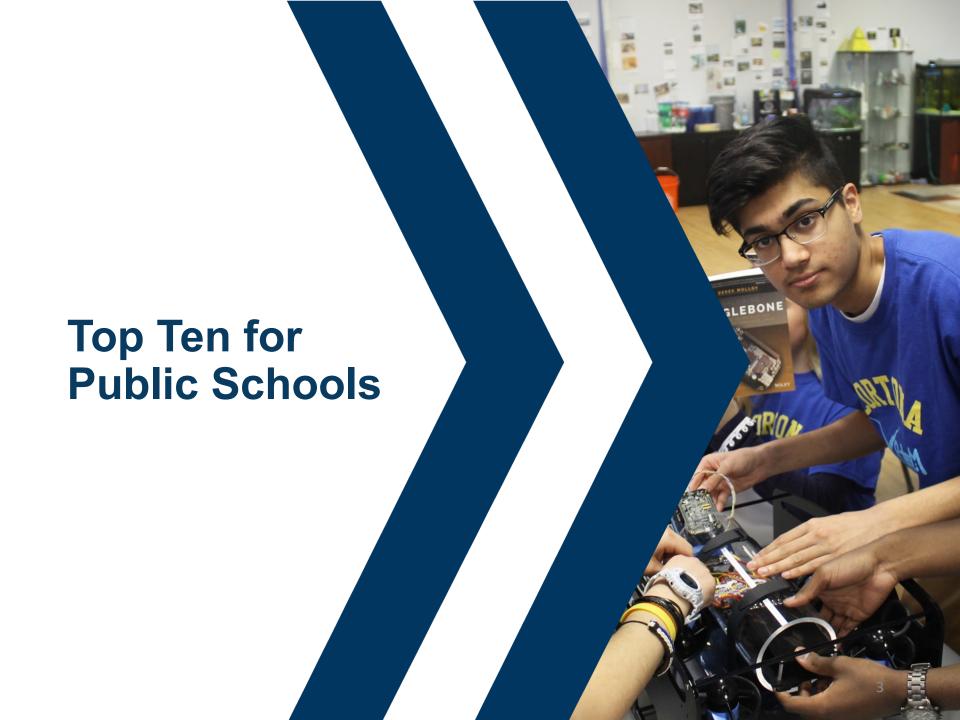
Positioning the Commonwealth for Healthier Economic Growth























- Top 10 for educational attainment, higher ed, and K-12
- Attractive small sites (<25 acres) in some regions
- Mid-Atlantic location contiguous to Washington, D.C.
- Below-average state/local tax burdens for existing firms
- Impressive Port of Va., NOVA airports, and spaceport
- Diverse range of high-quality employers and HQs
- Impressive range of federal labs, higher ed research



- Lack of customized workforce incentive program offering; insufficient CS pipeline
- Meager inventory of large sites (especially 100+ acres) and certified sites
- Site development timeline/cost challenges due to lack of investment and topography
- Uncompetitive state/local tax burdens for new investment
- Metro, traffic congestion challenges in NOVA; road limitations in rural Va.
- High reliance on federal governmentrelated activities
- Limited commercialization of intellectual property relative to our assets



