

SVHEC STRATEGIC PLAN 2018-20



SVHEC

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BOARD-APPROVED FINAL VERSION

SVHEC STRATEGIC PLAN 2018-20

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SUBMITTED FOR APPROVAL TO THE SVHEC BOARD OF TRUSTEES

INTRODUCTION

The culmination of six months of investigation, listening and synthesis, this document lays out a road map of strategic goals and objectives for advancing the SVHEC's mission into the 2018-20 biennium. A number of critical resources were mined in developing the Plan: the 2014-16 Strategic Plan, SVHEC Virginia Performs Strategic Plan, stakeholder feedback, and numerous analytical reports and publications describing the milieu in which the agency will operate in the biennium.

STAKEHOLDER FEEDBACK

From September through December 2016 more than 70 representatives from key stakeholder groups provided feedback on the Plan through formal facilitated listening sessions. Represented stakeholder groups included the Southern Virginia Higher Education Foundation, South Central Workforce Development Board, SVHEC Board of Trustees, SVHEC staff, SVHEC Leadership Team, SVHEC workforce training program participants, and Halifax County Chamber of Commerce's Senior Executive Roundtable and Vision 2020 groups. Common themes expressed across all groups are reflected in the goals and objectives that follow:

- Remain focused on sustainability
- Strengthen collaborative partnerships
- Be more regional
- Increase the general public's awareness of the Center
- Expand k-12 engagement

MISSION STATEMENT

The mission of the Southern Virginia Higher Education Center is to advance the economic potential of Southern Virginia through education, innovation and collaboration.

VISION STATEMENT

Educational victories **equal** economic strength

TAGLINE

Opportunity lives here

LONG RANGE GOALS

1. Maintain a sound and sustainable business model.
2. Encourage and support regional collaborations that leverage Southern Virginia's economic & educational assets to address workforce education and training needs.
3. Provide support services to ensure the success of participants enrolled in SVHEC non-credit workforce programs.
4. Anticipate facilities, operational & staff changes required of future growth.

WE BELIEVE

- *In the power of education to transform individuals & communities*
- *That collaboration leverages scarce resources and yields creative solutions*
- *In harnessing technology to improve educational, workforce, & research outcomes*
- *In trying new things*

GOALS & OBJECTIVES

1. **GOAL** Maintain a sound and sustainable business model.

A. Objective: By **July 2017** develop a fundraising sub-MOU under the existing Center/Foundation MOU to specify fundraising roles & responsibilities not addressed in the existing MOU. [Dr. Adams with Ad Hoc Group]

B. Objective: By **July 2017** develop a Fundraising Needs Assessment to identify funding needs for SVHEC programs, services, and operations. [Dr. Adams, Patty Nelson]

C. Objective: By **July 2017** develop a SVHEC Fundraising Case Statement. [Dr. Adams, Hope Harris Gayles]

D. Objective: By **July 2017** complete roll-out of the Budget Management by Division process. [Patty Nelson, Brenda Terry]

E. Objective: Continue regular monitoring of signature programs for effectiveness and sustainability. [Patty Nelson, Dr. Nettie Simon-Owens]

F. Objective: By **July 2017** contact the VCU Brandcenter about engaging VCU students in a service project to assess SVHEC branding and how it might be adjusted to increase awareness among the general public. [Dr. Adams and Dr. Nettie Simon-Owens]

2. GOAL Encourage and support collaborations that address regional workforce education and training needs by leveraging Southern Virginia's economic & educational assets.

