents in most counties wanted a maximum commute of around 30 miles. The longest anticipated commute, based on his recommended campus locations, would be for certain residents of Wakulla County, who could face as much as a 102 mile commute each way to the proposed location in Marianna. This longer commute was due to the fact that at the time, state law prohibited the establishment of junior colleges in Leon and Alachua Counties, home to Florida State University and Florida A&M University in Tallahassee and the University of Florida in Gainesville, respectively.

During Collins’ tenure as governor, the state would see the establishment of 10 new junior/community colleges as well as the beginning of planning for desegregation through the merging of 12 historically segregated colleges that had separate names and separate facilities for black and white students (Smith, 1994). This effort would ensure that just one integrated college served each district, but did allow individual institutions to establish multiple campuses in the interest of serving their communities (Wattenbarger & Albertson, 2007). The first campus to be desegregated was Brevard Junior College (now Eastern Florida State College), which merged with Carver Junior College in 1963, a year before the Civil Rights Act of 1964 (Florida College System, 2015b).

Legislation in 1957, motivated in part by the 1953 Wattenbarger report, saw the establishment of the Division of Community Colleges under the Florida Department of Education; Wattenbarger was appointed its director. The new Division of Community Colleges and an allowance that community colleges could operate independently of local K-12 school boards marked the beginning of a new level of state coordination. The legislation also approved six new community colleges that year: Gulf Coast Community College, Central Florida Community College, Daytona Beach Community College, Manatee Junior College, North Florida Junior College, and St. Johns River Community College.

» **A Complete System and Beyond from the 1970s**

The following decade brought the opening of 17 new community and junior colleges, and in 1968 the state legislature approved a measure creating local governing boards for each two-year college in the state, establishing further autonomy from local school districts. This separation was something many community college advocates argued was necessary to increase the efficiency and efficacy of the community college system. The founding of Polk Community College in 1972 completed the state's updated master plan, being the 28th public two-year institution of higher education within Florida's borders.

Seeking increased accountability among the community colleges, the state legislature established the Community College Coordinating Board in 1979 and replaced it four years later with the State Board of Community Colleges, charging it with "statewide leadership in overseeing and coordinating the individually governed public community colleges" (Wattenbarger & Albertson, 2007, p. 4). Former state representative and senator, Clark Maxwell, Jr., was appointed the first executive director of Florida's new community college system.

A voter-approved amendment to Florida's Constitution in 1998 enacted several changes to the state's education systems. Among them was that a new seven-member board, appointed by the Governor, would be established to oversee all public education. HB 2263 (the Florida Education Governance Reorganization Act of 2000) was adopted by the legislature, confirming the structure and membership for the new Florida Board of Education. This Board established a Commissioner of Education as well as three new chancellor positions, one each for the K-12 system, the State University System, and the Community College System.

» **Looking Toward the Future: The 21st Century**

A later bill, SB 1162, passed in 2001, opened the door for community colleges to begin offering baccalaureate degrees and granted the first such privilege to St. Petersburg Junior College, which was concurrently renamed as St. Petersburg College. J. David Armstrong, Jr., who had served as the executive director of the Florida Community College System since 1998, remained in place to become the first chancellor of the Florida Community College System and oversaw much of the early transformation of Florida community colleges beginning to offer baccalaureate degrees. While the 2001 legislation provided Florida community colleges the option to offer four-year degrees, the colleges themselves also had to earn accreditation of their four-year programs from the Southern Association of Colleges and Schools (SACS)—the regional accrediting body of which Florida is a member. The trend of community colleges offering bachelor's degree is a national one evolving since West Virginia became the first state to authorize a community college to offer a baccalaureate degree in 1989. Community college baccalaureate programs are now in place in at least 18 states, typically offered in high-needs areas of the state such as business, nursing, and teacher education. While not the first state to offer community college baccalaureate degree, Florida is a leader in this arena, offering nearing twice as many degree programs at over twice as many community colleges than any other state (Floyd, Skolnik, & Walker, 2005; Russell, 2010). At the same time, while Florida has experienced tremendous growth in the number of students receiving baccalaureate degrees at the state colleges, FCS institutions still award far more associate degrees and certificates than baccalaureate degrees, a point we discuss in greater detail in Section III.

In 2002, the Florida Legislature passed CS/SB 20-E, known as the School Code Re-Write Bill, which eliminated all of the existing statutes concerning education because they were "scattered throughout the volumes of Florida Statutes" (Wattenbarger & Albertson, 2007, p. 8) and re-wrote them as 14 new chapters in an attempt to create

a more seamless system of public education for the state. Two years later, in 2004, the legislature passed SB 2388 and HB 303, companion bills in the Florida Senate and House, which updated fiscal policies related to the community college baccalaureate, requiring Florida Community College System institutions to keep separate ledgers to account for dollars appropriated for baccalaureate programs. Approved institutions were required to update their tuition and fee structures to establish rates for upper-division programs that would fall between the cost of existing two-year degree programs and that of four-year programs at local universities (Florida Senate, 2004; Florida House of Representatives, 2004). By that year three more institutions Okaloosa-Walton Community College, Chipola Junior College, and Miami-Dade Community College, had been granted the ability to offer baccalaureate degrees and their names were changed to Okaloosa-Walton College, Chipola College, and Miami Dade College, respectively. Edison Community College was also renamed Edison College, although it was only granted permission to host a baccalaureate program that would be provided by Florida Gulf Coast University. In 2008, the legislature passed CS/SB 1716, a bill that renamed the Florida Community College System as the Florida College System and officially clarified the purpose of the system's institutions to include the provision of both two- and four-year degrees in employment-related fields. The later passage of CS/SB 2682 in 2009 re-affirmed the open access mission of the state colleges and the "2+2" articulation plan so that students completing two-year degrees at any state college would be guaranteed transferability to a state university with junior standing.

One of the most recent policy shifts in the FCS has been with respect to performance funding. Florida is one of 26 states across the country that ties some or all of their appropriations for higher education to institutional performance. For the last two years, a portion of funding for Florida's public four-year universities has been awarded based on a performance funding formula. In 2015, the Florida State Board of Education approved performance funding for the state colleges. We discuss this policy shift in greater detail in Section IV.

» Summary

Emerging from its roots in private, local schools, the Florida College System has developed a model for statewide postsecondary education that attempts to balance state interests with local needs (see Chart 1 for a timeline of the development of the FCS). As an early actor in the two-year college movement, Florida has implemented initiatives such as articulation agreements and "2+2" academic tracks and provided a balance of workforce development and postsecondary credentials to create a pipeline into the four-year university system. However, challenges remain. The FCS institutions serve a growing, and increasingly diverse, population and face increasing demands from the state. Balancing local needs and state expectations provides a major challenge for Florida's state colleges. As the state and its economic needs evolve, so too must the missions and goals of its colleges. We now turn to a discussion of the evolving mission of the Florida College System and its institutions. Later, in Section IV, we return to our policy discussion as we highlight the most recent and current policy initiatives facing the FCS.

Chart 1: Chronology of the Florida Colleges

1927	» St. Petersburg Junior College founded as private, two-year college
1933	» Palm State Junior College founded as first public college
1939	» Legislature passes law allowing counties to petition for the establishment of public colleges
1947	» Drs. Morphet and Johns include section on "junior colleges" in report to legislature
1947 -48	» St. Petersburg Junior College becomes part of Florida's public system » Legislature approves creation of three new colleges » Palm Beach Junior College » Chipola Junior College » Pensacola Junior College
1948	» Creation of Florida Association of Public Junior Colleges (the forerunner to FACC)
1955	» Legislature created Community College Council to formulate long-range plans
1957 -58	» Community College Council issues report to legislature which recommended state plan for 28 community/junior colleges » Legislature approves creation of six new colleges » Gulf Coast Community College » Central Florida Community College » Daytona Beach Community College » Manatee Junior College » North Florida Junior College » St. Johns River Community College » Legislature approves statutory revisions permitting junior colleges to separate from K-12 » Legislature establishes the Division of Community Colleges
1960	» Legislature approves creation of four new colleges » Brevard Community College » Broward Community College » Miami Dade Community College » Indian River Community College
1962	» Legislature approves creation of three new colleges » Edison Community College » Lake City Community College » Lake-Sumter Junior College
1964	» Legislature approves creation of Okaloosa-Walton Community College
1965	» Legislature approves creation of Polk Community College
1966	» Legislature approves creation of five new colleges » Florida Keys Community College » Florida Community College at Jacksonville » Santa Fe Community College » Seminole Community College » South Florida Community College
1967	» Legislature approves creation of two new colleges » Valencia Community College » Tallahassee Community College
1968	» Legislature approves creation of Hillsborough Community College » Legislature approves measure allowing community colleges to be governed under local boards
1970	» Desegregation and merging of black community colleges
1972	» Legislature approves creation of Pasco-Hernando Community College
1979	» Legislature creates Community College Coordinating Board
1983	» Legislature replaces Community College Coordinating Board with State Board of Community Colleges
1990s	» Legislature adds economic development as primary mission of the colleges
1996	» Colleges become first state agency in Florida to embrace performance based budgeting
1998	» Commissioner of Education eliminated from cabinet position
2000	» Florida higher Education Reorganization Act restructures higher education systems » Division of Community Colleges merged with Division of Workforce Development
2001	» SB 1162 eliminates State Board of Community Colleges, creates State Board of Education, and creates local boards of trustees » St. Petersburg, Edison, Miami Dade, and Chipola approved to offer baccalaureate degrees
2002	» New statutes give more control to local boards
2003	» Okaloosa-Walton approved to offer baccalaureate degrees
2004	» Legislation outlines process for community colleges to create baccalaureate degrees » Community colleges allowed to change names to reflect expanding mission
2009	» The Florida Community College System is renamed The Florida College System

Section II

» Evolution of the Mission of the Florida College System

At the core of any college's operations and purpose for existence lies its mission. The mission sets the benchmark which the college must reach and upon which strategic plans are built (Hirt, 2009). This benchmark also communicates institutional characteristics to external audiences and standards by which these audiences can evaluate its success. In this section, we build on the history of the Florida College System by focusing on its evolving mission and highlighting the missions of specific colleges within the system. We investigate the extent to which these missions are being met and the impact of policy developments through a series of tables and figures of publicly available data on enrollments, academic offerings, student outcomes, and finances.

» Original Mission: Access & Local Economic Development

Governor Collins' mutual interests in access to public education and economic development were apparent in the development of the earliest junior colleges. These institutions were established to provide low cost, local educational opportunities within particular communities, and, at least in the case of the earliest cohort of junior colleges, to help advance economic prospects for individual members of the community. Specifically, a junior college education was to serve as the thirteenth and fourteenth years of education, a continuation of high school that would allow a student either to attain meaningful work or to continue on to complete her final two years of college at a state university.

Residents of St. Petersburg recognized in the early 1920s a "need for an institution of higher learning to provide job skills training to local residents of modest means." This was in contrast to a university education, which was accessible only to those with the means to travel and to stay away from home for extended periods of time (St. Petersburg College, 2015). According to one history of St. Petersburg College, the institution "was founded to enable students to live at home, pay low tuition, work part-time and still pursue a postsecondary education" (St. Petersburg Junior College, 2002). Though founded as a private institution, St. Petersburg Junior College served a quasi-public function, gaining the financial guarantees of local bankers and even holding its first classes in an unutilized wing of the just-built St. Petersburg High School (St. Petersburg College). Its transition to a public institution was perhaps a formality with the implementation of the Minimum Foundation Program in 1947.

Similarly, the junior college at Palm Beach emerged to provide a local education to students whose families could not afford to send them away to university following the financial devastation of the Great Depression. Local business and civic leaders met with the high school principal and agreed to establish a junior college to serve Palm Beach County, opening its doors in 1933 and offering classes in both the local high school and an adjacent building (St. Petersburg College, 2015).

Chipola Junior College started in the mind of R.B. Beall, a farm implement dealer and member of the Jackson County School Board in the early- to mid-1900s. In 1926, during Florida's pre-Depression boom, Beall observed that local teachers were leaving Marianna in search of the higher wages available elsewhere in the state. According to Beall, the early 1900s in Jackson County saw fewer than 5 percent of youth finish even high school (Morris, 1957). A local junior college would allow the county to provide a low cost postsecondary education and would keep more locals in the area to teach in their own communities, since they would not be required to move away from home to pursue their education elsewhere. Chipola Junior College opened its doors in 1947 and became a public college under the oversight of the Jackson County Board of Public Instruction a year later. Access was a primary concern for Chipola Junior College. According to a 1957 profile of the institution, then-President K.G. Skaggs stated that he was "proud of the fact that no prospective Chipola student ever has been turned away for lack of money" and that "the hat is still being passed along Lafayette Street and elsewhere in the four counties" (Morris, p. 6) to ensure the ability of the institution to provide a service to its community.

» Contemporary Mission: Continued Economic Development

The role of the community college as an economic driver throughout the rest of the 20th century was as strong as it was in the Depression Era. An Economic Mobility Project study that reviewed income data from 1964 – 2005 found that among families in the bottom income quintile, 96 percent of children with a four-year postsecondary degree earned a greater family income than did their parents in inflation-adjusted dollars, (Haskins, 2008). The report identifies community college as a critical, and often overlooked, piece of the economic development puzzle, especially for students from low-income families. Furchtgott-Roth, Jacobson, and Mokher (2009) reported similar findings, adding that low achieving students who focus their studies on high-return fields tend to earn more than high achieving students who focus on low-return fields, making a community college education a potentially valuable investment for lower income or lesser achieving students. The same study notes, however, that lower achieving high school students who attended community college in Florida were 15 percent less likely than higher achieving students who attended community college to pursue studies in high-return fields.

The role of the community college in advancing the economic prospects of the individual has also been clearly delineated in state law. Until the early-1990s, the primary statutory purposes of Florida's community colleges were twofold: first, to provide undergraduate education and to award associate degrees; and, second, to provide vocational, continuing and adult education for professions requiring less than an associate degree (Section 240.301(2), Florida Statutes (1987)). This concept of economic development is by way of workforce education and development, emphasizing the individual citizen as a driver of economic prosperity through individual educational and/or training outcomes. It was evident in the first junior colleges' missions and is re-emphasized in Florida's current five-year economic development plan, which was generated from the Governor's office and the Florida Department of Economic Opportunity, and which emphasizes workforce preparation and the role of the state colleges in that preparation (FDEO, 2010).

However, there is a second way state colleges are tied to the state's economic development—through public investment in community businesses and technology transfer.

In the mid-1990s, the legislature became interested in this second type of economic development, which meant that the community college would have an increasing role in the economic development of the community itself. To that end, the legislature amended the statutory purpose of Florida's community college system to include two additional primary purposes: providing student development and assessment services, and promoting economic development within the local community college district (Section 240.301(2), Florida Statutes (1997)).

The state economic development agenda highlights the importance of Florida's education system. The recent *Florida Strategic Plan for Economic Development* (Florida Department of Economic Opportunity, n.d.) specifies a goal to "[Lead] the Nation in Student Performance and Market-Relevant Workforce Skills" through four strategies, including:

1. Align education and workforce development programs to foster employment opportunities and to develop and retain talented workers with the skills to meet current and future employer needs.
2. Develop and integrate pre-K through career education system to prepare students for becoming successful workers and entrepreneurs.
3. Lead the nation in STEM (science, technology, engineering, and mathematics) research, education, and market-relevant technical skills.
4. Expand access to education and training programs for talent in distressed markets. (p. 25)

Thus, while the goal of economic development has been associated with the state's community colleges since their beginning, the goal has been broadened by state involvement over time to recognize the importance of education to the economic development of the community and state. However, it is important to note that while economic development as a concept is written into Florida's Education Code, no specific requirements for program participation exist in law. For example, a state college may develop a technology transfer center on its campus, but there is no requirement to do so.

» **21st Century Challenges: Baccalaureate Degrees, Instructional Reform, and Performance Funding**

Moving into the 21st century, the purpose of the two-year colleges continued to expand, most notably as many of the institutions began offering four-year degrees while also facing legislatively mandated reform to better serve underprepared students who enroll in community colleges. At the same time, the FCS institutions now face increased pressure to achieve high levels of student success as a portion of their budget is now connected to student retention and completion through the new performance funding plan adopted by the State Board of Education.

In 2001 the state legislature approved “site-determined baccalaureate degree access” [Section 240.3836, Florida Statutes (2001)], opening the door for community colleges to request permission to grant four-year degrees. Among other requirements, the community college was required to demonstrate local demand for the degree, unmet need for graduates in the proposed degree field, and that the institution had facilities to appropriately support the program (Section 240.3836(2), Florida Statutes (2001)). Meeting these requirements, the community college could either develop its own baccalaureate degree or enter into a partnership with a state university to offer the degree. St. Petersburg Junior College was the first two-year institution in Florida to offer a baccalaureate degree. As of spring 2014, 24 of Florida’s 28 state colleges offered at least one four-year degree program. In 2013-2014, Florida state colleges enrolled 34,528 students in over 170 baccalaureate programs and awarded 5,889 bachelor’s degrees (Florida College System, 2014). Since 2008-2009, enrollment in community college baccalaureate programs has more than quadrupled while the number of degrees awarded has more than quintupled (Stewart & Hanna, 2014).