In the Wake of Sequestration, Virginia's 5-Year Growth Rankings Plummeted





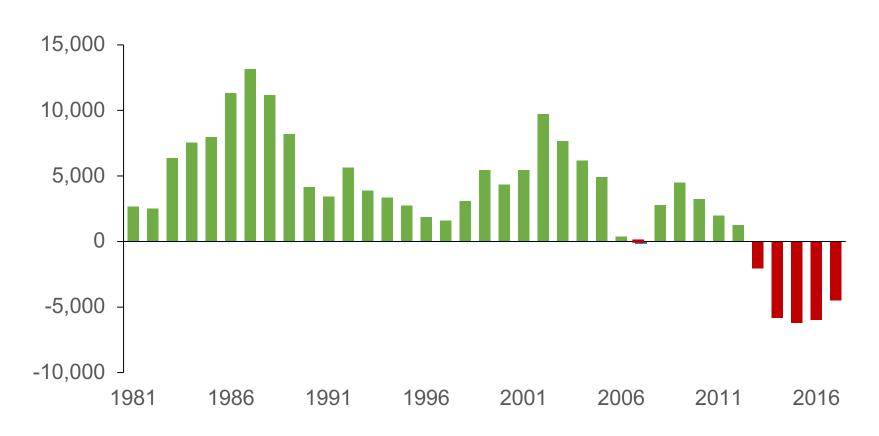


Total Employment

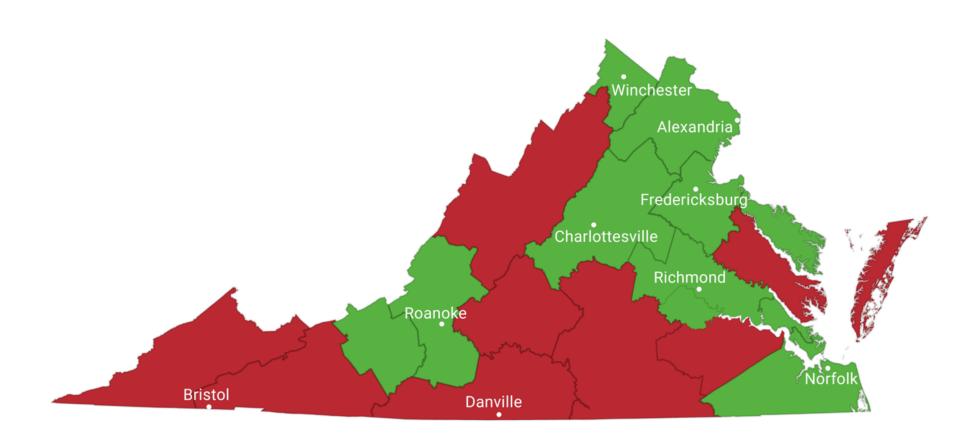
Gross State Product

Median Earned Income

With Slower Growth, Virginia Recently Began Experiencing Net Domestic Out-Migration



Employment Growth in Virginia Has Been Highly Uneven Across Regions (2007-2017)