A. Objective: By **January 2018** form a "Partnership 2.0" Project Team comprised of members from the SVHEC and founding partners DCC, SVCC and Longwood University. The Project Team will be charged with (1) assessing current educational access provided by partners at the SVHEC (2) conducting a gap analysis to identify and compare regional educational needs with the programs currently offered, (3) suggesting the most effective and efficient strategies for meeting these needs by leveraging the resources across the four institutions, and (4) maximizing

the use of technology to increase access. [Nelson Stevens, Amy Cole, Dr. Nettie Simon-Owens]

B. Objective: Build on the Center's ongoing efforts to grow the region's STEM-H worker pipeline by collaborating with the local community colleges and surrounding public school systems to provide a location at the SVHEC for community college dual enrollment in high demand technical programs. By **July 2018** position the Center to serve as an educational facilitator and host, providing the facilities, equipment and support necessary to develop and grow STEM-H-related high school dual enrollment programs. The region's public schools in concert with the local community colleges would determine which STEM-H related high school dual enrollment programs are appropriate to be offered at the Center. This aligns with existing successful models such as the Pittsylvania Career and Technical Center and the Northern Neck Technical Center and Governor's STEM Academy. Governor's STEM Academies are the technical/vocational equivalent of the Academic-Year Governor's Schools. [Dr. Adams, Patty Nelson, Dr. Nettie Simon-Owens]

C. Objective: Beginning **December 2017** provide the SVHEC Board of Trustees with an annual progress report on the measures and targets established under the Virginia Performs Strategic Plan.

3. GOAL Provide support services to ensure the success of participants enrolled in SVHEC non-credit workforce programs.

A. Objective: Complete development of policies by **September 2017** as recommended in the 2016 Student Services Audit report. [Patty Nelson, Dr. Nettie Simon-Owens and Amy Cole]

B. Objective: By **December 2017** submit all policies developed in Objective A above to the Planning & Development Committee for review. [Patty Nelson, Dr. Nettie Simon-Owens]

C. Objective: By **December 2017** sub-contract with an existing educational partner to manage the investigation of sexual harassment and sexual assault complaints. [Patty Nelson, Dr. Nettie Simon-Owens]

D. Objective: By **December 2017** complete development of a SVHEC Workforce Training Program catalog. [Amy Cole and Hope Harris-Gayles]

E. Objective: By **July 2018** reorganize the former Career & Academic Resource Services (CARS) Office to provide centralized supportive services for individuals participating in the SVHEC's workforce training programs. [Dr. Nettie Simon-Owens, Amy Cole & Hope Harris-Gayles]

4. GOAL Anticipate facilities, operational and staff changes required of future growth.

A. Objective: By **December 2018** complete internal discussions to set the stage for conducting a Master Facilities Plan. [Dr. Adams and Patty Nelson]

B. Objective: By **July 2019** conduct the Master Facilities Plan study and share results of with the SVHEC and Foundation Boards. [Dr. Adams and Patty Nelson]

C. Objective: Beginning **July 2017** provide every full-time employee with at least one professional development opportunity each year. [Patty Nelson and Dr. Nettie Simon-Owens]

D. Objective: By **July 2019** develop a succession plan for key leadership positions. [Dr. Adams, Patty Nelson, and Dr. Nettie Simon-Owens.]

PLANNING ASSUMPTIONS: 2018-20 UPDATE

The following numbered and highlighted planning assumptions were developed for the 2014-16 Strategic Plan. They are revisited with **UPDATEs** for the 2018-20 Strategic Plan.

Economic

1. Slow economic growth will likely continue in the US for the near term (3-5 years) with negative fiscal impacts on higher education funding and household incomes.

UPDATE: The above statement still holds true. US economic growth continues to be slow, with an average annual increase in gross domestic product of just 3.34% between 2014 and 2016 (US Bureau of Labor Statistics). The Congressional Budget Office projects only 2.3% GDP growth in 2017 and 2% in 2018. Although jobless numbers are falling and the unemployment rate has been below 5% for several months, wages continue to rise slowly. In November 2016 US wages grew by only 3.52% year-to-date, compared to average annual growth of 6.29 from 1960 to 2016 (Sousa and Fedec, 2017). Economist Stephen Banninger of IMF Direct, the International Monetary Fund's global economy forum, cites low worker productivity as the reason for slow wage growth and had this to say in Sept. 2016:

“So, the case of a resounding wage recovery being just around the corner is not a strong one. For this reason, policies that help raise wages by increasing productivity are paramount. In the United States there is a strong policy case for increasing infrastructure investment to help businesses become more productive, but also a need to expand partnerships between industry and higher education institutions, more vocational training, and apprenticeship programs.”