Allowing two-year colleges to offer four-year degrees has not been without controversy. James Wattenbarger argued against the community college baccalaureate stating that “colleges should stick to what they do best,” claiming, among other things, that such a system would produce a “second class bachelor’s” (2000, p. 4). In 2014, state Senator Joe Negron supported a moratorium on the approval of community college baccalaureate degrees citing concern over the increasing competition with Florida’s four-year universities, and that up to that point no proposals for new state college baccalaureate programs had been denied. This moratorium has since expired and colleges are now permitted to submit proposals to offer baccalaureate degrees again (Russon, 2015).

Amid this debate over offering four-year degrees, the 28 institutions of the Florida College System also faced legislatively mandated curricular changes for underprepared students seeking to enroll at a state college. Through Senate Bill 1720 passed in 2013, the state of Florida drastically changed how developmental education (define as coursework post-high school that is not yet college-level) is to be delivered and for whom it is to be required. Historically, students were required to take developmental education courses based on their performance on placement exams. However, under the new legislation, placement tests are no longer required for many students and students may enroll in developmental or college-level courses regardless of prior academic preparation. Further, the law mandates that developmental education be offered via instructional strategies designed to accelerate students into college-level courses.

These two major shifts are also accompanied by a third: a return to performance funding measures that stand to increase or decrease state appropriations to FCS institutions based upon the retention and completion of their students. We discuss this in greater detail in Section IV.

» **The Contemporary Mission of the System**

State economic development is highlighted in the mission of the Division of Florida Colleges within the Department of Education. It is tasked with “[providing] leadership and advocacy to promote education innovation and continuous improvement within The Florida College System, fueling economic development for the state of Florida and its citizens” (Division of Florida Colleges, n.d.). The Division of Florida Colleges administers the standards for the Florida College System established by the Florida Legislature, differentiating between primary goals and secondary focuses. Among the primary goals established in the 2014 Florida Statutes are provision of two year undergraduate instruction and awarding associate degrees, preparation for career-readiness, provision of student

services, promotion of the economy of the district in which the college is situated, dual enrollment instruction (allowing high school students to take college level courses at the state colleges), full four year undergraduate instruction and awarding of baccalaureate degrees (Florida Legislature, 2014). In addition to the primary goals, the statutes also stipulate secondary purposes of the colleges to serve of benefit to the community surrounding it in a non-academic or non-occupational manner and to provide adult education services, as well as recreation and leisure services.

» **Individual Missions: Commonalities with Some Differences**

Within these stipulations for the Florida College System, each individual college defines its mission, tailoring the content and structure to the actual needs and culture of its community. Only one college, Seminole State College of Florida, follows the state outline and includes all of the primary and secondary goals explicitly. In terms of offering degrees, 15 colleges list associate degrees and 14 list baccalaureate degrees as educational options at their institution. Of the 24 colleges that offer baccalaureate programs, 10 do not mention them in their mission statements. Furthermore, despite Seminole State College being the lone college explicitly including the “the first two years of university studies” in their mission statement, it can be inferred that many of the colleges assume this goal through the inclusion of offering associate degrees in their mission statements and participation on the state’s transfer and articulation program. In terms of other educational programs, 11 colleges list adult education as an educational pathway offered in the mission statement, and only two colleges vaguely mention dual enrollment as an option they provide.

More typically, colleges use words that evoke the educational and developmental mission of the colleges. For example, a commitment to lifelong learning is highlighted in eight of the colleges’ mission statements. Nine colleges include a commitment to “student success” in their mission statements: 14 highlight providing accessible and affordable education. Ten pledge a commitment to innovation through methods of instruction, or creating an institutional culture of inquiry and results. While not identified as a focus in the division’s mission and vision nor in the 2014 Florida Statutes, nine colleges highlight a commitment to global education, preparing their students for a more globalized workforce. Seventeen of the colleges also recognize the need to promote diverse and inclusive culture in their educational mission.

Many of the college mission statements include references to the non-academic primary and secondary goals listed by the 2014 Florida Statutes. The three most common such goals are: career preparation, economic development of the region in which the college is situated, and additional cultural enrichment of the community that it serves. Seventeen different colleges mention either career preparation as a goal of the college or list certificate and technical degrees as an option offered by the college. Often, the mission statement connects this commitment to other goals, such as economic development of the region, global education, and student success.

The history of community colleges in Florida also plays a factor in the commitment to the community found in the college mission statements. Only three colleges, Broward College, Polk State College, and Tallahassee Community College, have no explicit mention of serving the community they are situated in. Among the college mission statements that expressed a commitment to their local community, they often mention a specific commitment to enriching the community culturally and socially or specify their commitment to community by sharing what educational programs they offer and how they prepare students to be leaders within the community.

Beyond contributing to the community socially and culturally, 10 colleges explicitly mention their purpose as contributing to the economic well-being of the region in which they are situated. This mainly manifests itself in the rhetoric of graduating competent, career-ready students who can then contribute to the economy of the region using the education they received from the college. However, some colleges simply list economic contribution as a goal of the college in their mission statement. Beyond these three heavily emphasized goals, six colleges mentioned offering some form of student services and two colleges mentioned offering recreational and leisure programs as a part of their mission. The colleges, through their mission statements, reiterate the expressed focus of the Florida College System on preparing students for quality post-secondary education, careers and civic engagement. Despite some clear similarities, the Florida College System is most notable for the diversity of its colleges which appear to emphasize their role in meeting the needs of their particular students and communities.

» Summary

The historical development of the mission and vision of the Florida College System can be viewed as a series of timely responses to the state's economic and social context. At a time when few progressed beyond a high school education, a disparate assortment of unregulated institutions began to emerge in an organic process of communities responding to demand for opportunity. Into the middle of the 20th century, demand for regional post-secondary educational opportunities grew. As the need to re-integrate and re-train returning soldiers after World War II exploded, Florida took steps to organize a community college network, with a mind toward increasing efficiency and reducing duplication of efforts. Today, access to higher education is an increasingly important goal of the Florida College System, alongside the traditional goal of economic development. Florida's colleges have developed and maintained inclusive mission statements, locally-relevant academic and vocational offerings, and a commitment to providing both quality and access. In the next section, we link FCS missions to their institutional and student outcomes.

Section III

» Alignment between Current Missions and Outcomes

In this section we examine the extent to which the Florida College System is fulfilling its espoused mission and meeting the contemporary needs of the State of Florida. To do so, we first set the stage by presenting socio-demographic information for Florida compared to national averages. Then, we analyze additional data from the last several years on student enrollment and completion patterns, disaggregated by student characteristic and program of study, as well as system revenue data. Most of the data come from fact books compiled annually by the Florida College System. Specifically, we examine the extent to which the FCS has 1) enrolled a large and diverse student body in line with its mission of open access, 2) produced graduates that are equally diverse and prepared for fields in key areas of interest to the state of Florida, 3) done so in a way that is efficient in terms of individual and state resources, and 4) continued to provide opportunities for life-long learning. Then, at the end of the section, we provide an overall discussion of the extent to which these data suggest that the FCS is fulfilling its mission.

» State Economic and Demographic Analysis: Setting the Stage

In these sets of comparisons, we present Florida data alongside national figures. We do so to demonstrate how Florida serves a unique population of students in many ways, as well as to provide for the opportunity for across-table/figure comparisons of how the demographics of Florida are reflected in the FCS institutions.

As shown in Table 1, the Florida population tends to be more diverse (larger African American and Hispanic populations than the national average), have a lower household income, and have a higher percentage of the population living below the poverty level than the national average. Furthermore, Florida's population is significantly older than the rest of the country. In Florida 18.7 percent of the population is over 65, which is a larger percentage than any other state. In addition, Florida is below the national average in terms of its population having an associate degree or higher. For adults ages 25 to 64, only 38 percent have an associate degree or higher compared to a national average of 40 percent, putting Florida 29th nationally. These data present a unique challenge for the FCS institutions in their roles as a primary access point for students and major economic and workforce drivers in their local communities and statewide.

Table 1: Florida and U.S. Demographic, Economic, and Educational Attainment Data

	Florida	U.S.
Demographics		
Percent of Population 18-24	9.00%	9.90%
Percent of Population 25-44	24.90%	26.40%
Percent of Population 45-64	26.70%	26.20%
Percent of Population over 65	18.7%	14.1%
Percent of Population White	56.40%	62.60%
Percent of Population Hispanic	23.60%	17.10%
Percent of Population Black	16.80%	13.20%
Percent of Population Male	48.90%	49.20%
Economic Condition		
Median Household Income	\$46,036	\$52,250
Percent of Population Living Below the Poverty Level	17.00%	15.80%
Educational Attainment		
High School Diploma	86.10%	91.14%
Associate Degree or Higher	38.10%	39.50%
Bachelor's Degree or Higher	27.70%	30.70%
Graduate Degree or Higher	9.30%	11.10%

Source: 2014 U.S. Census Bureau American Community Survey

What might be one of the most important social and policy issues facing Florida is the fact that the state far exceeds the national average in the percentage of children who come from low-income families. We examined a number of different metrics of low-income status. Below we display data on children living below 150 percent of poverty (Figure 2), children from low-income working families (Figure 3) and the percent of students eligible for free or reduced-priced lunch (Figure 4). In each instance, the trend lines are remarkably similar. No matter how we look at it, the gap between Florida and the rest of the country is large and persistent. Much of the gap appears to have developed or grew larger during the great recession.

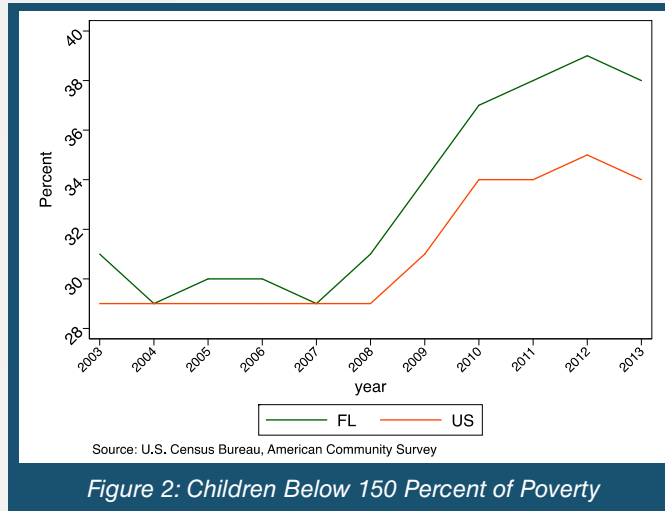


Figure 2: Children Below 150 Percent of Poverty

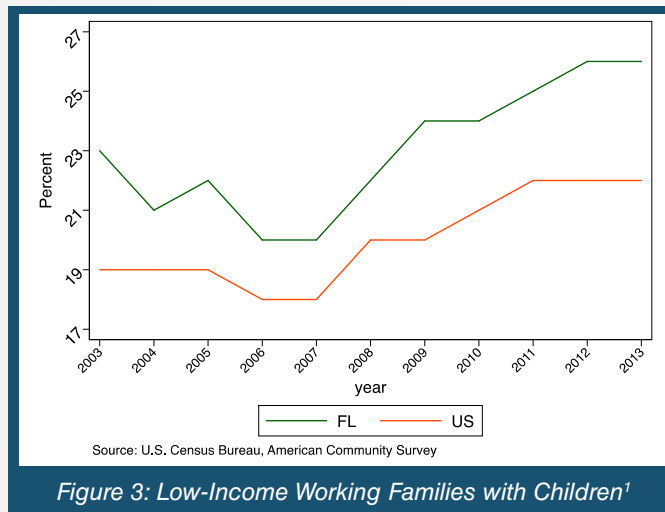


Figure 3: Low-Income Working Families with Children¹

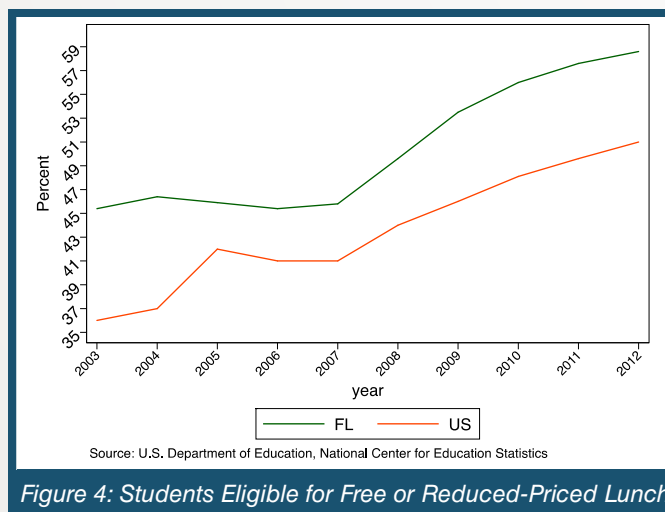
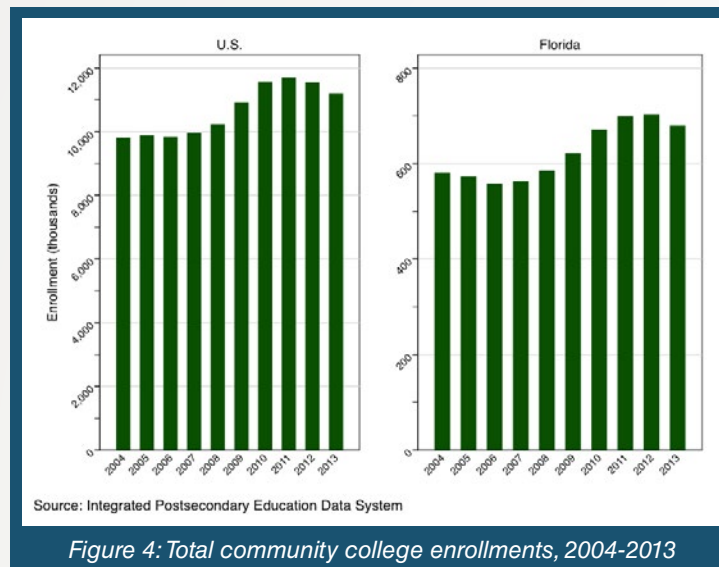


Figure 4: Students Eligible for Free or Reduced-Priced Lunch

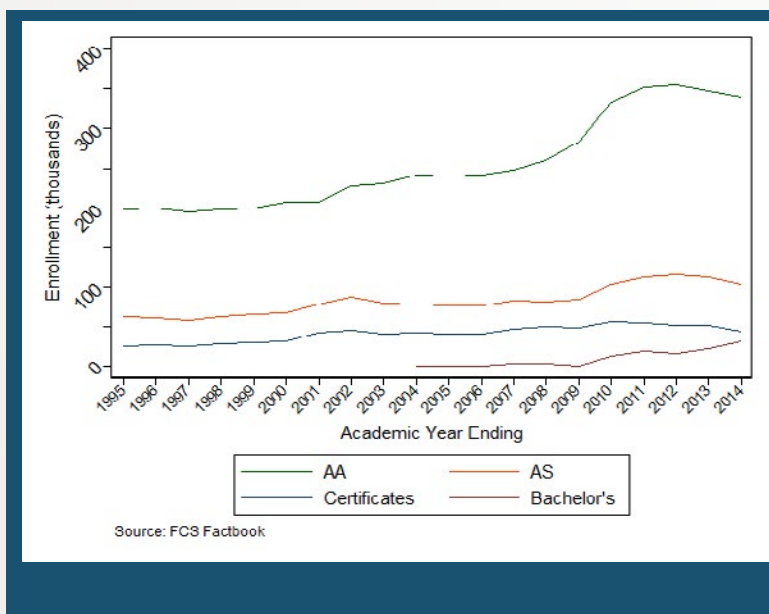
» Enrollment Analysis: Ensuring Open Access

Our enrollment analysis is organized into two broad categories. First, we examine overall system-wide enrollment. Then, we examine enrollment statistics for select student subgroups to highlight changes in access across student demographics.

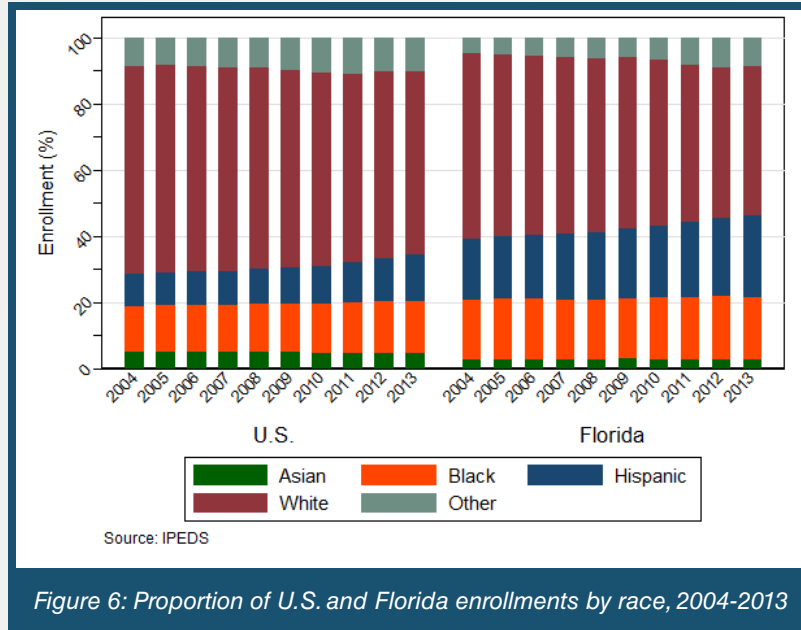
Overall enrollment statistics. The overall number of students enrolling in degree, certificate, and workforce preparation programs at FCS institutions has increased steadily over time and since 2009 has consistently topped 600,000 students annually, peaking at an unduplicated headcount of 687,046 in 2011-2012. Florida's enrollment has tended to mirror trends at the national level over time (Figure 4).