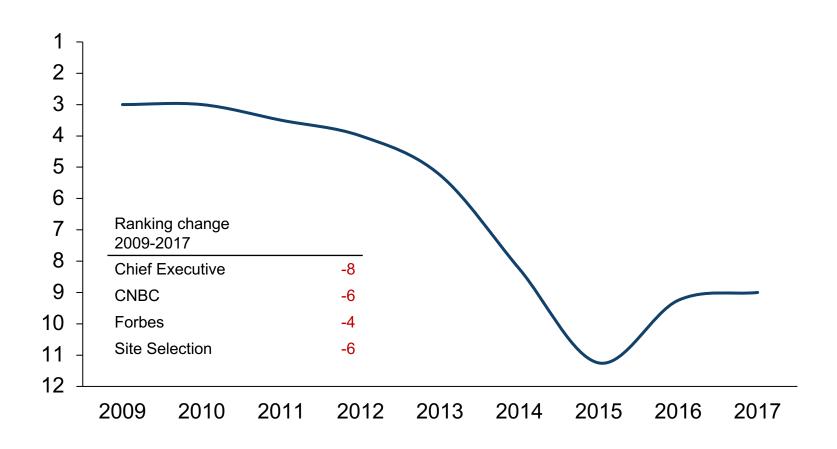




- CNBC, 2007, 2009, 2011

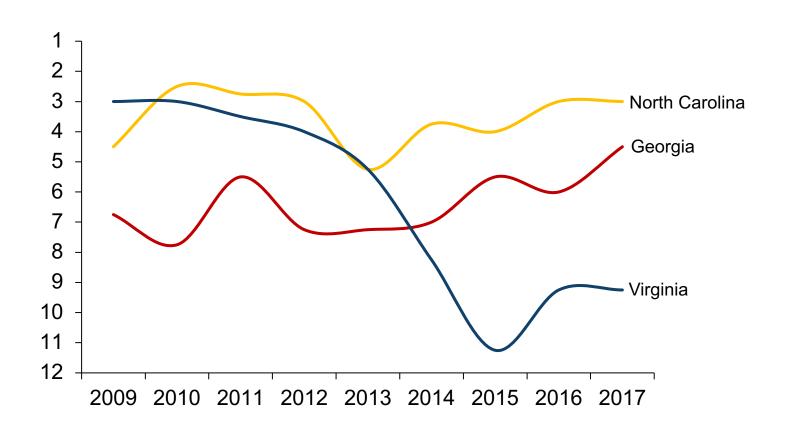


Since 2009, Virginia Has Dropped About Six Places in National Business Climate Rankings



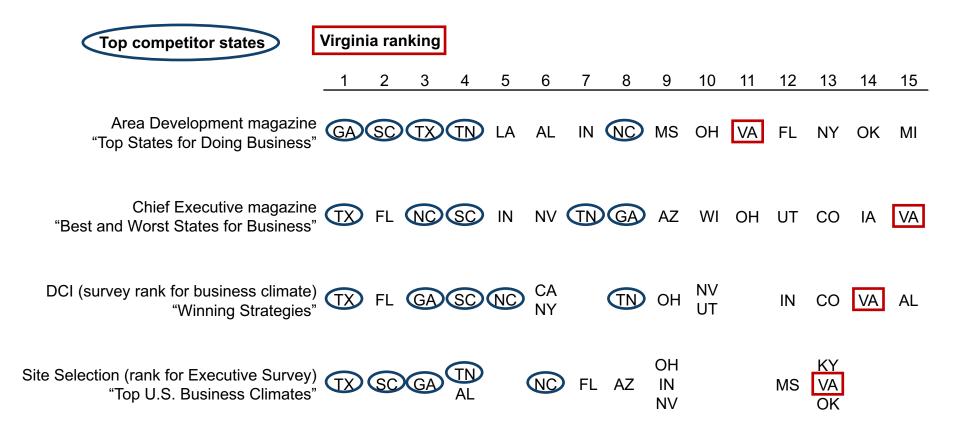


Virginia's Average Business Climate Ranking Lags Behind Aggressive Competitor States



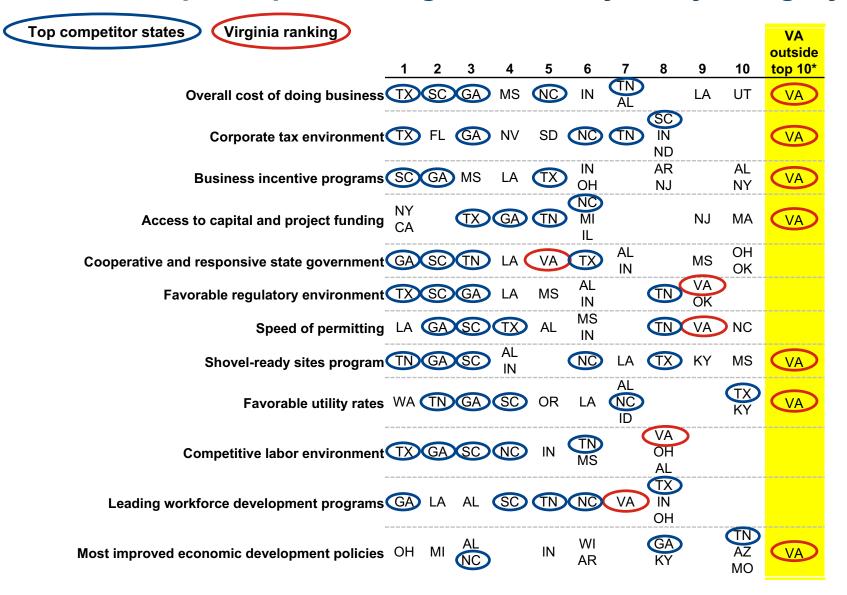


Virginia Has Fallen Out of the Top 10 States for Business in Every National Survey of Executives





Despite recent improvements in Virginia, site consultants rank our top competitors higher in nearly every category