Low wages are disproportionately impacting those workers who are re-entering the labor force after a period of unemployment, as they are often hired at wages lower than those of their peers (“job stayers”) who remained employed. (Banninger, 2016).

The negative impact of slow GDP growth on higher education is evidenced by the number of states that continue to reduce higher education funding: in FY 2016 46 states still spent less per pupil than they did before the 2008 recession (Mitchell, et al., Center for Budget and Policy Priorities, 2016). In July 2016, Virginia's governor requested a 7.5% savings plan from institutions of higher education for fiscal 2017, noting that the cuts should not be offset by increases in tuition and fees (Douglass-Gabriel, 2016).

In summary, slow economic growth and stagnant wages will continue to have negative impacts in higher education, especially in terms of access, for the near term.

2. Some economic sectors will continue to shrink while others (health care, energy, advanced manufacturing) will continue to grow, requiring institutions of higher education to respond rapidly in terms of educational program offerings and accessibility.

UPDATE: The above assumption is still true today largely due to continued technology advances and demographic shifts such as the aging of the population. The following industries are projected by the US Department of Labor to grow fastest among all industries during the 2014-2024 period:

#	Industry	Employment		Percent Change
		2014	2024	
1	<u>Specialty (except psychiatric and substance abuse) hospitals; local</u>	2,700	5,000	85%
2	<u>Home health care services</u>	1,262,200	2,022,600	60%
3	<u>Offices of all other health practitioners</u>	125,900	200,500	59%
4	<u>Power and communication line and related structures construction</u>	168,600	265,400	57%
5	<u>Offices of physical, occupational and speech therapists, and audiologists</u>	334,900	525,700	57%

#	Industry	Employment		Percent Change
		2014	2024	
6	<u>Community care facilities for the elderly</u>	843,200	1,248,600	48%
7	<u>Electronic shopping and mail-order houses</u>	328,800	481,700	47%
8	<u>Ambulance services</u>	166,900	235,600	41%
9	<u>Residential mental health and substance abuse facilities</u>	209,200	291,800	40%
10	<u>Other financial investment activities</u>	429,900	597,800	39%
11	<u>Offices of mental health practitioners (except physicians)</u>	71,400	98,300	38%
12	<u>All other ambulatory health care services</u>	111,700	153,400	37%
13	<u>Psychiatric and substance abuse hospitals: private</u>	121,300	166,300	37%
14	<u>Other transit and ground passenger transportation</u>	94,000	125,200	33%
15	<u>Medical and diagnostic laboratories</u>	247,400	327,100	32%
16	<u>Outpatient mental health and substance abuse centers</u>	203,500	268,700	32%
17	<u>Colleges, universities, and professional schools: local</u>	42,000	55,100	31%
18	<u>Offices of optometrists</u>	124,200	162,200	31%
19	<u>Used merchandise stores</u>	164,000	214,100	31%
20	<u>Other general merchandise stores</u>	1,764,100	2,301,300	31%
21	<u>Educational support services: local</u>	25,300	32,900	30%
22	<u>Direct health and medical insurance carriers</u>	492,400	635,000	29%
23	<u>Sporting goods stores</u>	279,500	359,400	29%
24	<u>Specialty (except psychiatric and substance abuse) hospitals: private</u>	215,900	277,100	28%
25	<u>Other heavy and civil engineering construction</u>	109,100	139,300	28%

Source: Bureau of Labor Statistics, Office of Occupational Statistics and Employment Projections

In the Southern Virginia region, manufacturing, healthcare and social assistance, retail, and local government are the largest employers and labor market projections see these sectors as leading jobs through the next decade (VEDP, 2017; Chmura, 2015).

3. The national economic condition will fuel the drive to accountability on the part of higher education, and students will be valued for what they can do, instead of what they studied.