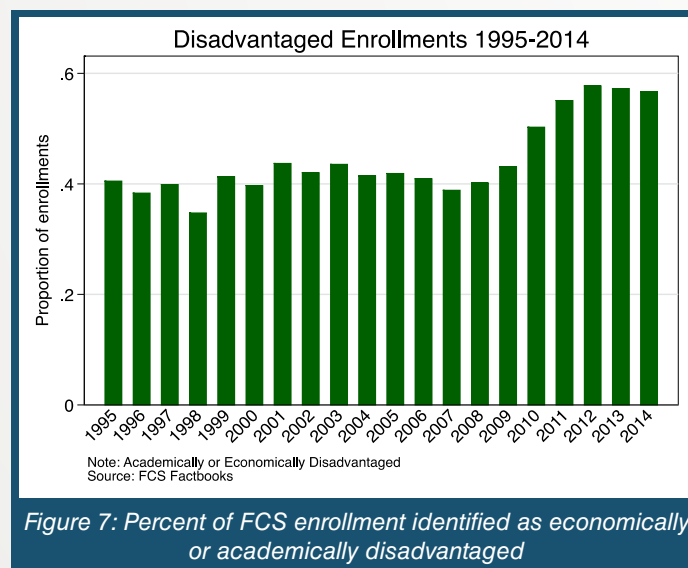
The bulk of the enrollment has historically been in Associate in Arts (AA) programs. This trend is particularly true for the years 2008-2012, where rapid growth took place in AA program enrollments across the state, a trend not altogether surprising as demand for higher education tends to increase in periods of economic downturn. While Associate in Science (AS) and certificate programs show lower enrollments overall, these programs, too, trended upward during the same period. All associate and certificate programs show a downward trend beginning in 2012. This is in contrast, however, to the baccalaureate program enrollment that, though small in number, has seen extensive growth in recent years. (Fig. 5).



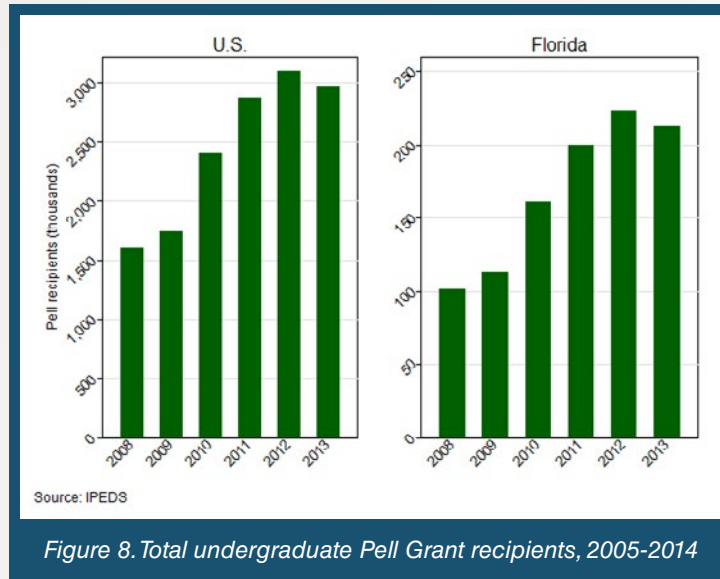
Enrollment statistics by subgroup. With respect to race, we report on the four largest racial/ethnic groups in Figure 6. White students remain the largest racial group on FCS campuses, but their proportion of enrollment has fallen over the past 20 years. While the enrollment gap between racial groups remained relatively stable until 2008, underrepresented populations, particularly Hispanic and black students, have grown as a proportion of total enrollment since that time. While national trends since 2004 have also shown a decline in white student enrollment and an increase in enrollment of Hispanic students, the trend among these two groups is more pronounced in Florida colleges.



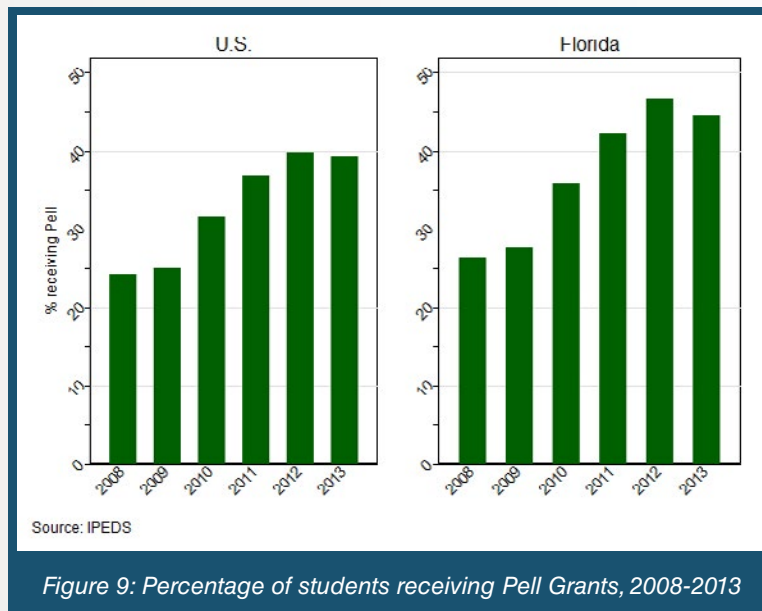
FCS Fact Book data also report students in a combined category of economically and/or academically disadvantaged, which the FCS defines as students who receive financial aid or who are taking developmental education. From 1996 to 2010, this figure remained consistent at around 40 percent. Since that time, however, the figure has grown sharply, growing to nearly 60 percent in recent years (Figure 7).



The number of Florida students receiving Pell Grants, an indicator of financial need², has remained consistent with national trends, peaking in 2012 before falling slightly in 2013 (Figure 8).



Historically, Florida colleges educate a greater proportion of Pell Grant recipients than their national counterparts. Between 2008 and 2012, the percentage of Florida college students receiving Pell Grants has grown substantially, outpacing the national average. In 2013, Florida's proportion of students receiving these awards was around 6 percent higher than the national percentage (Figure 9). Given the trends in the percentage of children living in low-income households and the fact that Florida far exceeds the national average in this regard, the finding that Florida enrolls a larger share of Pell Grant recipients is not surprising. Florida simply has more low-income students in its education pipeline.



Like community colleges nationally, part-time enrollments make up the majority of the enrollments, and they have increased over the years at the FCS institutions. As seen in Figure 10, in 1980 58 percent of enrolled students were part-time. By 2013 that percentage increased to 63 percent.

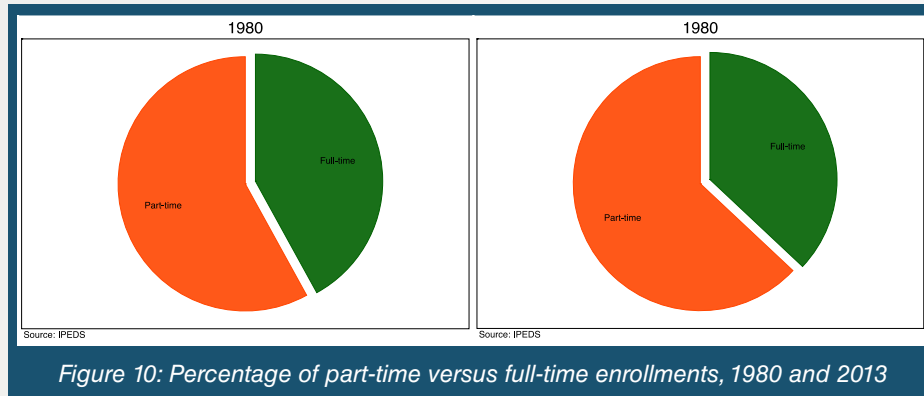


Figure 10: Percentage of part-time versus full-time enrollments, 1980 and 2013

» Completion Analysis: Producing a Diverse and High Quality Labor Force

In order to ascertain whether the FCS institutions continue to meet the needs of the state by providing a diverse and high quality labor force, we conducted an analysis of degree completion data. Our analysis of the completion data is organized into four broad categories. First, we examine overall completion statistics for certificate and associate degree programs over time. Second, we examine completion statistics for select student subgroups. Third, we examine completion statistics for specific major areas and degree programs. Finally, we present a table of high needs areas in the state and the extent to which the FCS has been producing credentials relevant to these fields.

Overall completion statistics. The number of students completing certificate, Associate in Arts (AA), Associate in Science (AS), and bachelor's degree programs (BA/BS) has increased over time and, for the last two years, has exceeded 100,000 per year. The trends in Figure 11 mirror those of the U.S.

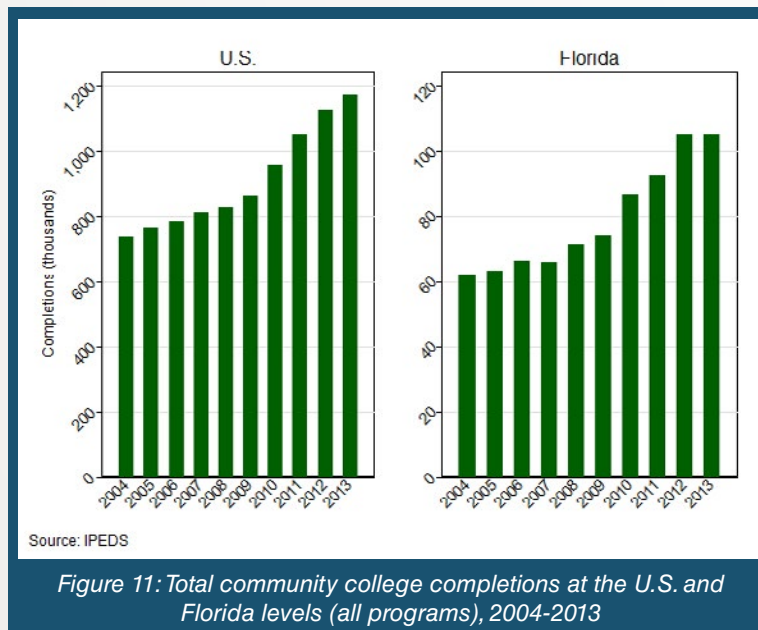
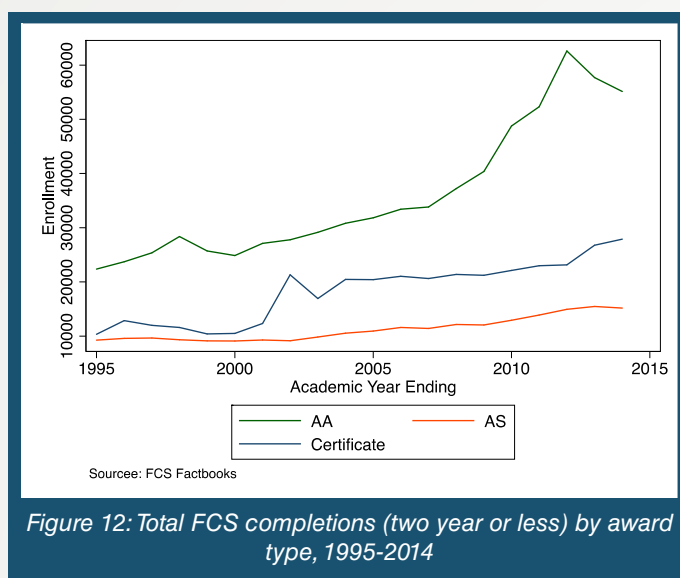
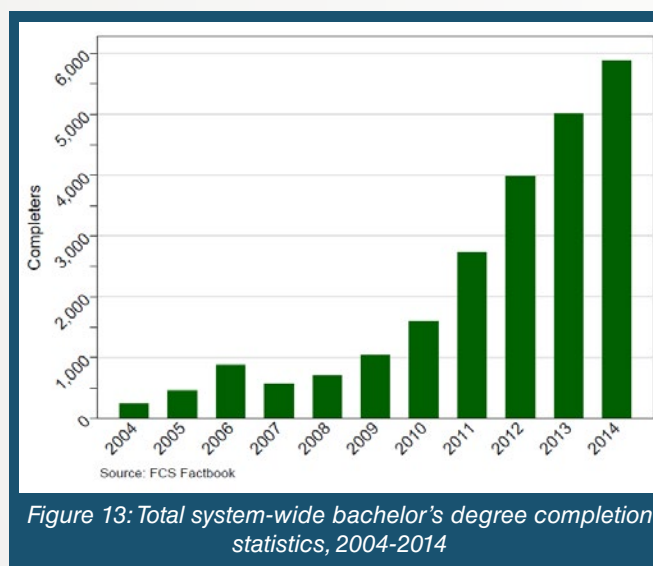


Figure 11: Total community college completions at the U.S. and Florida levels (all programs), 2004-2013

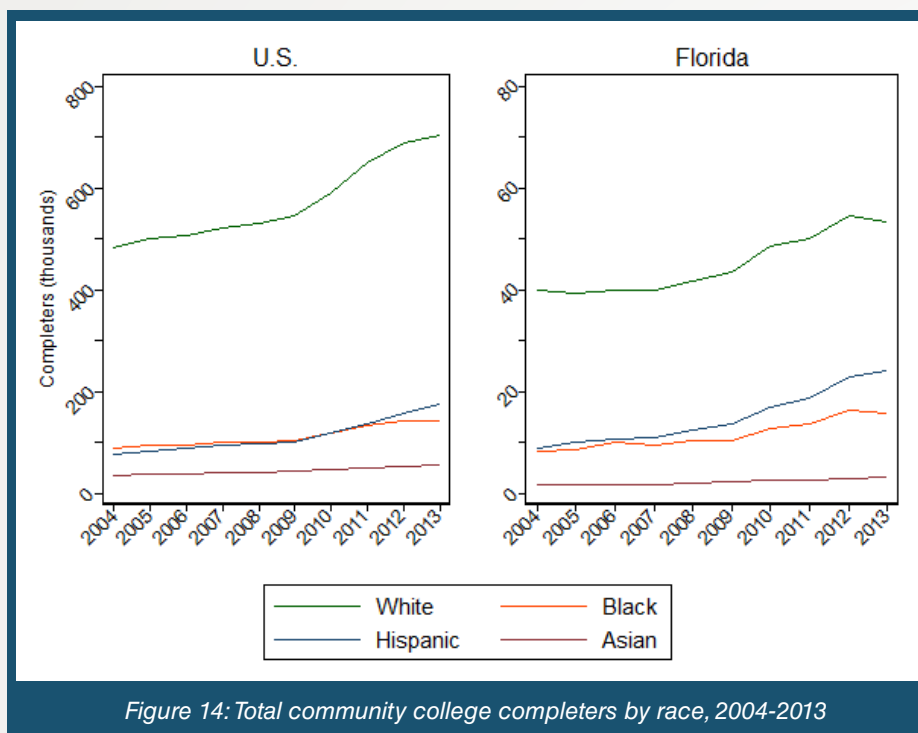
When examining completion figures separately for AA, AS, and certificate programs, the same trend can be found. Since 1995, the number of students completing these programs has consistently increased with relatively stable growth (Figure 12).



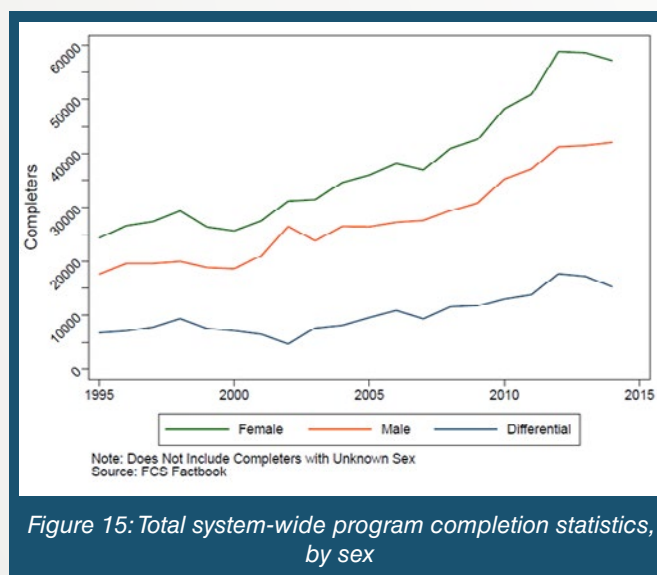
Completion statistics for bachelor's degree programs are reported from 2004 onward. Growth was moderate in the beginning when only a handful of colleges offered bachelor's degree programs; however, following the 2008 legislation granting all colleges the opportunity to grant the bachelor's degree, growth has increased (Figure 13). These programs, however, remain a very small percentage of the overall certificate and degrees conferred by FCS institutions.