^{*} Only the top 10 states in each category are published Source: *Area Development* magazine, 2017 "Top States for Doing Business" survey results

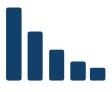


Virginia's Drop in Major Business Climate Rankings Can Be Tied to Three Main Factors



BUSINESS COSTS

New rankings of some business costs (e.g., tax burdens on new investment) place Virginia in a relatively negative light



ECONOMIC CLIMATE AND GROWTH

With federal sequestration and Virginia's reliance on federal spending, Virginia experienced a slowdown in growth

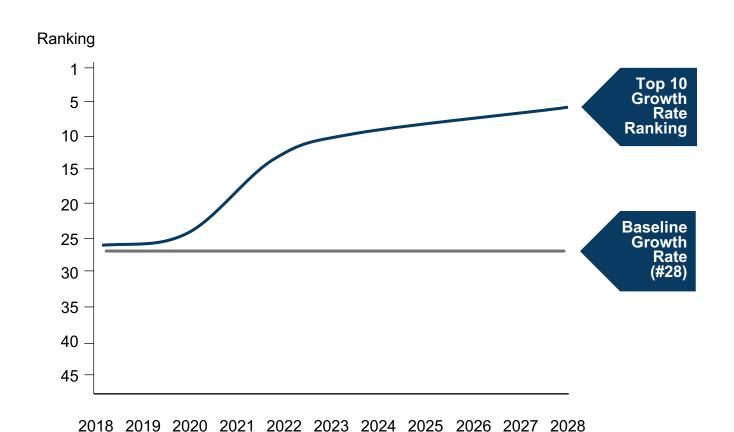


PERCEPTIONS OF CEOS

While still positive overall, CEO perceptions of Virginia's business climate declined after 2009

>>>

Virginia Must Add Tens of Thousands More Jobs per Year to Get Back Into the Top 10



Source: Moody's forecast for 2016-2026 as of June 2017











Robust State Growth Every Region Wins Best State for Business Top State EDO Super Collaborator

- Improve Virginia's Economic Competitiveness
- Cultivate Virginia's Target
 Growth Clusters
- Enhance VEDP's Capabilities



Improve Virginia's Economic Competitiveness

Strengthen Virginia's human capital development engine



Assemble a strategic portfolio of project-ready sites



Improve state, regional, and local economic competitiveness



Strengthen Virginia's digital infrastructure



Place a special focus on achieving growth in rural regions





Improve Virginia's Economic Competitiveness

Strengthen Virginia's human capital development engine



Assemble a strategic portfolio of project-ready sites



Improve state, regional, and local economic competitiveness



Strengthen Virginia's digital infrastructure



Place a special focus on achieving growth in rural regions





Opportunities to strengthen Virginia's human capital development engine

- Create a turnkey, customized workforce recruitment and training incentive program via a VEDP/VCCS partnership
- Expand supply of high-need sub-baccalaureate degrees and other credentials in critical fields (i.e., FastForward)
- Expand supply of high-need baccalaureate degrees in critical fields (especially CS, data science, and related programs)
- Upgrade Virginia's labor market data infrastructure to empower data-driven decision-making
- Expand interest in technology education and careers by building excitement in K-12
- Provide targeted incentives to produce and retain talent with high-demand skills and experience



Cultivate Target Industry Growth Clusters

Strengthen our leadership position in info. tech.



Assemble a world-class transportation and logistics hub



Position Virginia's manufacturing base to be future-ready



Create business and operations centers of excellence



Position Virginia to lead in promising disruptive technologies





Cultivate world-class execution at VEDP

BLUEPRINT VIRGINIA 2025

Implement robust marketing programs



Strengthen/expand business & trade development programs



Become a national leader in incentives administration





New/Expanded VEDP Programs Funded for FY19

Custom Workforce Recruitment and Training Incentive



Basic Marketing and Branding Program for Business



Expansion of Site Development Program





Opportunities to strengthen competitiveness and economic growth in Northern Virginia*