UPDATE: The accountability movement will continue to exert pressure on higher education to focus and align education programming with the labor market and to collect data to provide evidence of achievement and quality. Historically, public institutions of higher education have been funded based primarily on enrollment but in 2015, 30 states had begun to tie at least some of the money appropriated to higher education to certain educational metrics, according to the National Conference of State Legislatures (Ordway, D., 2015). Fiscal pressure will likely continue to be a driver for evidence-based practice in higher education.

4. New models of education will continue to emerge in reaction to the confluence of economic, technological, and job market changes; these new models will invoke greater competition and challenge traditional HEIs to rethink their business models.

UPDATE: This has not happened as rapidly as projected in the areas of for-profit institutions and Massively Online Open Courses (MOOCs), both of which seemed poised for rapid increase several years ago. The number of for-profit colleges and universities expanded rapidly from 2000-2009 but many have run afoul of the legal system, mostly for predatory marketing and lending techniques, high costs, and poor student outcomes. In 2016, research by Treasury Department economist Nicholas Turner and George Washington University economist Stephanie Riegg Cellini found that students who attended for-profit colleges “would have been better off not going to school, or attending a community college.” Closer scrutiny, legal troubles and negative publicity have

contributed to a decrease in the number of for-profit institutions of higher education operating in the US; from fall 2014 to fall 2015, that number fell about 5% in contrast to increases in public and private, non-profit institutions.

MOOCs have also failed to emerge as a threat to traditional models of education, principally because of the difficulty its originators had in creating a successful, sustainable business model. MOOCs were created as a “free” means of accessing higher education, as a way to democratize education, but the reality is that intensive resources are needed to create content and the cost of those resources must be borne by someone other than the small group of originators over the long run. MIT and Stanford MOOC creators approached traditional colleges and universities to explore potential “for-credit” partnerships using MOOCs but in the end, the model that developed is a hybrid: MOOCs are still free and open to all but accredited institutions are taking an active role in developing content hosted on a MOOC platform, such as Coursera, and are “packaging” courses into credentials called “specializations” for a charge, usually a monthly subscription. For example, Johns Hopkins offer a ten course “specialization” in Data Science for \$49/month and estimates (but does not guarantee) that the specialization can be completed in 3-6 months. The business model is still evolving, as the subscription model has replaced a flat fee since 2016.

There has already been a shift toward more short-duration programs leading to industry-recognized credentials, especially in technical fields, at the community college level driven by affordability issues and employer focus. Venture capitalist Ryan Craig predicts that lower and middle-tier four-year institutions will follow suit.

In his spring 2017 presentation to the University of Virginia Board of Visitors. Craig, of University Ventures, forecast that the higher education market would move away from the traditional four-year degree which has become unaffordable for many students, toward “unbundled” training courses that better prepare students for the workplace (Quizon, 2017). According to Craig this model would be a better value proposition for students

and could lead to higher productivity and economic growth, of importance to employers. Elite universities would be largely unaffected by this shift and degrees from those institutions would retain their value.

Colleges and universities are communicating the importance of internships, externships, and co-ops for future employability and students are getting the message. Sixty-five percent of bachelor's degree graduates from the Class of 2015 reporting having participated in an internship during college and fifty-six percent of them received at least one job offer prior to graduating (NACE, 2016). In 2016, only eight higher education institutions required internships, a number expected to increase as employer feedback underscores the value of internships to hiring decisions.

5. Southern Virginia will continue to see increased collaborations among industry, educators, and local government to addressing skills gap, but many efforts will remain fragmented

UPDATE: Fragmentation and localities working in isolation continues but funding mechanisms continue to pressure groups to work together and often include collaboration as a criteria for awarding funds. The Go Virginia initiative is a case in point: the General Assembly legislated the initiative into existence and requires that nine economic development regions be formed across the state. Each regional council will develop an economic development plan for the region, will request proposals, and assuming appropriations come, will award grant funds for projects that align with and advance the region's plan. Go Virginia is not the only funding mechanism requiring collaboration: the Tobacco Region Revitalization Commission, state, and federal grant makers are also increasingly requiring applicants to show broad regional collaboration and benefit.

Demographic

1. Overall, Higher Education Institutions (HEIs) are experiencing increased enrollments (enrollments in post-secondary degree-granting institutions is expected to increase 15% between 2010 and 2021).