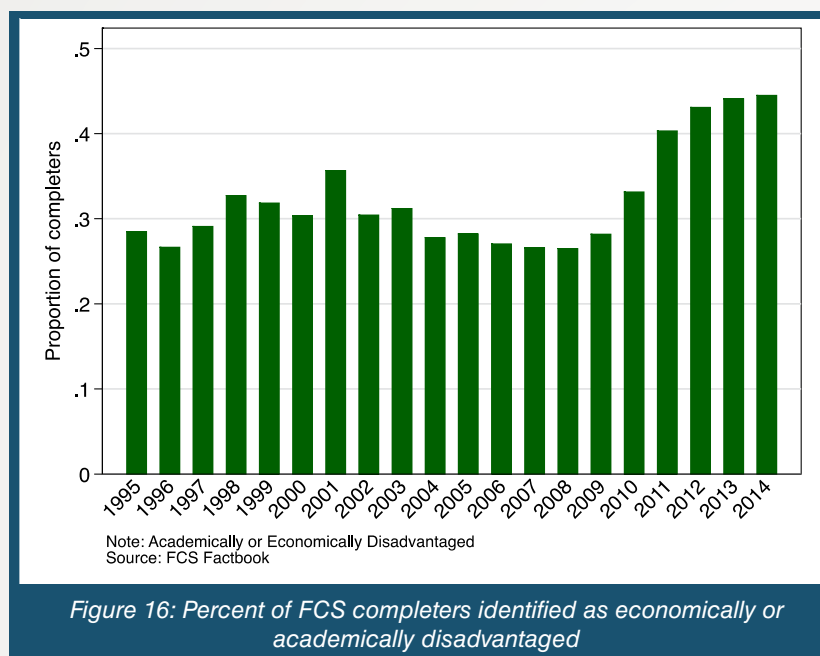
Completion statistics by subgroup. The following charts present completion statistics for select student subgroups. Specifically, we examine completion by race, sex, and economically or academically disadvantaged status. With regard to race, white students comprise the majority of program completers, and while all groups have experienced growth, recent years have seen declines in the number of black students completing community college, both nationally, but even more so in Florida (Figure 14).



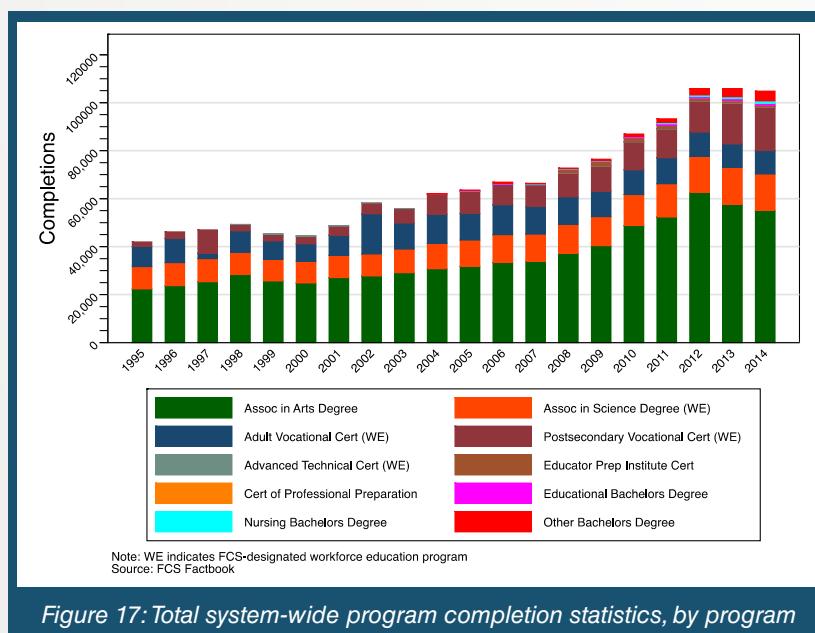
Completion statistics by sex indicate that while females have always outnumbered males, this difference in completion numbers appears to be growing in recent years especially since 2009. Both groups, however, have shown steady growth (Figure 15).



The FCS Fact Books present statistics on pooled completion numbers for economically and academically disadvantaged students (students who receive federal financial aid or who are taking developmental education courses). We find that these numbers had been relatively constant until 2009. Since that time, the percentage of these students completing certificates or degrees in FCS institutions has grown, reaching nearly 44 percent in 2014 (Figure 16).



Completion statistics by program area. In addition to the AA degree—the degree designed to facilitate transfer to a four-year university—the FCS has also continued to produce a number of certificate degrees preparing students for direct workforce entry. These certificate and degree programs include the AS degree and a number of certificate programs (see Figure 7 for overall figures). For certificate and bachelor's degree programs, the FCS also breaks down these statistics further into adult vocational certificates, postsecondary vocational certificates, and advanced technical certificates, as well as bachelor's degree programs in education, nursing, and other. While there has been substantial growth in all areas of credential production, particularly in vocational certificates and the emerging bachelor's degrees, the AA degree remains the dominant credential awarded by the FCS (Figure 17).



Bachelor's degrees in teacher education, nursing, and applied sciences (classified as "other" by the FCS for statistical reporting purposes), have experienced large amounts of growth since these data were first reported by the FCS in 2004. The applied sciences degree remains the largest field and all of these programs have experienced growth in recent years, and particularly nursing which doubled in size from just over 500 in 2010 to over 1,000 in 2014 (Figure 18).

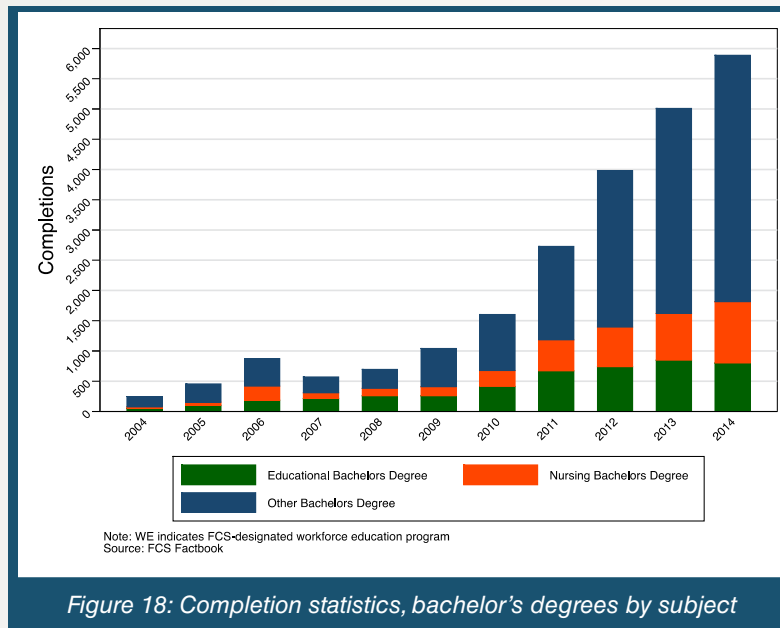


Figure 18: Completion statistics, bachelor's degrees by subject

Three-Year Graduation Rates for Associate Degree Students. In terms of three-year graduation rates for associate degree students (a common metric to define community college success), Florida ranks third across the nation at 48.1 percent based on data released in spring 2010 by the National Center for Education Statistics. This is in contrast to the national average of 29.2 percent (Figure 19).

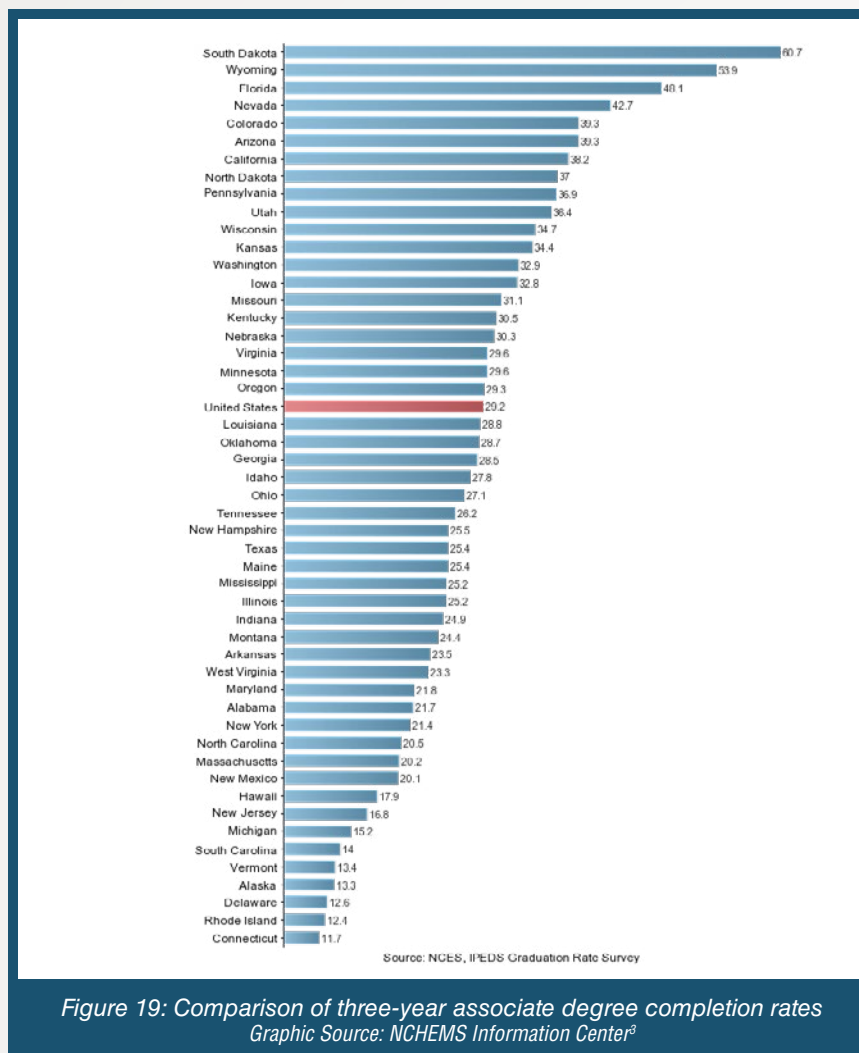
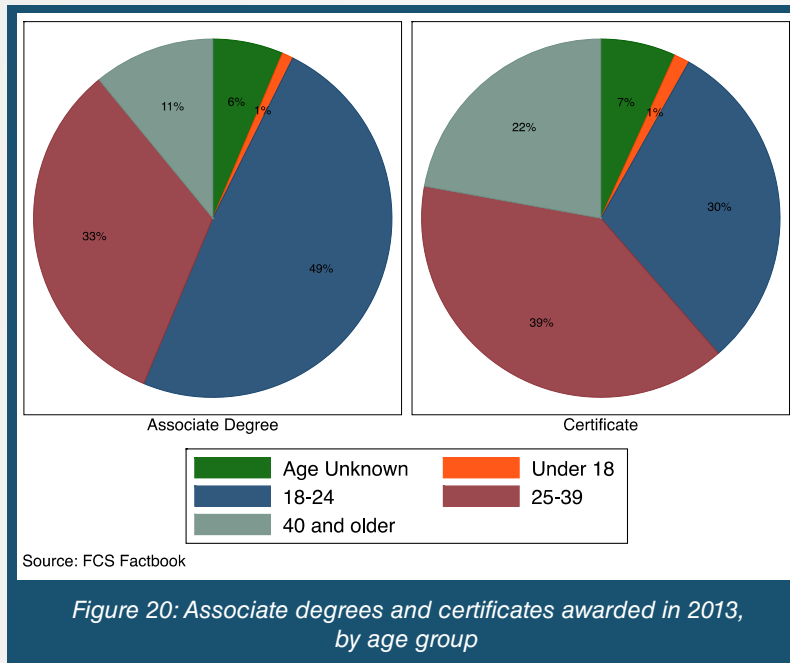


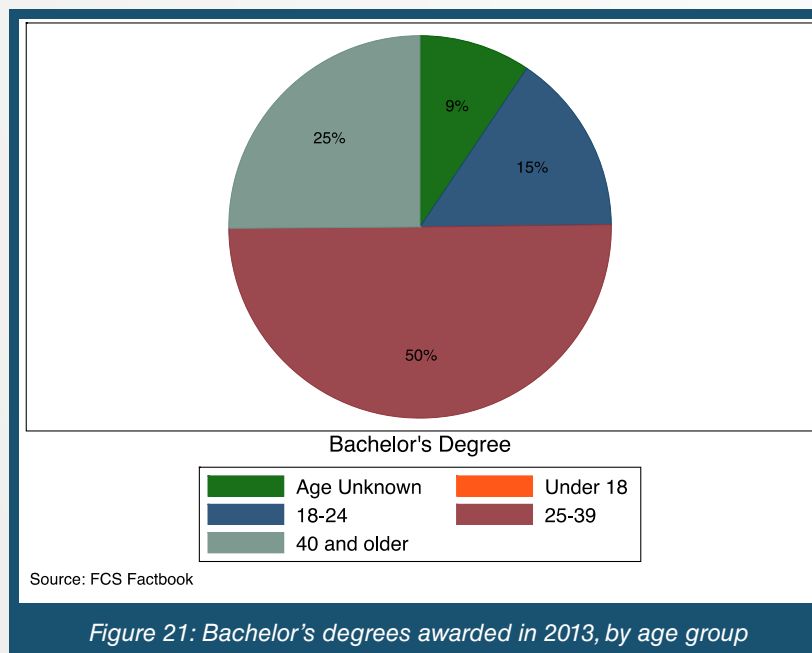
Figure 19: Comparison of three-year associate degree completion rates
Graphic Source: NCHEMS Information Center³

» Age Analysis: Supporting Lifelong Learning

Traditionally, community college enrollment reflects an older population than university enrollment. Figure 20 confirms that roughly half of degree recipients were traditionally aged college students, while a third were aged 25-39, with 11 percent aged 40 and older. For certificates, only 40 percent of the students were traditionally college-aged, with 39 percent and 22 percent being aged 25-39 and aged 40 and older, respectively.



With respect to the bachelor's degree, only 15 percent of the recipients were traditionally-aged college students, with half of the recipients aged 25-39 and a quarter of the recipients aged 40 and older (Figure 21). This is relevant to public policy since it indicates that the baccalaureate program is reaching a population different from that of universities.



Workforce needs and credential production. One of the missions of the FCS is to meet local and state workforce needs. To begin to assess the degree to which the FCS is meeting Florida's workforce needs, we first utilized data provided by the Florida Department of Economic Opportunity to match projected growth in employment by industry to current and past related credential production by the FCS, and second, used the same data to match credential production to growth in employment by occupation. Industries and occupations were matched to credentials using the industry and occupation codes and credential classifications of instructional programs codes (CIPs). These were matched using an established crosswalk⁴ and the researchers' best judgment. Care should be taken, however, in interpreting the results of these comparisons as matching industries and occupations to CIPs is difficult and far from an exact science.

We utilized both industries and occupations because we felt that industries, and industry classifications, are more stable and better related to local and state characteristics and needs than specific occupations (see Table 2). However, because college majors and credentials are often related to specific occupations, irrespective of industry, we also matched credential completions to specific occupations in Table 3 using the same process discussed above.

Table 2: Projected Percent Change Employment by Industry (2014-2022) and Actual Percent Change in Related Credential Completion from FCS Institutions (2010 to 2013)

Rank	Industry Title	Employment 2014	Projected Employment 2022	Projected Percent Change in Employment	Total Related Degrees and Certificates Awarded 2010	Total Related Degrees and Certificates Awarded 2013	Percent Change in Related Credentials Awarded
1	Construction of Buildings	76,674	105,679	37.80%	1,035	1,063	2.70%
2	Specialty Trade Contractors	254,098	340,684	34.10%	879	753	-14.30%
3	Ambulatory Health Care Services	431,173	548,917	27.30%	4,162	4,613	10.80%
4	Heavy and Civil Engineering Construction	49,621	61,805	24.60%	320	306	-4.40%
5	Nursing and Residential Care Facilities	184,004	226,415	23.00%	7,054	6,313	-10.50%
6	Nonmetallic Mineral Product Manufacturing	18,115	22,208	22.60%	0	0	N/A
7	Educational Services	154,646	185,556	20.00%	3,359	3,591	6.90%
8	Social Assistance	117,957	140,537	19.10%	1,471	1,697	15.40%
9	Professional, Scientific, and Technical Services	481,218	571,932	18.90%	2,179	3,276	50.30%
10	Wood Product Manufacturing	11,162	13,205	18.30%	27	8	-70.40%

Source: Florida Department of Economic Opportunity; U.S. Department of Education's Integrated Postsecondary Education Data System (IPEDS)

Reviewing Table 2 we see that often credential areas show growth where there is expected to be growth in industry employment, such as construction and ambulatory care services. However, there are a few areas where colleges may consider expanding the credential production such as specialty trade contractors, heavy and civil engineering construction, and nursing and residential care facilities. Credential production appears high in credentials related to professional, scientific, and technical services industries relative to future job production. Wood product manufacturing shows employment growth, but there are relatively few overall jobs in the industry. Nevertheless, it may be an area for expansion.