- Recognize that a robust economic development effort is required to overcome the area's historic heavy reliance on the federal government
- Continue working to address regional mobility and housing challenges, building on important progress with the recent Metro funding pact and regional transportation infrastructure funding program
- Strengthen collaboration with DC and Maryland, as well as among NOVA localities, on regional economic competitiveness issues
- Build greater national and global awareness of Northern Virginia's value proposition for the tech sector, which often is not as well known as other markets of similar size
- Collaborate with university/state leaders to dramatically expand computer science, data sciences, and related degree programs, which are substantially undersupplied in the DC metro area relative to demand

^{*} The economic development of Northern Virginia is also constrained by the lack of state investment in marketing, custom workforce programs, competitive incentive offerings for high-impact projects, and high-demand academic credentials (e.g., computer science degrees); some of these were addressed in the FY19 state budget



>>> Looking Forward to 2022...

Forbes

Virginia named America's Best **State for Business** (Again)



America's **East Coast IT Leader: Virginia**

The New Hork Times

Rural Virginia Bucks National Economic Trends

The Economist

Why College Grads in NC and TX are Moving to Virginia

APPENDIX

VEDP leads

- Marketing, branding, and lead generation
- Biz recruitment and project mgmt. for target industry sectors (e.g., IT, advanced manufacturing, BPO, distribution)
- One-stop shop for prospects, with close local/regional coordination and alignment
- Proactive business retention and expansion program for large/mediumsized firms, in partnership with localities
- Custom workforce recruitment/training incentive program for firms, with VCCS
- Trade development services
- Administration of business incentives
- Research / business intelligence
- State/local economic competitiveness

VEDP/GOVA Collaboration

- Site intelligence and development (VEDP will focus on site intelligence and managing site database; GOVA could fund site development)
- Cluster development (VEDP could focus on larger firms; GOVA could focus on cluster scale-up initiatives)
- Design of human capital development strategies, including various initiatives to fully leverage higher education's economic development potential

GOVA leads

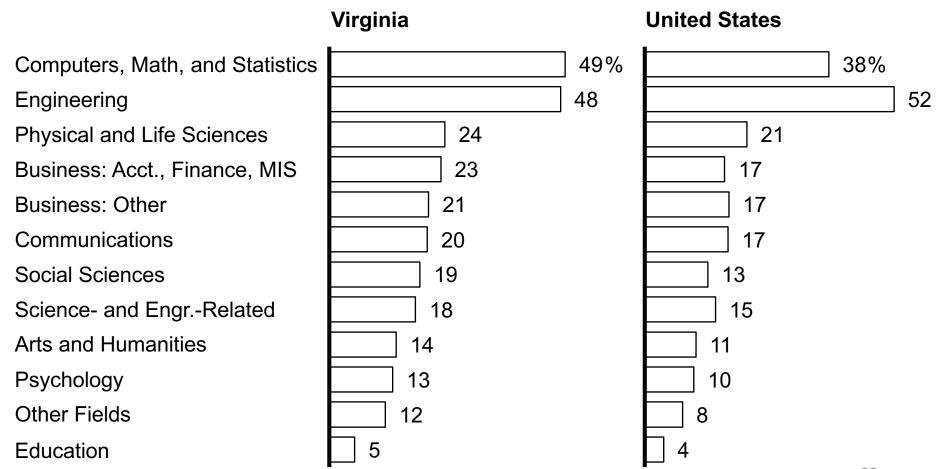
- Design of targeted, regional product development initiatives (e.g., broadband strategy for a region)
- Workforce development initiatives for sectors/regions
- Research and technology commercialization initiatives
- Initiatives to encourage capital and/or business formation (?)
- Funding for development of regional growth plans
- Incentives to encourage regional collaboration





College graduates with CS and engineering degrees are highly concentrated in Virginia's advanced industries

Percentage (%) of Employed Adults with a BA/BS or Higher Working in Advanced Industries, by <u>Undergraduate</u> Field of Degree