UPDATE: Post-secondary enrollment peaked in 2010 with 21,000,000 students. Since 2012, higher education enrollments have been shrinking as the job market improves, wages continue to stagnate (and with them, disposable income), and tuition rates increase. Enrollments have dropped disproportionately at community colleges and for-profit institutions. However, the National Center for Education Statistics projects a 14% increase from 2014 through 2022.

2. Higher education enrollments among older and part-time students will continue to increase.

UPDATE: Again, these are the categories of student most likely to return to the labor market, with the exception of those who were displaced and/or career switchers who need to complete a degree or other credential to regain employment. The 18-24 year old population is projected to decline by 4% over the period 2014-2022, so the 14% overall projected increase is significant, suggesting that the message that a college degree or some post-secondary education is a necessity for employment has gained traction.

3. Higher education enrollments of academically unprepared students requiring remediation to succeed will increase.

UPDATE: According to the National Assessment of Educational Progress (NAEP), only one-third of the nation's high school seniors are "college-ready" as measured by reading and math assessments. Furthermore, the gap between high- and low-achievers is increasing, although this may be influenced somewhat by increased efforts to reduce

the drop out-rate; some students who would not have been assessed before are now included. Some researchers suggest that the low college readiness figures are resulting from a high percentage of students who do not actually take a college or career readiness “core curriculum” but instead take a disjointed set of courses to meet credit requirements (Bromberg and Theokas, 2016). Whatever the underlying reasons, the results are high numbers of high school graduates who are either unable to pass basic college entrance requirements or unprepared for coursework when they are admitted. Remediation requires intensive resources and may or may not produce good outcomes.

4. Women constitute the majority of enrollments in higher education; this trend is expected to continue.

UPDATE: The National Center for Education Statistics projects that the number of women enrolling in higher education will increase 18% in the period 2011-2022, compared to 9% for men. There are a number of causal or correlation theories about why women are outnumbering men in higher education; some researchers suggest that household structure impacts whether males pursue higher education and others look at gender differences in how student’s out of school time is spent to explain some of the difference.

One result of these statistics is that women have more opportunity than ever before to enter previously-male dominated areas of study, as institutions of higher education are competing to fill slots. Engineering, computer science, and the physical sciences are examples of fields which will likely see shifts toward higher enrollments of women.

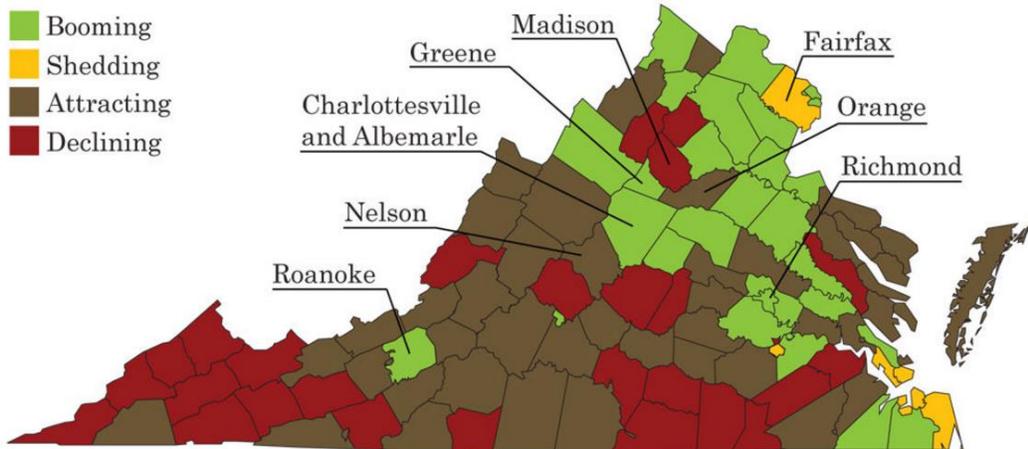
5. As the nation’s population moves away from majority white, higher education will serve more minority students (especially Hispanic) and more first-generation students.