Table 3: Projected Percent Change Employment by Occupation (2014-2022) and Actual Percent Change in Related Credential Completion from FCS Institutions (2010 to 2013)

Rank	Occupation Titles	Employment 2014	Employment 2022	Projected Percent Change in Employment	Total Related Degrees and Certificates Awarded 2010	Total Related Degrees and Certificates Awarded 2013	Percent Change in Related Credentials Awarded
1	Home Health Aides	29,607	41,144	39.0%	54	40	-25.9%
2	Cement Masons and Concrete Finishers*	11,605	15,982	37.7%	0	0	N/A
3	Cost Estimators	12,251	16,736	36.6%	393	68	-82.7%
4	Diagnostic Medical Sonographers	4,594	6,217	35.3%	123	124	0.8%
5	Heating, A.C., and Refrigeration Mechanics and Installers	27,123	36,371	34.1%	191	304	59.2%
6	Market Research Analysts and Marketing Specialists	17,274	22,630	31.0%	96	165	71.9%
8	Nonfarm Animal Caretakers*	11,381	14,767	29.8%	0	0	N/A
9	Drywall and Ceiling Tile Installers*	6,607	8,565	29.6%	0	0	N/A
10	Physical Therapist Assistants	4,706	6,101	29.6%	308	320	3.9%
85	Healthcare Support Occupations	231,647	282,707	22.0%	1783	2,332	30.8%
127	Health Technologists and Technicians	180,561	216,394	19.9%	5978	5,498	-8.0%
131	Registered Nurses	167,360	199,927	19.5%	4852	5,662	16.7%
223	Primary, Secondary, and Special Education Teachers	208,700	242,307	16.1%	395	1,095	177.2%

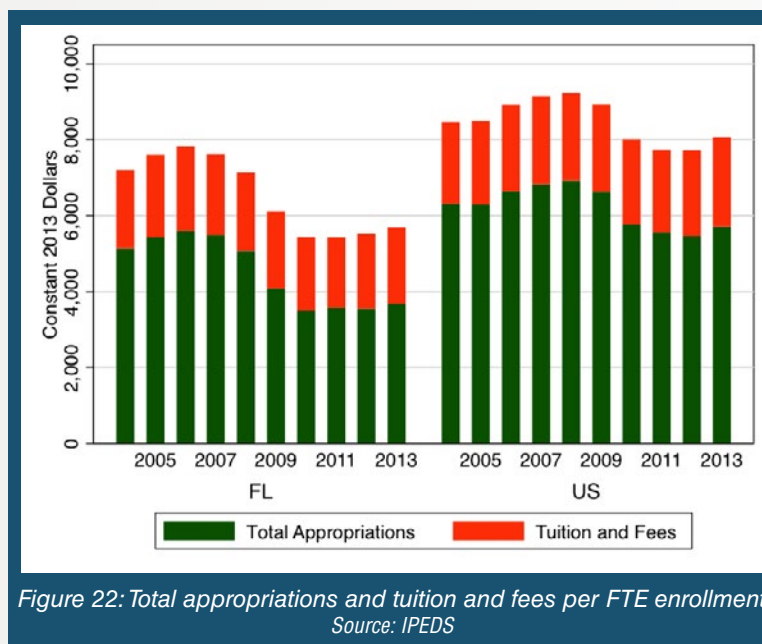
Source: Florida Department of Economic Opportunity; U.S. Department of Education's Integrated Postsecondary Education Data System (IPEDS)

Reviewing Table 3 there are several areas where jobs are projected to grow but where awarded credentials have decreased over the last three years. These include: home health aides and cost estimators⁵. Likewise, significant growth is projected for diagnostic medical sonographers, physical therapist assistants, and health technologists and technicians, while credential growth in those areas has been relatively modest. We also included a number of other healthcare related occupations and teacher occupations because these have generally been deemed high need employment areas in Florida even though they did not make the top ten in projected employment growth. Here we see a mismatch between projected growth in health technologists and technicians and an 8 percent reduction in credentials awarded from 2010 to 2013. One might be concerned about a potential over production in teachers. However, the years of study reflect the launching of many of these programs so that percentage increase is dramatic. And, for the state overall, enrollment in teacher certification programs (FCS institutions,

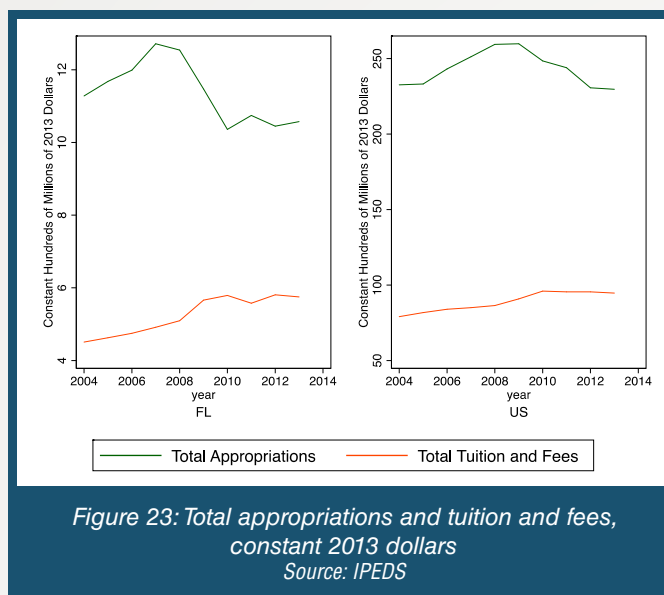
state universities, private colleges and universities, and certification programs outside of traditional colleges and universities) has gone down by 32 percent from 2010 to 2014 (U.S. Department of Education, 2015). Therefore the 177 percent increase in teacher education credentials from 2010 to 2013 in the FCS institutions may actually be seen as a good thing.

» Financial Analysis: The Balance of State and Individual Support

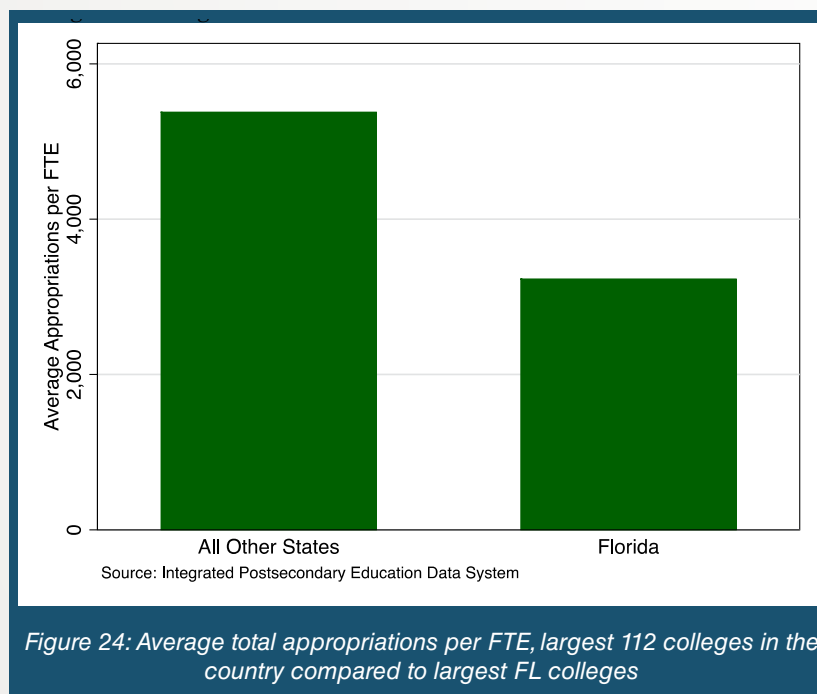
One way the Florida College System has committed to maintaining access to all Floridians is through affordable tuition and fees. We explore this commitment by examining the revenue stream of the FCS per full-time equivalent (FTE) student, and specifically how the revenue from appropriations (state and local) as compared to tuition and fees has changed over time, and in comparison to national averages. We find that Florida's appropriations per FTE at the state colleges are roughly \$1,000 lower than average state funding per FTE for two-year institutions in the United States; tuition and fees are comparable (Figure 22).



When examining appropriations versus tuition and fees in total dollars, instead of by FTE enrollment, a similar comparison may be drawn. Appropriations in Florida have plummeted in recent years while tuition and fees has grown steadily. This is in contrast to the national figures where the reduction in appropriations has not been as drastic and the increase in student tuition and fees has been steadier (Figure 23). This reveals the actual dollar amount appropriated to the institutions.



Some have argued that having a state system with a smaller number of larger institutions, such as Florida, is more efficient than having many small institutions, and, thus, should require less governmental support. However, when we isolate only the largest institutions in the country (those which fall at least one standard deviation above the mean on 12 month unduplicated full-time equivalent enrollment, $n=112$), which includes 12 Florida colleges, and compare the total appropriations these colleges receive, Florida still appears to be under-funded (see Figure 24). Thus, not only are Florida institutions underfunded on average compared to the rest of the nation, they are also underfunded when comparing them to other large institutions which are alleged to be more efficient.



» Summary

Overall enrollment has expanded and continued to become more diverse over the last two decades in-line with the mission of the FCS. In addition, while there has been growth in all credential areas, the FCS continues to enroll the majority of its students in traditional AA programs designed to facilitate transfer to four-year universities. It is also noteworthy that the share of students identified as disadvantaged has increased in recent years. Together, these findings suggest that the FCS has done a reasonable job securing access to all Floridians regardless of race/ethnicity, gender, future plans, and financial or academic disadvantage; however, challenges may be ahead with the number of disadvantaged students increasing. It will be important to monitor these trends in the sweeping policy changes such as community college baccalaureate degrees, developmental education reform, and performance funding.

In terms of degree production, more students are graduating from the FCS in recent years. This is promising and encouraging as a means to build a productive workforce in Florida. Not all students, however, appear to be making gains in terms of both enrollment and completion at equal rates. For instance, black students show a much slower increase in completion rates than is the case for enrollment rates. Put differently, it appears as though more black students may be entering the FCS, but are not completing at the same rates as other race/ethnicities. The same is true of disadvantaged students. In recent years, nearly 60 percent of incoming students are identified as economically and/or academically disadvantaged; however, just over 40 percent of the graduating cohort is identified as such. Disadvantaged students in the FCS are not completing credentials at the same rate as students who are not disadvantaged. Patterns such as these have been documented at many college campuses across the country; however, that does not excuse the FCS from taking additional steps to better serve disadvantaged students. Given the percentage of children living in low-income households in Florida, which far exceeds the national average, the state must be particularly cognizant how its educational policies impact these populations. Further, additional research is warranted on how different campus-specific policies or practices could be either creating or resolving this disparate impact.

When analyzing the extent to which FCS graduates are meeting the workforce needs of the state, we observe mixed results. For instance, there has been growth in production of certificates and degrees in the areas of technical services, social assistance, educational services, ambulatory care, and construction; these are also major areas of projected employment. It is encouraging to see that, in some areas, there has been growth in these high need areas of the state economy. For other areas, however, this is not the case. For instance, the state forecasts an increase in employment of 23 percent for nursing and residential care workers; however, the last several years have seen a 10.5 percent *decrease* in the number of credentials being awarded in this area. This is particularly troubling given the focus on the bachelor's program in nursing—indeed, given the increase in bachelor's degrees in nursing, this overall decline in nursing credentials is due to decreasing numbers at the sub-baccalaureate level.

In terms of access and affordability, Florida maintains comparable tuition and fees to the rest of the nation despite comparatively low levels of state funding—funding that has continued to decline in recent years. While this could be an indicator of efficiency, this would only be the case if the economic needs of the state were being met. The previous data suggest this may not be the case, at least not in all areas. The growth in disadvantaged students—who may require more services—is also a troubling trend given the reduction in resources.

Finally, Florida has had a long-standing commitment to educating individuals at all points in their life. It is encouraging to see the large shares of degrees, and particularly bachelor's degrees, being earned by individuals who are not traditionally college-aged.

Section IV

» State Policy and the Florida College System

Because the FSC institutions are public colleges, much of what they do is shaped by state policy. In this section we describe a number of state policies particularly important to the FCS. These include:

- » the 2+2 program,
- » the state college baccalaureate (or the community college baccalaureate - CCB),
- » the Bright Futures Scholarship program,
- » performance funding,
- » the \$10,000 degree,
- » state college governance,
- » free community college, and
- » developmental education.

We focus on these policies based on the recommendations of institutional and state leaders, and our own best professional judgment. We discuss each policy, and where we were able, to discuss how the policy aligns with the missions of the FCS system as a whole and the colleges themselves.

» Florida's 2+2 Program

Across the board, those we interviewed⁶ for this project highlighted Florida's 2+2 program as the most important and influential state policy for the FCS colleges. This program allows students to complete their first two years of a four-year degree at a state college and then “seamlessly” transfer into a four-year program at one of the public universities or colleges for the final two years. This policy is meant to reduce costs for students, increase their options, and smooth their path to a bachelor's degree. The policy originated with administrators from the state's public colleges and universities in the late 1960s, who became concerned about the difficulties of assigning course credits to transferring students. These concerns led to the common course numbering system and later the 2+2 transfer and articulation policy, a set of guidelines guaranteeing transferability of credits between FCS institutions and State University System institutions. The policy covers all Florida public institutions and a small number of private institutions. Florida's approach has been copied across the country and has largely been seen as successful. In fact, Louis Bender, a professor of Educational Leadership at Florida State University, noted in his study of the transfer and articulation program, that “Florida probably has one of the most comprehensive and operationally efficient common course numbering and designation systems.” (Florida Department of Education, 2014, p. 10)

The state of Florida guarantees that students who complete an AA degree at a Florida college have the opportunity to earn a bachelor's degree at a state university or Florida college offering four-year degrees (the student must meet the enrollment qualifications of the four-year degree institution). Each public institution has a 36-hour general education program that is part of the AA degree. The articulation agreement guarantees the 36-hour general education block of credit earned at any public college or university will be accepted by any other public institution in Florida and no further courses will be required to meet the general education component (Florida Department of Education, n.d.).

Participation in the program is high. In 2010-11, the State University System of Florida enrolled more than 40,000 new transfer students. More than 30,000 of those transferred as a result of the 2+2 program (FBOG, 2011). This program is tightly aligned with the mission and goals of the FCS and the individual colleges, as it provides access to postsecondary education and smooths the path towards more advanced credentials for students who might not otherwise have such opportunities.

Overall, transfer student graduation rates are similar to graduation rates of students who originally began at a four-year institution. And, data compiled by the FCS, show similar upper division GPAs for AA transfer students (3.15) and native State University System students (3.12)⁷. However, regarding the graduation rates, these statistics compare transfer students who have already earned credit hours (some as many as 60 or more) to new first-year university students. This is not necessarily a fair comparison. A different way to examine the success rate of transfer students is to focus on those who earned an associate degree before transfer and to compare them to native juniors at the destination university. Students transferring with an associate degree generally come in with

around 60 credit hours and transfer in as juniors (or third-year students). Available data only allow us to examine the relative graduation rates of AA transfer students at Florida State University and the University of Florida. When examining success rates of those transfer students at Florida's two flagship universities and comparing them to native university students with 60 credit hours who are in their third year, the transfer students' bachelor's degree graduation rates lag those of the native students. For example, at Florida State University, FCS transfer students have an equivalent of a 53 percent four-year graduation rate (2+2) and a 72 percent five-year graduation rate (2+3), while native students with 60 credit hours have an 82 percent four-year graduation rate and a 93 percent five-year graduation rate (data provided by the Florida State University Institutional Research Office). Similar gaps exist among native and transfer students at the University of Florida (Stratton, 2015). However, additional data would be needed before any conclusions could be drawn about the relative success rates of transfer students statewide or at any of the other individual universities in Florida. Transfer students may graduate at equivalent or even higher rates at those institutions.

This discrepancy at the flagship universities could be the result of a number of factors, such as transfer students needing to adjust to a new university campus, difficulties with course transfers, and transfer student academic preparation and increased expectations at the four-year universities. Another factor that could prevent FCS students from eventually attaining a four-year degree, but also transferring in the first place, is a lack of academic/enrollment intensity. Many FCS students attend part time and it has been well documented that failing to enroll full-time diminishes the likelihood of transfer by at least 12 percentage points (Park, 2015).

While graduation rates of transfer students lag behind those of native four-year students at the flagship institutions, little concrete evidence exists regarding what the size of the completion gap would be if the 2+2 program did not exist, or if such a gap exists at the other Florida universities. There is reason to believe that the gap at the flagship universities would be larger if the 2+2 program did not exist. Thus, without additional statewide data, it is difficult to draw clear conclusions over the effectiveness of the 2+2 program in closing the completion gap at this time.

Early assessments conducted by the Florida Office of Program Policy Analysis and Government Accountability (OPPAGA) concluded that the 2+2 program had suffered from a lack of oversight and implementation issues. OPPAGA found that transfer students needed to take lower division courses at the universities in order to meet degree requirements, that universities did not have to accept credit for many of the courses in the common course numbering system, and that universities had implemented prerequisites in ways that created barriers to transfer students and that increased oversight was needed (OPPAGA, 2002, 2007, 2008). Another OPPAGA report from 2010 found that many state college students remained uninformed regarding the common course numbering and 2+2 programs (2010a). However, a later 2010 report found that increased oversight by the FCS and the Universities' Board of Governors had improved the implementation of program prerequisites, which should help degree completion and time to degree among transfer students (OPPAGA, 2010b). Despite early challenges, the long functioning 2+2 program remains one of the model programs in the country and has facilitated the successful transfer of hundreds of thousands of students with the vast majority successfully accomplishing their goal of a bachelor's degree.