Step One: **Business**

Analysis

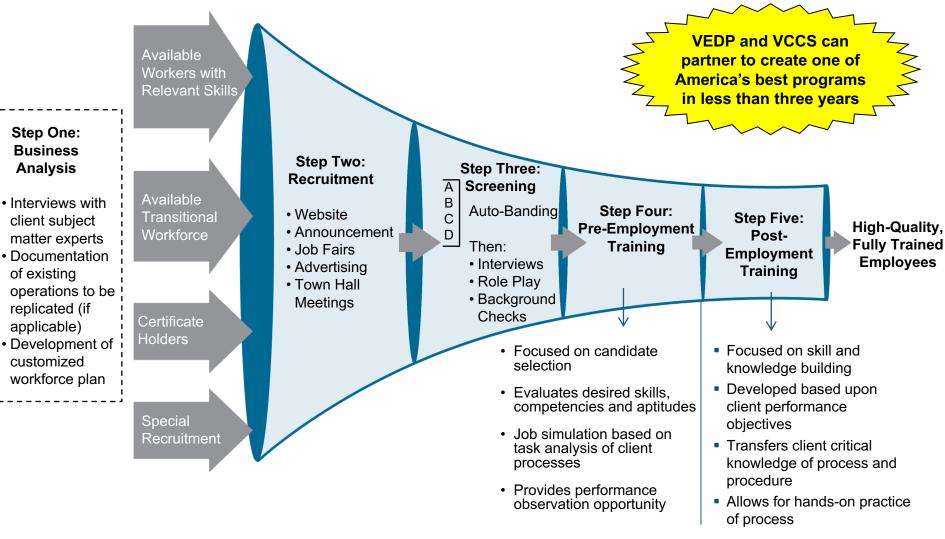
of existing

replicated (if

applicable)

customized

Top-ranked state workforce development programs (GA, LA) offer fully customized, turnkey solutions



Every project is delivered by a mix of full-time employees (roughly one-third) and specialized contractors (roughly two-thirds) who are assembled to meet the needs of the particular client

Examples of benefits to community colleges of VEDP and VCCS creating a customized workforce incentive program

- Strong relationships with new and expanding business establishments
- Tighter linkages with state economic development efforts
- Direct exposure to and engagement with the next generation of industry technologies
- Greater demand for community college programs (certificates, degrees, and/or custom training)
- Opportunity to strengthen workforce training programs, equipment, and facilities
- Opportunity to highlight community college strengths
- Opportunity to create more workforce success stories and community college testimonials`



Examples of what higher ed institutions can do to improve employment outcomes and help drive economic growth

- Place greater focus on (and investment in) career services in particular helping undergraduates to secure professional work experiences (e.g., internships) prior to graduation
- Leverage insights from the literature and promising national initiatives to ensure that college graduates consistently attain college-level skills (e.g., critical thinking, writing) during their undergraduate studies
- Continue to support University-Based Economic Development (UBED) group, which provides a POC for every public institution so businesses have easy access to public college/university resources
- Work with SCHEV and VEDP to survey alumni to better understand what is driving out-migration of Virginia's college graduates
- Support SCHEV and VEDP efforts to build a stronger understanding of the underemployment problem among Virginia's college graduates
- Explore opportunities to further integrate computational sciences across the undergraduate curriculum (e.g., courses, minors)



An opportunity to build a more robust understanding of the predictors of employment outcomes: an alumni survey

- Building on SCHEV Chair Heywood Fralin's assessment of graduate outcomes initiative, colleges and universities could make a big impact by encouraging alumni to participate in a landmark survey of employment outcomes
- Current datasets in Virginia are more comprehensive than in most states, but we are missing some key variables, for example:
 - Current occupation
 - ✓ Whether current job requires a college degree
 - ✓ Hours worked (i.e., whether employed full-time or part-time)
 - ✓ Number of internships completed during college
 - Use of career services office during college
 - ✓ Willingness to relocate to another metro area for an attractive job
 - ✓ Field of study for graduate degree(s) not earned in Virginia
- One option to consider would be to craft an opt-in survey for alumni (with blessing of college presidents) to complete the missing variables, which would enable new and important insights about employment outcomes of college grads
- The results of such a survey would build a more robust understanding of the predictors of employment outcomes as well as interstate migration of graduates