UPDATE: This assumption holds true. The US is still heading for “Minority Majority” in terms of racial makeup over the long-term, but some states are impacted more significantly than others (California, Texas, New York, and Florida). In the short term and in Southern Virginia, population demographics will change little along racial/ethnic lines.

6. Southern Virginia will continue to experience a net population decrease.

UPDATE: Although the national decline in the number of people living in non-metro areas slowed in 2015, rural areas experiencing population growth have largely been those with an expanding energy sector, close proximity to suburban areas, and recreational assets. Virginia’s population overall is still growing but at a slower rate than in recent decades. Population growth also differs significantly by region and locality. Researchers at the Weldon Cooper Center for Public Service at the University of Virginia have categorized counties by four levels of population growth: Booming, Shedding, Attracting, and Declining (see Figure 1, next page). *Booming* localities (e.g. Albemarle, Alexandria, Arlington, and Charlottesville) are experiencing significant new development driven by in-migration from all age groups. *Shedding* localities are those experiencing growth from natural population increase, more births than deaths, while losing residents to out-migration. *Attracting* localities are experiencing or will soon experience population loss due to natural decrease, which is currently offset by in-migration. *Declining* localities face natural population decrease as well as out-migration. According to Cooper Center Executive Director Luke Juday, “with residents aging and fewer people replacing them, these counties quickly slip into a downward population spiral.” Most Southern and Southwest Virginia counties are categorized as *Declining*; however, Halifax and Pittsylvania Counties are in the *Attracting* category. Investments in education and training in the region will need to be met with additional employment opportunities and incoming industry if population loss is to be stemmed.

Four types of Virginia localities



Source: Weldon Cooper Center Population Estimates and Components of Change

Figure 1. Daily Progress graphic/Source: Weldon Cooper Center

7. Recruiting and retaining key expert positions will remain a human resources challenge.

UPDATE: This trend will continue, especially as a function of the current trend in college and career-readiness among high-school graduates. The pipeline from which business and industry develops subject matter experts and fills key positions may be growing but the quality of candidates appears to be declining. Training and professional development also require an investment of resources which US businesses have deferred, instead allocating resources to maintain competitive advantage in the face of challenges from “cheap labor” countries. In the Southern Virginia region, while employers cite the difficulty of attracting and retaining a quality workforce they do not seem ready yet to embrace the idea that training can break that cycle and lead to better hiring and retention results.

Societal

1. Higher Education Institutions (HEIs) have already been impacted by domestic and sexual violence on their campuses and are increasingly being held accountable by

their communities (students, faculty, staff, parents, and others) for being proactive in preventing violence, and for responding rapidly and appropriately when it occurs.

UPDATE: Awareness of and demand for accountability in the face of sexual and domestic violence has grown exponentially on college campuses in the last eight years. Institutions of higher education have responded with education and resources aimed at preventing sexual and domestic assaults, and every institution receiving federal funds must have a Title IX Coordinator, whose responsibilities include coordinating the school's compliance with Title IX. Issues of sexual diversity and gender identity are also increasingly requiring that HEIs address them as pertains to their campuses and communities, in policy and procedure.

There is concern among many in higher education that the current administration will scale back enforcement of Title IX (New, 2016). During the presidential campaign, Trump's New York state campaign co-chairman, Carl Paladino, characterized the Office for Civil Rights as "unnecessary" and stated that all campus discrimination cases should be handled by U.S. attorneys.

2. Issues of diversity and affirmative action have touched some HEIs more than others in terms of admissions policies; HEIs with open admissions policies are less vulnerable to impacts in this arena.

UPDATE: See above. While it may be true that HEIs with open admissions policies are less vulnerable to affirmative action issues, those institutions have more problems with un-prepared incoming students, especially where the underlying population experiences higher rates of poverty.

3. Increased polarization on social issues (sexual diversity, abortion, gun rights) is creating tension on HEI campuses.

UPDATE: This polarization may currently be at an all-time high since the Viet Nam war. The Trump administration has taken a number of aggressive actions in its first eight days that have led to increased discord within the US population.