» **State College Baccalaureate**

Four-year college degrees have become increasingly important for achieving a middle-class income and a high quality of life. For example, between 1973 and 2007, the share of jobs held by workers with a bachelor's degree rose from 9 percent to 23 percent, and demand for skilled labor is expected to grow (Carnevale & Rose, 2011). In response, many states have explored policy initiatives aimed at increasing overall four-year college degree attainment. Among these initiatives is the community college baccalaureate (CCB)—a program that allows students to earn a bachelor's degree while enrolled in community college (Floyd, Skolnik, & Walker, 2005). As of 2010, 18 states, including Florida, have adopted CCB programs, predominately in high-need fields such as nursing, teaching, and applied sciences (Russell, 2010).

The development of community colleges offering baccalaureate degrees has generated new interests and controversies. Proponents of the four-year degree at the community college argue that by eliminating the necessity of transferring, becoming acquainted with a new and very different institution, and the challenge of having to move to a new location, these programs will increase the likelihood that a student starting at a community college will earn her bachelor's degree there (Floyd et al., 2005). Likewise, proponents of the CCB in Florida argue that the program aligns with the colleges' mission of providing access to degrees and meeting local workforce needs.

In essence the colleges, by offering bachelor's degrees in specified areas, are meeting an unmet need in the Florida education system. Opponents have criticized this development for being wasteful and costly and argued that it results in mission creep, duplicated efforts, and threatens the quality of higher education (Floyd et al., 2005). Additionally, others argue that community colleges offering baccalaureate degrees may lose sight of their traditional missions of open access, serving underserved communities, and meeting local needs (Floyd et al., 2005).

Florida began experimenting with the idea of the community college baccalaureate in 2001 when the state enacted Senate Bill 1162 (SB 1162) authorizing St. Petersburg College to offer baccalaureate degrees in the fields of nursing, education, and information technology. At the time, and still today, these fields were identified as particularly "high need" and many thought community colleges could help supplement the workforce being produced by the four-year institutions. Along with this authorization, the state also provided \$1 million to St. Petersburg College to support this effort. In addition, SB 1162 established a preliminary process by which community colleges could seek approval by the State Board of Education to grant baccalaureate degrees in certain high-need fields (mostly education, nursing, and business). Over the next six years, a handful of community colleges in Florida sought, and received, approval to offer baccalaureate degrees. Then, in 2007, the state began to systematically review its comprehensive plan for postsecondary education when the Florida Board of Governors commissioned Pappas Consulting to conduct a study examining cost-effective means for providing undergraduate degrees to Florida residents (Pappas Consulting Group, 2008).

Based largely on the results of the Pappas report advocating for an expansion of community college campuses offering baccalaureate degrees while still maintaining their longstanding tradition of open access, the Florida Legislature passed Senate Bill 1716 (SB 1716) in 2008 further expanding and defining the process by which community colleges operate (all members of the State College System, established by SB 1716). On July 1, 2008, then-Governor Charlie Crist signed SB 1716 into law providing the authority for all campuses in the state college system to seek approval to offer baccalaureate degrees in the fields of education, nursing, and business. In fall 2008, 10 of the 28 members of the state community college system began to offer four-year degrees and currently the vast majority of the state college system offers four-year degrees (Florida Department of Education, 2005, 2012; Florida Senate Bill 1162, 2001; Florida Senate Bill 1716, 2008; Floyd, Falconetti, & Hrabak, 2008).

Enrollment growth in the FCS CCBs was moderate in the beginning when only a handful of colleges offered bachelor's degree programs; however, following the 2008 law. Data from 2014 indicates that around 6,000 state college students graduated with a bachelor's degree. The State Board of Education, which oversees the schools, by 2014 had never rejected a proposal for a new one (Hatter, 2014). This growth resulted in renewed criticism of the CCB in Florida. In 2014, Senator Joe Negron successfully passed a one year moratorium on new state college bachelor's degrees. He and others worried that colleges are creating programs outside local workforce needs and encroaching on existing university programs. The moratorium ended in June 2015. However, colleges must continue to demonstrate the workforce need of having a bachelor's degree program and must seek approval from the State Board of Education. Proponents of the CCB in Florida argue that the program aligns with the colleges' mission of providing access to degrees and meeting local workforce needs.

» State Student Financial Assistance

The largest financial aid program in Florida is the Florida Bright Futures Scholarship Program. Bright Futures is a state-sponsored, merit-based financial aid program. The program is funded through lottery proceeds and was first implemented in 1997. Florida is not alone in sponsoring a merit-based financial aid program. In the last two decades, some 15 states have adopted merit-based financial aid programs (Doyle, 2006; Zhang, Hu, & Sensenig, 2013). Historically, aid for students to attend postsecondary education had been need-based, where individuals and their families would receive awards based on demonstrated financial need. Merit-based scholarships were a departure from this approach as these awards are given to academically talented students, often with little or no requirement that the students have demonstrated need.

Since the introduction of these programs, there has been a general trend in higher education away from need-based aid. (NASSGAP, 2013; McLendon, Tandberg, & Hillman, 2014). Issues of access equity arise around merit-aid programs, particularly over students from low-income families. Critics of the programs have pointed out that

the financial aid is most likely to flow to middle and upper income students who would likely attend college anyway. Additionally, critics and scholars point out that lottery-funded merit-aid programs (as in Florida) are particularly regressive as not only do the benefits often flow to middle and upper income populations, but also lower income populations are more likely to play the lottery, thereby providing the bulk of the funding for the programs (Heller & Marin 2002).

The Bright Futures program consists of three types of awards with different eligibility requirements (See Table 4):

- » Gold Seal Vocational Scholars (GSV)
- » Florida Medallion Scholars (FMS)
- » Florida Academic Scholars (FAS)

The vast majority of students who receive a Bright Futures award attend one of the public universities in Florida. Relatively few of the students receiving the Academic Scholars award, which carries the highest average award, attend an FCS college (4.4 percent). A larger total number and share (20.8 percent) of Medallion Scholars awardees attend an FCS college. The program most targeted to state college students is the Gold Seal Vocational Scholars Program, which is for students enrolled in a career and technical education program/certificate. However, the program is relatively small with only 1,735 total awards made in 2013-14; nearly 60 percent of the awards go to students attending a state college.

A number of changes have been made in recent years. Originally, students were funded at 100 percent or 75 percent tuition awards, depending on award level, which is no longer the case. In 2009, the legislature instituted the flat rate awards. In 2011, the requirements became much stricter. For example, the required SAT score for the Academic Scholars award was increased from 980 to 1290 SAT. In the same year, community service hours were added. Finally, the budget has decreased from \$429 million in 2008-2009 to \$307 million in 2013-14.

Table 4: Bright Futures Programs Awards and Qualifications

Bright Futures Program	Number of Awards	Number Awarded to State College Students	Percent Distributed to State College Students	Total Spending	Average Award	Qualifications
Gold Seal Vocational Scholars	1,735	1,014	58.4	\$1,832,598	\$1,056	Enroll in a career or technical education program/certificate; 19 ACT, 880 SAT, or 322 PERT
Medallion Scholars	112,837	23,471	20.8	\$192,795,756	\$1,709	College preparatory curriculum; 3.0 high school GPA; 26 ACT or 1170 SAT
Academic Scholars	41,775	1,838	4.4	\$108,791,410	\$2,604	College preparatory curriculum; 3.5 high school GPA; 29 ACT or 1290 SAT

Source: <http://www.floridastudentfinancialaid.org/SSFAD/bf/bfacts.htm>

While the potential regressive nature of merit-aid program has been documented, so too have potential positive aspects, especially in regard to increased enrollments. For example, Zhang, Hu, and Sensenig (2013) found, in their evaluation of Bright Futures, that the program resulted in significant enrollment increases for both the public universities and colleges (the effect was larger for the universities). Many of these increases were due to students deciding to stay in-state for college rather than going out of state. Bright Futures also positively impacts degree production, however the effect was significantly smaller than for enrollments. Similar increases in four-year college enrollment and bachelor's degree completion have been found in other states, as well (Dynarski, 2008; Scott-Clayton, 2011).

Florida also maintains a number of smaller financial aid programs for which FCS students are eligible. These include the First Generation Matching Grant Program, which is a need-based grant program, available to students who demonstrate substantial financial need and who are attending a public college or university. The Florida Student Assistance Grant Program is also a need-based financial aid program which provides aid to needy

students attending both public and private institutions. These programs are much smaller than the Bright Futures Program and there is little publicly available data on them (FSSGP, 2015). Currently, the state financial aid system does not appear as conducive as it might be to encouraging FSC student enrollment and success and the bulk of the spending is among the public universities.

Compared to other states, Florida does very little in regard to need-based financial aid. Nationally, 48 percent of state grant dollars are distributed based on need alone. In Florida only 25.4 percent of its grant dollars are based on need alone. Also, nationally, states distribute an average of \$509 of need aid per FTE student; in Florida we distribute \$191 of need aid per FTE student (NASSGAP, 2013). Given the percentage of children living in low-income households in Florida, which far exceeds the national average, the state must be particularly cognizant how its educational policies affect these populations. It has been argued that given the FCS institutions' relative low costs that federal financial aid is sufficient for their students. However, according to the U.S. Department of Education data, even after accounting for federal financial aid of all types, there remains unmet need, even for the colleges' poorest students. In Table 5, net price is calculated by taking the total cost to an in-state, full-time student for the academic year (tuition and mandatory fees, books, supplies, and room and board costs), minus any federal financial aid. These costs are compared across three income categories. The table shows that students in lower income categories spend more for their education than wealthier students but their costs are high relative to their ability to pay.

Table 5: Institution Average Academic Year Net Price for Students Receiving Federal Financial Aid, by Income Band

Income	0 to \$30,000	\$30,001 to \$48,000	\$48,001 to \$75,000
Average Net Price	\$6,481.50	\$7,271.79	\$9,205.32

» Performance Based Funding for the State Colleges

State performance funding programs for higher education have become increasingly popular over the last 10 years. Currently, 26 states tie some or all of their funding for higher education to institutional performance. For the last two funding cycles, a portion of state funding for Florida public universities has been allocated via the Board of Governor's performance funding system and recently the State Board of Education approved performance funding for the state colleges, as well.

For state colleges, performance funding program implemented through 2015-16 included four metrics: job placement/continuing education; completion; retention; and entry-level salaries. Institutional performance is measured by comparing individual colleges against their past performance and/or against each other. These data are then converted into performance scores based on the weights assigned to each metric. Currently the completion and retention rate metrics receive more weight (0 to 10 points possible) than the job placement/continuing education and entry-level wages metrics (0 to 7.5 and 0 to 3, respectively). The difference in weighting is due to problems with the availability of workforce data on graduates who leave Florida.

Some \$40 million has been appropriated for performance funding for the state colleges. Half of this comes from new funding from state sources; half is from a proportional withholding of revenue from each college's base funding. The performance funding dollars are allocated based on which of three categories the individual colleges fall into as a result of their individual performance. Table 6 shows the three groupings and which colleges are under each.

The seven colleges with the highest point total are in the gold category (Gold Colleges), then of the remaining colleges, those with scores above one standard deviation below the mean are in the silver category (Silver Colleges), and those colleges whose point total falls more than one standard deviation below the mean are in the bronze category (Bronze Colleges). Gold Colleges have their base funding restored, receive a proportional amount of new performance dollars, and also a proportional amount of performance dollars that would have been allocated to the colleges in the bronze category based on the size of their recurring base budget and the total points they earned. Silver Colleges have their base funding restored and receive a proportional amount of performance dollars. Finally, Bronze Colleges have a percentage of their base funding withheld with the opportunity to submit an improvement plan to the State Board of Education and, upon showing progress in its implementation, have that

base funding restored (Florida Department of Education, 2015). An important point is that institutions may fall into a lower category based on, what one might consider, insignificant differences in performance. For example, the difference between being placed in the Silver category versus the Gold category came down to 0.18 for Chipola College. Statistically that is a very small difference, but to Chipola the difference in funding may have been quite significant.

While it remains unclear whether performance funding improves institutional outcomes, such programs help state policymakers identify their priorities for higher education (See Tandberg & Hillman, 2013). The FCS performance metrics utilized through 2015-16 emphasized student progress to completion and the colleges' workforce mission. However, the indicators failed to emphasize the colleges' traditional access mission. Generally, states have addressed access by including a metric regarding the enrollment of underrepresented groups (often measured as low-income student enrollments) or by weighting the retention and completion metrics by underrepresented students, in effect providing a bonus for each underrepresented student who is moved to completion. Such approaches guard against colleges' "creaming" easier to educate students by rewarding institutions which emphasize and expand educational opportunity for low-income students. Indeed, access metrics were considered and were in fact recommended by the FCS, however, the legislature and the State Board ultimately decided that the four metrics in the funding program adequately addressed their priorities for the state colleges. Given the percentage of children living in low-income households in Florida, which far exceeds the national average, the state must be particularly cognizant how its educational policies impact these populations. As of spring 2016, revisions to the FCS performance funding metrics are still being considered.

Furthermore, ongoing attention will need to be paid to those institutions that fall into the bottom three on the performance funding points. If year after year the same institutions frequently fall in the bottom three, and therefore lose funding, this may have long-term consequences for those institutions. It may reduce their capacity to serve their students.

Table 6: State Colleges' Performance Funding Points

Performance Category	College	Job Placement/ Continuing Education (0-7.5)	Completion Rates (0-10)	Retention Rates (0-10)	Entry Level Wages (0-3)	Total Points (0-30.5)
Gold	Santa Fe College	6.75	10	8	1.2	25.95
	Valencia College	7.5	8.67	9	0.3	25.47
	Tallahassee Community College	7.5	4.33	10	3	24.83
	Lake-Sumter State College	5.25	10	7	1.2	23.45
	Gulf Coast State College	3.75	10	7	1.2	21.95
	State College of Florida, Manatee-Sarasota	7.5	7.33	6	0.9	21.73
	Florida South Western State College	7.5	7.33	3	3	20.83
Silver	Chipola College	3.75	10	6	0.9	20.65
	Broward College	5.25	1.67	10	3	19.92
	Florida Gateway College	0.75	6	10	3	19.75
	Seminole State College of Florida	6	4	8	0.9	18.9
	Hillsborough Community College	5.25	6.67	5	1.8	18.72
	Miami Dade College	6	1	9	2.7	18.7
	Eastern Florida State College	3.75	7.33	7	0.3	18.38
	Palm Beach State College	5.25	2.67	10	0.3	18.22
	Polk State College	7.5	3	5	2.7	18.2
	St. Johns River State College	4.5	5	8	0.3	17.8
	Florida Keys Community College	0.75	8	6	3	17.75
	South Florida State College	3.75	7.33	2	3	16.08
	Florida State College at Jacksonville	0.75	5	8	1.5	15.25
	North Florida Community College	2.25	8.33	4	0.6	15.18
	St. Petersburg College	3.75	1	7	3	14.75
	Indian River State College	3	5	5	0.9	13.9
Bronze	Pasco-Hernando State College	4.5	1.67	5	2.1	13.27
	College of Central Florida	0.75	5	6	0.3	12.05
	Daytona State College	0.75	6.67	3	0.9	11.32
	Northwest Florida State College	2.25	6.67	1	0.3	10.22
	Pensacola State College	0.75	1.33	2	3	7.08
	Average	4.18	5.75	6.32	1.62	17.87
	Standard Deviation	2.38	2.90	2.60	1.10	4.62

Source: Florida Department of Education (2015)

» The \$10,000 Degree

In 2011, then Governor Rick Perry of Texas challenged Texas's public universities to develop four-year degrees costing no more than \$10,000 in tuition, fees, and books. Florida Governor Rick Scott then presented a similar challenge to Florida public institutions. While many cheered the possibility of significantly reduced costs to students, these challenges have also been met with some skepticism and concern. Critics argue that quality may suffer; that while the price to the student might be reduced, the cost to the institution may not; and that natural inflation will make sustaining the \$10,000 price impossible, especially if quality is to be maintained. Nevertheless, a number of institutions have attempted to craft \$10,000 bachelor's degrees. In Texas, three higher education partners crafted an "Affordable Baccalaureate" using competency-based and on-line education, however, for those who arrive with no prior college credits, the cost will significantly exceed \$10,000 (Lindsay, 2014). In Florida, 23 colleges from the FCS have students enrolled in what they are calling \$10,000 four-year degree programs. The programs only apply to specific majors and, in some cases, students must enter the programs with accelerated learning credits. Furthermore, the \$10,000 price only includes tuition (Kliegman, 2014).

Looking at the actual data on costs to students from the most recent FCS Fact Book (2014) (Fall 2012-13 data, so current costs to students would be greater), the average price of a four-year degree can be calculated using the average tuition and mandatory fees for the first two years (lower level costs) and the average tuition and mandatory fees for the second two years (upper level costs), and then adding an estimate of the average cost for books per year, \$1,200 (we calculated these costs based on a review of FCS college websites). These data are shown in Table 5. While the average price when only tuition is considered gets close to the \$10,000 mark, other mandatory fees move the price well beyond that mark. When books are considered the price nearly doubles the \$10,000 goal (Florida Department of Education, 2014). Regardless of the inflation measure (Consumer Price Index or one of the higher education specific measures), normal yearly inflation will result in the prices going up year upon year, moving further away from the \$10,000 mark, even if periodically institutions maintain tuition and fee rates.