Political

1. Lawmakers at the state and federal level are increasingly inserting their authority in the push for accountability on the part of HEIs, as evidenced in recent changes to financial aid eligibility and regulations, as well as funding formulas tied to graduation rates and job placements.

UPDATE: While the Trump administration has moved to delay accountability regulations at the primary and secondary levels (Federal Register, 1/30/17), little has been mentioned in the way of higher education. Trump's nominee for Secretary of Education, Betsy DeVos has also been largely silent on higher education issues, instead focusing her remarks on school choice and vouchers.

2. The current sequester and efforts to reduce the national deficit are almost certain to impact most at some level in the short term (1-2 years). Research universities and others relying on federal grants and contracts may see funding put on hold or eliminated for some programs.

UPDATE: The 2013 Sequestration has had lasting impacts in Virginia, especially in military communities and cuts to mandatory spending extend through 2023. This will continue to impact higher education institutions that receive federal grants and contracts. The US deficit will decline in 2017 but is projected to increase steadily in the decade after as baby boomer generation retires. President Trump has promised tax cuts, expansive infrastructure projects, and military expansion which will both increase the deficit and cause challenges for the Republican-led Congress.

3. FERPA will continue to be protected but increasingly complex data sharing is being driven by the accountability movement and the recognition that evidence needs to back practice in higher education.

UPDATE: During the 2016 presidential campaign, Donald Trump indicated that he would “close loopholes” in FERPA, primarily by eliminating the clause by which an “authorized representative” is allowed to receive a student’s Personally Identifiable Information (PPI) without consent. This would threaten federal databases to monitor compliance with education laws as well as state longitudinal databases.

4. The Affordable Care Act (2010) has already impacted higher education, as institutions have reduced adjuncts’ hourly loads so that they are not counted as “full time,” under which designation the HEI would be required to cover them on its employee health insurance plan.

UPDATE: On January 12, 2017, the Senate voted 51-48 to approve a budget that would allow the repeal of the Affordable Care Act (ACA) and the Trump administration did rescind \$5 million in advertising that promoted HealthCare.gov in a cost-cutting effort. This does not mean the ACA has been repealed and it appears that the Republican-led Congress is not yet prepared to offer a replacement. It is difficult to project at this time what the impact on institutions of higher education will be if the ACA is repealed entirely or changed significantly.

Technological

1. Increasing connectivity and internet access have several implications for higher education. Educational delivery is becoming less centralized. New delivery models including Massively Open Online Courses (MOOCs) are emerging, prompting responses from HEIs who may not embrace them, but cannot afford to ignore them.

UPDATE: This is still true. See page 3 regarding MOOCs. The increasing availability of robust, pervasive Wi-Fi is a key factor in higher education. The number of mobile devices per student is escalating, educational technology options are expanding, bandwidth needed by apps is growing, and the density of devices is rising. The ability to significantly boost network capacity will be critically important for infrastructure performance. Campuses will need to invest resources to maintain adequate capacity.

In the Southern Virginia region, technology in the form of distance learning and increased broadband access will have the greatest impact on higher education.

2. Use of technology, especially digital devices (smart phones, tablets) in the classroom will increase.

UPDATE: See above comments regarding digital devices. Some public school divisions in the region are providing laptops to students, but only on a limited and experimental basis. Widespread adoption of this practice will be dependent on future resource allocations.

3. HEIs will need to increase protection of their student information and campus data systems as hacking and cyber-attacks increase in frequency.

UPDATE: Hacking and cyberattacks appear to be even more frequent and sophisticated today. Educating users to avoid cyberattacks and monitoring networks against attacks has become a large part of the workload for IT staff on campuses.

4. Technology has already changed the way most HEIs communicate to their campus communities in cases of emergencies. Failure to have a large scale, rapid alert system in place may put HEIs at legal risk.

UPDATE: Today it is considered standard practice to have a campus alert system that includes telecommunications. HEIs are also incorporating “response” training on campuses to ensure that the effect of the alert system is optimized.