Table 5: Average Costs to FCS Students for a Four-year Degree (Fall 2012-13)

	Tuition Only	Tuition and Fees	Tuition, Fees, and Books
Average Costs	\$10,285	\$13,418	\$18,218

Source: FCS Fact Book (2014)

Despite the difficulty in making the \$10,000 four-year degree the norm, the challenge has resulted in a number of institutions attempting to identify ways of reducing costs to students, often through on-line courses (Lindsay, 2014; Kliegman, 2014; Bidwell, 2014; Fain, 2014; Sverapa, 2015). New Jersey and California have recently announced \$10,000 four-year degree program challenges, and Southern New Hampshire University (SNHU) has announced online, self-paced, competency-based four-year degrees in health care management and communications. The Southern New Hampshire offerings are called "College for America," and the total cost in tuition and fees will be \$10,000, unless a student completes the program quicker which may reduce the cost. However, these costs do not appear to include what the students might pay for books (Fain, 2014).

» State College Governance

While governed by local boards, the FCS colleges are coordinated under the jurisdiction of the State Board of Education. The Board includes seven members appointed by the Florida Governor. The Board, in turn, appoints the Commissioner of Education. Administratively, the Chancellor of Florida Colleges is the chief executive officer of the FCS. The Chancellor is hired by and reports to the Commissioner of Education who serves as the chief executive officer of Florida's K-20 System and the Florida Department of Education (FL DOE). The Chancellor serves as the head of the Division of Florida Colleges within the FL DOE. The Division serves as the state office with the responsibility for policy implementation, rule development, data collection and analysis, regulation, compliance, and system advocacy for the FCS. The Division's official mission statement reads: "The Division

of Florida Colleges is a dynamic and responsive Department of Education team. We provide leadership and advocacy to promote education innovation and continuous improvement within The Florida College System, fueling economic development for the state of Florida and its citizens.”

Florida’s arrangement for the coordination and governance of its postsecondary institutions is unique among the states. Florida is the only state which has a state governing board for its universities (The Board of Governors) and local boards for each university. It also utilizes the State Board of Education as the policy and coordination board for the community/state colleges, which are locally governed by their individual boards of trustees (Education Commission of the States, 2013). However, Florida’s arrangement is rooted in the state’s historic emphasis on local control and a desire for statewide coordination between K-12 education and the community/state colleges. Each FCS college board, usually referred to as the Board of Trustees, is comprised of individuals from the community served by the college, who are appointed by the Governor. Each board varies in the number of trustees that comprise the team; however, most contain between five to 10 trustees. Florida Administrative Code (Section 6A-14.024) dictates the composition of the Board of Trustees. The number of trustees is derived from the number of county district boards that fall under the region served by the college. Trustees are appointed for four-year terms and are eligible for reappointment. The Florida Administrative Code also calls for the Governor to stagger appointments and terminations on each board of trustees so that returning trustees can ensure continuity in the activity of the board of trustees.

A number of individuals interviewed for this report who were either involved in the early planning for the community/state colleges and the FCS, who were former officials within the FCS, or who are current college presidents, indicated that the FCS might benefit from its own state board. The observation was made that the State Board of Education, by necessity, must focus the majority of its attention on K-12 education leaving little space for the FCS. Some individuals were concerned that K-12 issues dominate the agenda, and that the FCS does not receive the kind of attention and advocacy it deserves. These individuals argued that the FCS needs a centralized board and state office, which are independent of the State Board of Education and the FL DOE, that may be able to provide stronger advocacy for the FCS, develop specific expertise in the issues related to the FCS, and devote its sole attention to the needs of the FCS institutions. The individuals advocating for an independent state board for the FCS also argued that the colleges ought to retain their local boards of trustees. However, as mentioned earlier, Florida’s arrangement is rooted in the state’s historic emphasis on local control and statewide coordination between K-12 education and the community/state colleges. If a separate governance structure were to be implemented for the state colleges, the clear institutional link between the state colleges and K-12 at the state level would be lost, possibly resulting in a loss of ongoing coordination.

» Free Community College

There has been significant recent attention paid to the idea of “free community college.” This attention has been driven by President Obama’s advocacy for a national program meant to make community college free. Two states, Tennessee and Oregon, have already passed free community college legislation. The Tennessee Promise is a last-dollar scholarship, meaning the initiative covers all tuition and fees that federal grants and state scholarships and assistance programs do not. The Tennessee Promise is offered to every graduating high school senior in the state who plans to attend a two-year college degree program. However to be eligible, students must maintain full-time status and a 2.0 grade point average, along with meeting with mentors and completing at least eight hours of community service prior to enrollment. The Oregon Promise is structured similarly as a last-dollar scholarship; however, every eligible student will receive at least \$1,000. To be eligible students must be a resident of Oregon and receive a high school diploma, GED or have completed the 12th grade. Students must have maintained a 2.5 or greater GPA.

While Oregon’s program will not go into effect until the 2016-2017 academic year, Tennessee’s program enrolled its first students in Fall 2015. The Tennessee Promise has 22,534 college freshmen, well above the 13,000 students projected for the program a year ago. In 2013, about 11,400 incoming freshmen entered the community colleges straight after high school. Therefore, the recent participation numbers represent a considerable increase (nearly double) of students entering the community colleges directly from high school, indicating that the Tennessee Promise has had a significant impact on these students. What is not known is how many of the Tennessee Promise students would have attended college regardless of the initiative. Also, it is not known how many of these students were diverted away from another sector (e.g., the public universities or the private colleges and universities).

One argument against the “free community college” idea is that such universal programs tend to be inefficient. This is because some of the benefits will flow to those who would enroll in college even without the benefit and who could afford to pay without such aid. Critics argue that such programs should instead be targeted at those who are less likely to attend without financial assistance (make such programs need-based). Likewise, critics argue that such programs should also be targeted at students who enroll in four-year universities, as well as community colleges, because of the much larger pay-off to bachelor’s degrees relative to associate degrees (Heller, 2015).

» Developmental Education in Florida

Developmental coursework in postsecondary education is defined as coursework completed post-high school that is not yet at the college-level and does not count for credit toward a degree. Developmental coursework is often referred to as “remedial education.” Students may be required to take developmental coursework based on their score on a placement exam, formerly the Postsecondary Education Readiness Test (PERT) in Florida. Because a significant number of students graduate from high school unprepared for college-level work, developmental education has become very costly to both the student and the institution/state. Compounding this issue is that academic progress (course completion, persistence, degree/certificate completion) is very low for students in developmental education. Nationally, 50 percent of all students seeking an associate degree require at least one developmental course (Bailey, Jeong, & Cho, 2010; Complete College America, 2012). The National Center for Education Statistics, in 2010, found that 1.7 million beginning students require some developmental education each year (NCES, 2012) and recent estimates also indicate that over \$3 billion is spent each year providing developmental education (Alliance for Excellent Education, 2011). Only a small fraction of students (28 percent) who have taken developmental education actually complete educational credentials from college (Complete College America, 2012).

Florida students use developmental education at a higher rate than the nation. Seventy percent of first-time in college (FTIC) community college students were enrolled in at least one developmental course in the 2009-2010 school year costing \$154 million (OPPAGA, 2013).

The debate around developmental education has centered on the question: does developmental education (DE) help underprepared students in a way that is efficient? While students needing developmental education are often less likely to succeed than those who do not require it, it is hard to determine the actual impact of taking developmental education. Without developmental education, students may be even less likely to succeed.

Florida recently set out to reform DE in the state. Through Senate Bill 1720, passed in 2013, Florida significantly changed how DE is to be offered and for whom it is required. There are two main components to the law. 1) For *exempt students*, placement tests are no longer required and students are no longer required to take DE courses, regardless of academic preparation. *Exempt students* include: recent graduates from Florida public schools and any student who entered 9th grade in a Florida public school in 2003-2004, or any year thereafter and earned a Florida standard high school diploma. Active duty members of any branch of the United States Armed Services are also exempt. 2) Developmental courses must be offered in a way that is designed to accelerate student progression, including:

1. *Modularized* strategies that break course material into smaller instructional units (i.e., modules) so that students can progress at their own pace through areas where they need additional support.
2. *Compressed* structures that are shorter than the typical 15-16 week semester; usually offered in time spans of seven to eight weeks.
3. *Contextualized* courses that are focused toward a specific career path rather than a general pathway; i.e., DE math for liberal arts majors as opposed to DE for college algebra.
4. *Co-requisite* courses where DE students are expected to do college-level work with the help of a paired remedial class or supplemental instruction (e.g., tutoring, study groups, additional class periods, and study skills workshops).

In addition, FCS institutions must provide comprehensive advising and additional academic support services to DE students.

Proponents of the law argued that DE was not working in helping students successfully transition to college-level work and, therefore, students needed greater flexibility in deciding whether to take DE and in the types of instruction they received if they decided to enroll in DE. Critics of the new law argued that too many students who would have required DE will opt out and will likely not be successful in college-level work.

While it is still too early to assess the impact of the legislation, the new flexibility appears to have decreased the number of students in DE and increased the number of students in entry-level college level courses. However, a number of students who would have likely been required to take developmental education are not only skipping developmental education, they appear to be skipping the associated college level courses (Scheuch, 2014; Hu, Park, et al, 2015). As such, the share of first-time-in-college students enrolling in developmental education has declined by 16 percentage points in math, 11 percentage points in reading and 5 percentage points in writing. Enrollments in college-level courses; however, have increased by 11 percentage points in English and 12 percentage points in math while passing rates for college-level courses have declined by 2 percentage points in English and 10 percentage points in math. At the same time, however, the total number of students successfully passing an entry-level college course has increased in 2014 following the implementation of the legislation. Whereas 33.9 percent of entering students successfully passed an entry-level English Composition course and 11.3 percent passed an entry-level intermediate algebra course in 2013, 40.9 percent and 16.1 percent did so in 2014, respectively (Hu, Park, & Tandberg, 2015).

» Final Considerations

Florida's system of state colleges is, in many ways, a model for the rest of the nation. With graduation rates topping just about every other state in the country, the colleges appear to perform at a very high level. Nevertheless, Florida's educational attainment rate lags the national average, meaning that the state is forfeiting the benefits which flow from having a more highly educated society. Florida's median household income is below the national median and it has a relatively large percentage of people below the poverty level and percentage of low income families with children. These issues may, in part, be addressed by moving more people into postsecondary education, especially from populations that are currently being underserved (low-income and minority groups). The primary access point for these individuals, and where we are likely to see the largest boost in enrollments, is in our state colleges.

Based on this research of trends and policies, several issues come to the fore:

- The performance funding system utilized through 2015-16 does not reward colleges that serve large portions of low-income students and thus may not do enough to encourage the enrollment of low-income students. Florida will only increase its education attainment rates by doing a better job of educating underrepresented populations such as lower-income individuals. Florida far exceeds the national average in the percentage of children who come from low-income families. Therefore, colleges which do a good job of enrolling these populations should be rewarded. Furthermore, low-income students also tend to be those who are more difficult to graduate and require more resources from the colleges. In that regard, the current performance funding program puts institutions which serve low-income students at a disadvantage. From a technical perspective, this is an easy fix. The state could include a metric regarding the enrollment of Pell Grant eligible students or weight the retention and completion metrics by Pell Grant eligible student, in effect providing a bonus for each Pell Grant student who is moved to completion.
- While the Bright Futures Scholarship has done an excellent job keeping our best and brightest from leaving the state for college, Florida has not done enough from a financial aid perspective to encourage the enrollment of underserved populations, those populations most likely to attend an FCS institution. Expanding the current need-based financial aid programs would help address this issue and help Florida raise our educational attainment rates. Florida far exceeds the national average in the percentage of children who come from low-income families. Making college accessible for these students is important to the state's economic future.

- Florida's public funding for the FCS institutions is low relative to the rest of the nation. If we desire more from the FCS institutions, appropriate funding should be provided. A wealth of research shows that public institution performance (measured a number of different ways) is directly impacted by the level of state fiscal support provided to the institutions. Increased state appropriations are associated with increased performance (e.g., Bound, Lovenheim & Turner, 2012; Kane & Orszag, 2003; Robst, 2001; Titus 2009; Toutkoushian & Hillman; 2012; Volkwein, 1989; Zhang, 2006). With the introduction of performance funding, the state should ensure that the colleges have the resources necessary to meet performance expectations.
- The governance of Florida's community colleges may warrant consideration. Given the number and complexity of the K-12 education issues facing the State Board of Education and the important and complex needs of the FCS, allowing the FCS to be overseen by its own board may make some sense. This would allow a single state board for the FCS to gain expertise in the issues facing the system and become informed advocates on behalf of the FCS. Whether such a change would result in increased institutional performance or increased student success is not clear. Likewise, a separate state governance structure for the state colleges may result in a loss of coordination between K-12 education and the state colleges.

The FCS institutions are, as President Obama said about community colleges nationwide, the heroes of our education system. However, to fully realize their potential as access points to the American dream and engines of the state's economy, they require a state fiscal and policy environment conducive to their success. Attention to the issues listed here may help identify new policy solutions which could help create such an environment.

» References

- Alliance for Excellent Education. (2011). Saving now and saving later: How high school reform can reduce the nation's wasted remediation dollars. Washington, DC. Retrieved from <http://all4ed.org/reports-factsheets/saving-now-and-saving-later-how-high-school-reform-can-reduce-the-nations-wasted-remediation-dollars/>.
- Bailey, T., Jeong, D. W., & Cho, S. W. (2010). Referral, enrollment, and completion in developmental education sequences in community colleges. *Economics of Education Review*, 22(2), 255–270.
- Bidwell, A. (2014). The \$10,000 community college B.A. U.S. New & World Report. Retrieved: <http://www.usnews.com/news/articles/2014/09/29/the-10-000-community-college-ba>
- Blocker, C., Plummer, R., & Richardson, R. (1965). *The two-year college: A social synthesis*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Bound, J., Lovenheim, M. F., & Turner, S. (2012). Increasing time to baccalaureate degree in the United States. *Education*, 7(4), 375-424.
- Charbonnet, J. (1984, July 19). Personal interview with R. L. Johns. Retrieved from <http://ufdcimages.uflib.ufl.edu/UF/00/09/32/92/00001/AL093.pdf>
- Chipola College. (n.d.). History. Retrieved from <https://www.chipola.edu/cjchist.htm>
- Complete College America. (2012). Remediation: Higher education's bridge to nowhere. Washington, DC. Retrieved from <http://www.completecollege.org/docs/CCA-Remediation-final.pdf>.
- Division of Florida Colleges. (n.d.). About us. Retrieved from <http://www.fldoe.org/schools/higher-ed/fl-college-system/about-us>
- Doyle, W. R. (2006). Adoption of merit-based student grant programs: An event history analysis. *Educational Evaluation and Policy Analysis*, 28, 259–285.
- Dynarski, S.M. (2008). Building the stock of college-educated labor. *Journal of Human Resources*, 43(3), 576-610.
- Education Commission of the States (2013). 50-state comparison: Postsecondary governance structures. Retrieved from: <http://www.ecs.org/postsecondary-governance-structures/>
- Fain, P. (2014). Competency and affordability. Inside Higher Ed. Retrieved: <https://www.insidehighered.com/news/2014/05/06/college-america-hits-10000-mark-new-competency-based-bachelors-degrees>
- Florida Citizens Committee on Education. (1947a). Education and the future of Florida: A report of the comprehensive study of education in Florida. Tallahassee, FL: Author. Retrieved from http://digitool.fcla.edu/R/XY24VC6SNUSGPXD78PAEV/A93SNP9B4AQLH1HNSK3J47KAJIX9R-01399?func=dbin-jump-full&object_id=2575245&local_base=GEN01&pds_handle=GUEST
- Florida Citizens Committee on Education. (1947b). Education and Florida's future: A digest of the report of the comprehensive study of education in Florida. Tallahassee, FL: Author. Retrieved from <http://catalog.hathitrust.org/Record/006580409>
- Florida College System. (2014). The Florida College System 2014 annual report. Tallahassee, FL: Author. Retrieved from https://www.floridacollegesystem.com/sites/www/Uploads/Publications/2014_FCS_Annual_Report.pdf
- Florida College System. (2015a). Division of Florida colleges. Tallahassee, FL: Author. Retrieved from <http://www.fldoe.org/schools/higher-ed/fl-college-system/index.shtml>
- Florida College System. (2015b). The fact book: Report for the Florida College System. Tallahassee, FL: Author. Retrieved from <http://www.fldoehub.org/CCTCMIS/c/Documents/Fact%20Books/fb2015.pdf>
- Florida Department of Economic Opportunity. (n.d.). Florida strategic plan for economic development. Tallahassee, FL: Author. Retrieved from http://www.floridajobs.org/Business/FL5yrPlan/FL_5yrEcoPlan.pdf
- FBOG (2010). Florida's "2+2 Pathways to Success Program" earns national nod. Tallahassee, FL: Florida Board of Governors. Retrieved from: <http://www.flbog.edu/pressroom/news.php?id=408>
- Florida Department of Education (2014). Florida statewide course numbering system. Tallahassee, FL: Author. Retrieved from: http://scns.fldoe.org/scns/admin_uploads/SCNS_Handbook_2014.pdf
- Florida Department of Education (n.d.). Planning on pursuing a bachelor's degree? 2+2 pathways to success. Tallahassee, FL: Author. Retrieved from: <https://www.flvc.org/documents/96858/97591/2%2B2+Pathways+to+Success.pdf/2a6c1f9b-36df-42af-8e07-a23a4cf8bbdd>

- Florida Department of Education (2015). Florida college system performance funding overview. Tallahassee, FL: Author.
- Florida Department of Education. (2012). List of approved bachelor's degree programs by college. Available online at www.fldoe.org/cc/students/bach_degree.asp
- Florida Department of Education. (2005). History of the need for baccalaureates policy paper. Available online at www.fldoe.org/cc/students/pdf/HistBacc.pdf
- Florida Senate Bill No. 1162. (2001). Retrieved June 13, 2013, from <http://archive.flsenate.gov/data/session/2001/Senate/bills/billtext/pdf/s1162er.pdf>
- Florida Senate Bill No. 1716. (2008). Retrieved June 13, 2013, from http://archive.flsenate.gov/session/index.cfm?m&BI_Mode=ViewBillInfo&Mode=Bills&SubMenu=1&Year=2008&billnum=1716
- Florida Legislature. (2004, March 29). Senate staff analysis and economic impact statement: CS/CS/SB 2388. Retrieved from <http://archive.flsenate.gov/data/session/2004/Senate/bills/analysis/pdf/2004s2388.aed.pdf>
- Florida Legislature. (2004, April 20.) House of Representatives staff analysis: HB 303 w/ CS postsecondary education. Retrieved from <http://archive.flsenate.gov/data/session/2004/House/bills/analysis/pdf/h0303c.edk.pdf>
- Florida Legislature. (2014). The Florida Statutes, Title XLVIII, Chapter 1104.65. Tallahassee, FL: State of Florida Government Publications.
- Florida TaxWatch. (2006). The funding of Florida public education (K-12). Tallahassee, FL: Author. Retrieved from <http://www.floridataxwatch.org/resources/pdf/112006EducationFundingPrimer.pdf>
- Floyd, D.L., Falconetti, A.M.G., & Hrabak, M.R. (2008). Baccalaureate Community Colleges: The New Florida College System. *Community College Journal of Research and Practice*, 33(2), 195-202.
- Floyd, D.L., Skolnik, M.L., Walker, K.P. (Eds.) (2005) *The Community College Baccalaureate: Emerging Trends & Policy Issues*. Sterling, VA: Stylus.
- Furchtgott-Roth, D., Jacobson, L., & Mokher, C. (2009). Strengthening community colleges' influence on economic mobility. Washington, D.C.: Economic Mobility Project. Retrieved from <http://www.frbsf.org/economic-research/files/Jacobson.pdf>
- FDEO (2010). The Florida strategic plan for economic development. Tallahassee, FL: Author.
- FSSGP (2015). State scholarship and grant programs. Tallahassee, FL: Author. Retrieved from: <http://www.floridastudentfinancialaid.org/SSFAD/home/uamain.htm>
- Haskins, R. (2008). Education and economic mobility. In J. B. Isaacs, I. V. Sawhill, & R. Haskins, *Getting ahead or losing ground: Economic mobility in America* (pp. 91-101). Washington, D.C.: Economic Mobility Project. Retrieved from http://www.brookings.edu/~media/research/files/reports/2008/2/economic-mobility-sawhill/02_economic_mobility_sawhill_ch8.pdf
- Hatter, L. (2014). Colleges reach truce with one-year moratorium on new B.S. degrees. Tallahassee, FL: WFSU. Retrieved from: <http://news.wfsu.org/post/colleges-reach-truce-one-year-moratorium-new-bs-degrees>
- Heller, D. E., & Marin, P. (Eds.). (2002). *Who should we help? The negative social consequences of merit aid scholarships*. Cambridge, MA: Harvard Civil Rights Project.
- Hirt, J. B. (2009). The importance of institutional mission. In G. S. McCellan & J. Stringer (Eds.). *The Handbook of Student Affairs Administration* (21-44). San Francisco, CA: Jossey-Bass.
- Holcombe, W. N. (2006). Florida's community colleges: Reflections and projections. *Community College Journal of Research and Practice*, 21(4), 351-363. doi: 10.1080/1066892970210402
- Holcombe, W. N. (2012). The Florida College System/Florida College System historical update. Tallahassee, FL: Florida College System. Retrieved from <http://www.myafchome.org/assets/site/the%20florida%20community%20college%20system%20history%20with%20update.pdf>
- Hu, S., Park, T., Woods, C., Tandberg, D., Bertrand Jones, T., Hankerson, D., & Richard, K. (2015). *How Students Make Course Enrollment Decisions in an Era of Increased Choice: Results from a Survey of Enrollment Patterns and Choice Factors*. Tallahassee, FL: Center for Postsecondary Success.
- Hu, S., Park, T., & Tandberg, D. (2015, October 20). Florida developmental education redesign research project: Updates and plans. Presentation at the Florida House Subcommittee on Higher Education and the Workforce, Tallahassee, FL. Retrieved from <http://www.myfloridahouse.gov/Sections/Documents/loaddoc.aspx?PublicationType=Committees&CommitteeId=2853&Session=2016&DocumentType=Meeting%20Packets&FileName=hews%2010-20-15.pdf>

- Joliet Junior College. (n.d.). History. Retrieved from <http://www.jjc.edu/college-info/Pages/history.aspx>
- Kane, T., & Orszag, P. (2003). Funding restrictions at public universities: Effects and policy implications. Brookings Institution Working Paper.
- Kliegman, J. (2014). Scott says all 4-year state colleges offer \$10,000 degrees. Tampa Bay Times – Miami Herald. Retrieved: <http://www.politifact.com/florida/statements/2014/mar/04/rick-scott/scott-says-all-4-year-state-colleges-offer-10k-deg/>
- Lindsay, T.K. (2014). Texas's 'Impossible' \$10k degree marches on. Real Clear Policy. Retrieved: http://www.realclearpolicy.com/blog/2014/04/18/texas_impossible_10k_degree_marches_on_916.html
- McKinney, L. & Novak, H. (2013). The relationship between FAFSA filing and persistence among first-year community college students. *Community College Review*, 41(1), 63-85.
- McKinney, L. & Novak, H. (2015). FAFSA filing among first-year college students: Who files on time, who doesn't, and why does it matter? *Research in Higher Education*, 56(1), 1-28.
- McLendon, M. K., Tandberg, D. A., & Hillman, N. W. (2014). Financing College Opportunity Factors Influencing State Spending on Student Financial Aid and Campus Appropriations, 1990 through 2010. *The ANNALS of the American Academy of Political and Social Science*, 655(1), 143-162.
- Morris, A. (1957, March 3). Chipola Junior College good example. *Sarasota Herald-Tribune*, p. 6. Retrieved from <https://news.google.com/newspapers?id=PjsgAAAAIBAJ&sjid=WQEAAAAIBAJ&pg=5148%2C317200>
- Museum of Florida History. (2015). Thomas LeRoy Collins. Retrieved from <http://www.museumoffloridahistory.com/resources/collections/governors/about.cfm?id=40>
- NASSGAP (2013). Annual NASSGAP survey report. Author.
- National Center for Education Statistics. (2015, May). Undergraduate enrollment. Retrieved from http://nces.ed.gov/programs/coe/indicator_cha.asp
- Olson, K. W. (1974). *The GI Bill, the veterans, and the colleges*. University Press of Kentucky.
- OPPAGA (2013, Feb. 20). College remediation. Presentation at the Florida Senate the 2013 Regular Session Appropriations Subcommittee on Education Meeting, Tallahassee, FL. Retrieved from http://www.flsenate.gov/PublishedContent/Committees/2012-2014/AED/MeetingRecords/MeetingPacket_2056.pdf.
- OPPAGA (2002, January). Articulation works for most community college transfer students, but some problems continue. Tallahassee, FL: Author.
- OPPAGA (2007, March). Institutions do not have to accept transfer credit for many of the courses in the statewide course numbering system. Tallahassee, FL: Author.
- OPPAGA (2008, March). Inconsistent implementation of common prerequisites creates barriers to effective 2+2 articulation. Tallahassee, FL: Author.
- OPPAGA (2010a, January). Most AA graduates pursue baccalaureate degrees, but many lack information about articulation policies. Tallahassee, FL: Author.
- OPPAGA (2010b, May). University implementation and state oversight of common program prerequisites have improved. Tallahassee, FL: Author.
- Palm Beach State College. (2015). Celebrating our roots. Retrieved from <http://www.palmbeachstate.edu/history/>
- Pappas Consulting Group. (2008). Proposing a blueprint for higher education in Florida: Outlining the way to a long-term master plan for higher education in Florida. Tallahassee, FL: Pappas Consulting Group.
- Park, T. (2015). The impact of full time enrollment in the first semester on community college transfer rate: New evidence from Teas with pre-college determinants. *Teachers College Record*, 117(12), 1-34.
- Pensacola State College. (2013). The college. Catalog and Student Handbook 2012-2013, (55)2, 1-4. Pensacola, FL: Author. Retrieved from <https://pensacolastate.edu/docs/catalog/1213cat.pdf>
- Pensacola State College. (2014). History of PSC. Retrieved from <http://www.pensacolastate.edu/history-of-psc/>
- Preuss, G. B. (2009). *To get a better school system: One hundred years of education reform in Texas*. College Station, TX: Texas A&M University Press.
- Robst, J. (2001). Cost efficiency in public higher education institutions. *Journal of Higher Education*, 730-750.
- Russell, A. (2010). Update on the community college baccalaureate: Evolving trends and issues. Washington, DC: American Association of State Colleges and Universities.

- Russon, G. (2015, March 10). Senator seeks limits on state-college 4-year degrees. Orlando Sentinel. Retrieved from <http://www.orlandosentinel.com/features/education/os-valencia-bachelor-degrees-20150310-story.html>
- Scheuch, K. (2014). Developmental education reform first look: Summer & Fall 2014 data. Tallahassee, FL: Florida Department of Education: Retrieved from: <https://www.floridacollegesystem.com/cc2015>
- Scott-Clayton, J. (2011). On money and motivation: A quasi-experimental analysis of financial incentives for college achievement. *Journal of Human Resources*, 46(3), 614-667.
- Smith, W. (1994). *Magnificent twelve: Florida's black junior colleges*. Winter Park, FL: Four G Publishers.
- St. Petersburg College. (2015). History of SPC. Retrieved from <https://www.spcollege.edu/history/>
- St. Petersburg Junior College. (2002). 2001-2002 fact book. Retrieved from <http://www.spcollege.edu/central/ir/factbook2001/>
- Sterling, R. (2001). *Joliet Junior College 1901 to 2001*. St. Louis: G. Bradley Publishing.
- Stratton, T. (2015). Exploring the difference in undergraduate student success between rising college juniors and transfer students from the Florida College System. Unpublished doctoral dissertation, Florida State University.
- Stewart, P., & Hanna, R. (2014). Florida College System baccalaureate accountability. Tallahassee, FL: The Florida College System. Retrieved from <http://www.fldoe.org/core/fileparse.php/7724/urlt/0072357-fyi-baccalaureateaccountability.pdf>
- Sverapa, J. (2015). Bill to encourage NJ colleges & universities to offer \$10,000 degree programs. PolitickerNJ. Retrieved: <http://politickernj.com/2015/03/bill-to-encourage-nj-colleges-universities-to-offer-10000-degree-programs/>
- Tandberg, D. A., & Hillman, N. W. (2013). State performance funding for higher education: Silver bullet or red herring? WISCAPE Policy Brief. Retrieved from <http://wiscapewisc.edu/wiscapewisc/publications/policy-briefs/pb018>
- Tillery, D., & Deegan, W. (1985). The evolution of two-year colleges through four generations. In Deegan, W., & Tillery, D. (Eds.), *Renewing the American community college: Priorities and strategies for effective leadership* (pp. 3-33). San Francisco, CA: Jossey-Bass Publishers.
- Titus, M. A. (2009). The production of bachelor's degrees and financial aspects of state higher education policy: A dynamic analysis. *The Journal of Higher Education*, 80(4), 439-468.
- Toutkoushian, R. K., & Hillman, N. W. (2012). The impact of state appropriations and grants on access to higher education and outmigration. *The Review of Higher Education*, 36(1), 51-90.
- University of California System Academic Senate. (1991). 1991, University of California: In memoriam. Berkeley, CA: Author. Retrieved from <http://texts.cdlib.org/view?docId=hb4t1nb2bd&brand=calisphere&chunk.id=meta>
- Valdes, Plano B. (1975). A study of the scope of cooperation and coordination between community colleges and community schools in Florida's Community College Districts (Doctoral Dissertation). Retrieved from Proquest Dissertations and Abstracts.
- Volkwein, J. F. (1989). Changes in quality among public universities. *The Journal of Higher Education*, 136-151.
- Wattenbarger, J. L. (1953). *A state plan for public junior colleges with special reference to Florida*. Gainesville, FL: University of Florida Press.
- Wattenbarger, J. L. (2000, April 17). Colleges should stick to what they do best. *Community College Week*, 12(18), pp. 4-5. Retrieved from <http://search.ebscohost.com.ezproxy.fgcu.edu/login.aspx?direct=true&db=a9h&AN=3038540&site=ehost-live>
- Wattenbarger, J. L., & Albertson, H. T. (2007). A succinct history of the Florida community college system. Tallahassee, FL: Association of Florida Colleges. Retrieved from <http://www.myafchome.org/assets/site/the%20florida%20community%20college%20system%20history%20with%20update.pdf>
- Wellman, J. V. (2002). State policy and community college-baccalaureate transfer (National Center Report #02-6). San Jose, CA: The National Center for Public Policy and Higher Education.
- Zhang, L. (2006). Does public funding for higher education matter? Cornell University, School of Industrial and Labor Relations, Working Paper. Retrieved from: <http://digitalcommons.ilr.cornell.edu/workingpapers/149/>
- Zhang, L., Hu, S., & Sensenig, V. (2013). The effect of Florida's Bright Futures program on college enrollment and degree production: An aggregated-level analysis. *Research in Higher Education*, 54(7), 746-764.

» Endnotes

1. The share of families that met three criteria: (1) the family income was less than twice the federal poverty level; (2) at least one parent worked 50 or more weeks during the previous year; (3) there was at least one “own child” under age 18 in the family.
2. While the Pell Grant recipient data is the only metric we have for low-income student enrollment by college, it is a very imperfect one. In fact, while filing a FAFSA is necessary to receive Pell, approximately 40% of all Pell eligible community college students do not file the FAFSA. Likewise, the lowest income students tend to be less likely to fill out a FAFSA compared to moderately poor and middle income students (McKinney & Novak, 2013; McKinney & Novak, 2015).
3. <http://www.higheredinfo.org/dbrowser/index.php?submeasure=24&year=2009&level=nation&mode=graph&state=0>
4. <https://s3.amazonaws.com/PCRN/docs/crosswalks/CIP%20SOC%20NAICS%20Clusters%20Crosswalk-092309.xlsx>
5. The U.S. Bureau of Labor Statistics defines cost estimators as individuals who “collect and analyze data in order to estimate the time, money, materials, and labor required to manufacture a product, construct a building, or provide a service” (<http://www.bls.gov/ooh/business-and-financial/cost-estimators.htm>).
6. Individuals interviewed for this study include former senior executives of what is now the FCS as well as current executives in the FCS central office, two college presidents, and legislative staff who assist with education committee affairs.
7. The Florida College System: Associate in Arts Degrees and Transfer Students (2016). Tallahassee, FL: Florida Department of Education, Division of Florida Colleges.
8. We note, however, that FCS institutions do not set book prices.

Beginning in 2005, the LeRoy Collins Institute has published a number of reports in a series called *Tough Choices: Shaping Florida's Future*. Many of these publications provide an in-depth analysis of Florida tax and spending and local governments' pension and other retirement benefits. This report is the second in a series dedicated to another pivotal area—higher education. It highlights both the achievements and threats to Florida's state college system while identifying opportunities to help state colleges realize their full potential.

The report was written by Professor Toby Park from the Florida State University College of Education and Professor David Tandberg formerly at the Florida State University College of Education and now at the State Higher Education Executive Officers organization in Boulder, Colorado. The authors were assisted by Dr. Carol Weissert, Collins Institute Director and Professor of Political Science at Florida State University. Amy Stubblefield and Jennifer Fennell contributed to the editing, proofing, and production of the report.

About the LeRoy Collins Institute: Established in 1988, the LeRoy Collins Institute is a nonpartisan, statewide policy organization which studies and promotes creative solutions to key private and public issues facing the people of Florida and the nation. The Institute, located in Tallahassee at Florida State University, is affiliated and works in collaboration with the State University System of Florida. Named in honor of former Florida Governor LeRoy Collins, the Institute is governed by a distinguished board of directors, chaired by Lester Abberger. Other board members include executives, local elected officials, and other professionals from throughout the state.

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