5. Social media will increasingly be used for social and political organizing at HEIs.

UPDATE: This is still the case and has brought revolutionary changes to organizing and getting messages out. HEIs who do not use social media to interact with and “message to” students will be disconnected and vulnerable.

Sources 2018-20

Banninger, Stephen. 2017. "No Victory Lap Yet: US Wage Growth Elusive." IMF Direct. <https://blog-imfdirect.imf.org/2016/09/20/no-victory-lap-yet-u-s-wage-growth-elusive/>

Bureau of Labor Statistics, Office of Occupational Statistics and Employment Projections. 2017. Fastest Growing Occupations, 2014 and projected 2024.

Bromberg, M and Theokas, C. 2016. *Meandering Toward Graduation: Transcript Outcomes of High School Graduates*. The Education Trust. <https://edtrust.org/resource/meandering-toward-graduation/>

Brooks, Chad. 2016. "Looking for Work? The 20 fastest growing industries." Business Week Daily. <http://www.businessnewsdaily.com/9138-fastest-growing-industries.html>

Cellini, Sr. and Turner, N. 2016. Gainfully Employed? Assessing the Employment and Earnings of For-Profit College Students Using Administrative Data. National Bureau of Economic Research Working Paper No. 22287.

Congressional Budget Office. 2016. An Update to the Budget and Economic Outlook: 2016 – 2026. <https://www.cbo.gov/publication/51908>

Douglass-Gabriel, D. Virginia Colleges Are Bracing For Potentially Significant State Budget Cuts. Washington Post, Nov. 8, 2016. https://www.washingtonpost.com/news/grade-point/wp/2016/11/08/virginia-colleges-are-bracing-for-potentially-significant-state-budget-cuts/?utm_term=.1d1f956f6607

Hussar, W.J., and Bailey, T.M. (2013). Projections of Education Statistics to 2022 (NCES 2014-051). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

Mitchell, M., Leachman, M., and Masterson, K. *Funding Down, Tuition Up: State Cuts to Higher Education Threaten Quality and Affordability at Public Colleges*. Center for Budget and Policy Priorities, Aug. 15, 2016.

National Assessment of Educational Progress, 2016. *Nation's Report Card*. <https://www.nationsreportcard.gov/>

National Association of Colleges and Employers (2015). *Class of 2015 Student Survey*, <HTTP://WWW.NACEWEB.ORG/S10072015/INTERNSHIP-CO-OP-STUDENT-SURVEY>.

New, J. 2016. *Campus Sexual Assault in a Trump Era*. Inside Higher Ed, 11/10/16.

Orday, D-M. 2015. *Performance Funding For Colleges: Research Roundup*. Journalist's Resource. Harvard Kennedy School, Shorenstein Center on Media, Politics, and Public Policy.

Quizon, D. (2017). *U.Va, Officials Discuss Changing Landscape of Higher Education*. The Daily Progress (Charlottesville, VA).

Sousa, A.J.F. and A. Fedec. 2017. "United States Wage & Salary Growth." IEconomics. <http://www.tradingeconomics.com/united-states/wage-growth>

Staff Writer. 2015. *Higher Ed Thought Leaders Forecast 2016 Trends*. University Business. <https://www.universitybusiness.com/article/higher-ed-thought-leaders-forecast-2016-trends>

Sources 2014-16

Burch, B., Gonzales-Gomez, M., Burch-Ragan, K. 2012. *Critical Issues and Questions Affecting the Transformation of American Higher Education*. 5th International Conference of Education, Research and Innovations (Madrid, Spain).

Chmura, C. (2013). *Virginia Economic Forecast: 2012–2013*. Thomas Jefferson Institute for Public Policy. Springfield, VA: Thomas Jefferson Institute.

Husser, W.J., and Bailey, T.M. (2013). *Projections of Education Statistics to 2021 (NCES 2013-008)*. U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

National Center for Education Statistics,
<http://nces.ed.gov/fastfacts/display.asp?id=372>.

Pew Research & Social Trends, <http://www.pewsocialtrends.org/2008/02/11/us-population-projections-2005-2050/>.