



# 2016 VIRGINIA EDUCATION SUMMIT

Joint Meeting of the House Education and  
Senate Education and Health Committees



**#VAedsummit**

# *The Demand for Postsecondary Education, Credentialing and the Virginia Workforce*

GEORGETOWN UNIVERSITY



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Center  
on Education  
and the Workforce

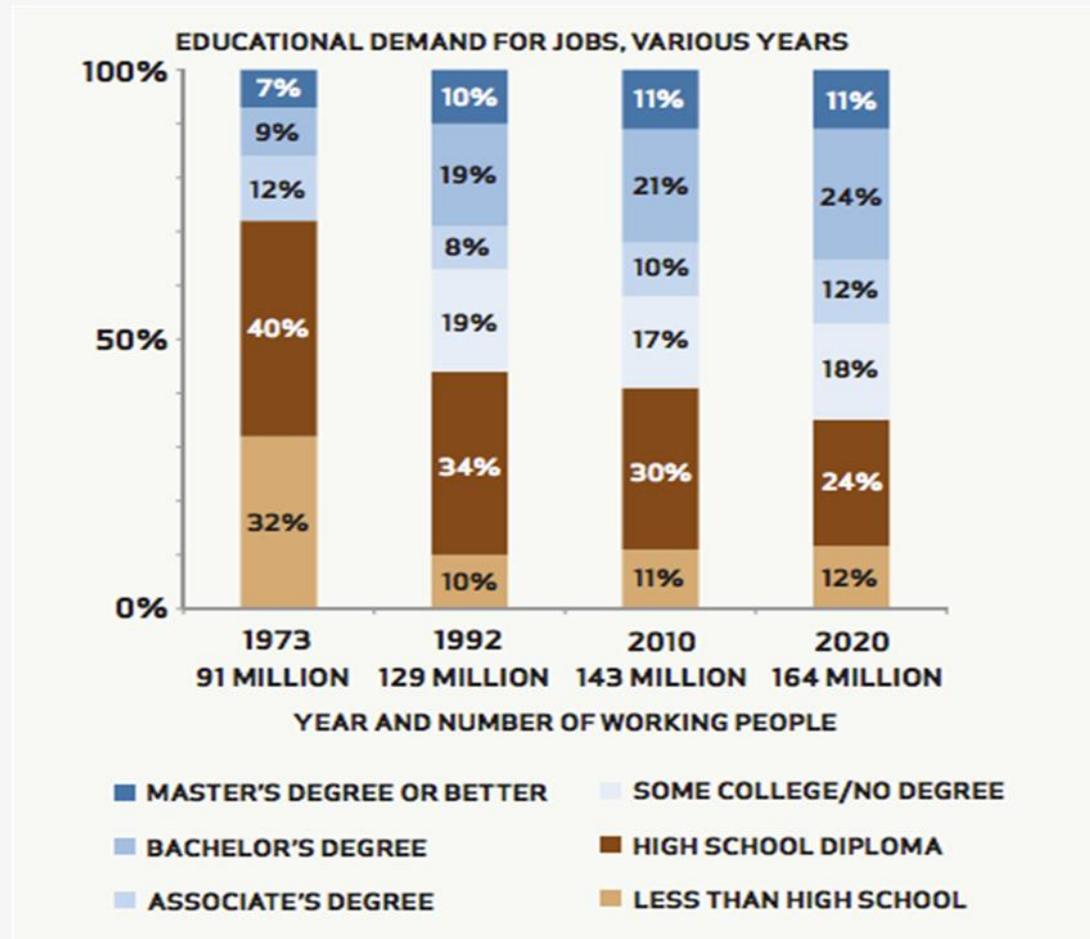
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McCourt School of Public Policy

**2016 Virginia Education Summit  
October 13, 2016**



## Demand for postsecondary education has been rising.

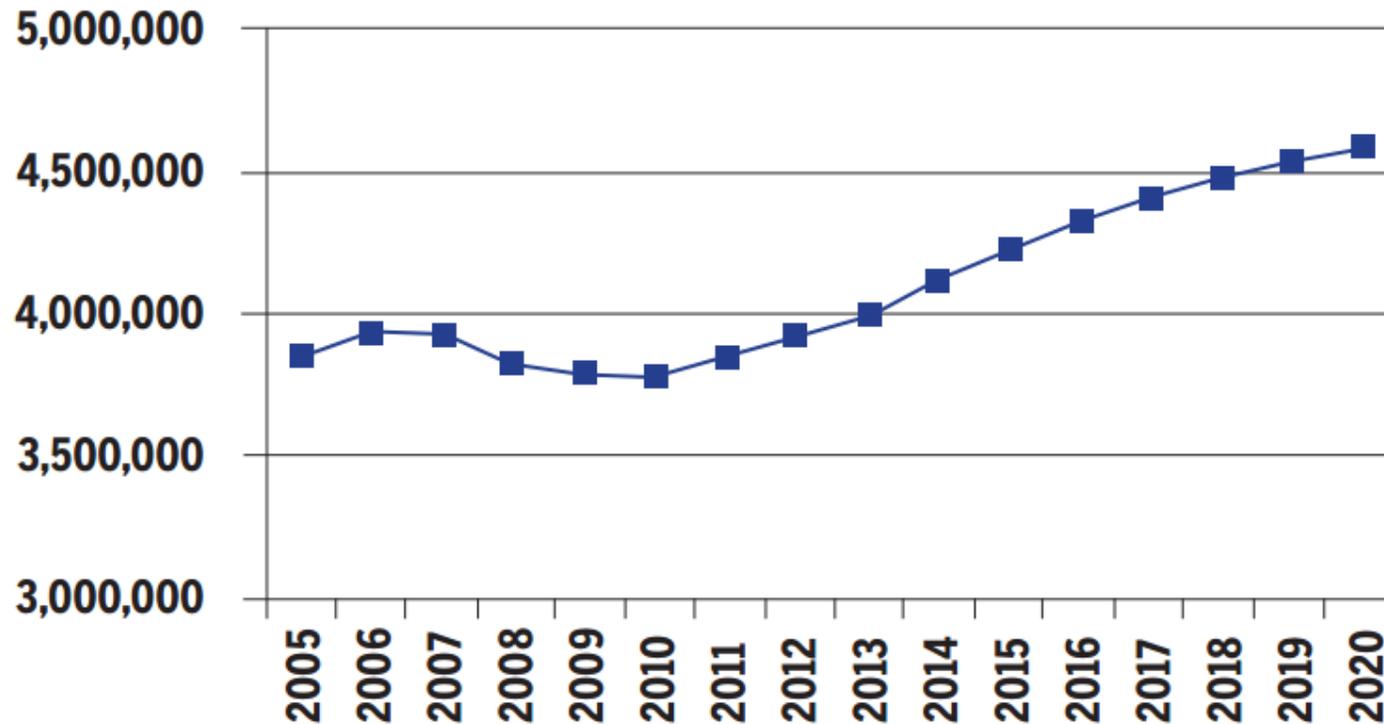


Source: CEW, *Recovery 2020*

# Where does Virginia stand?



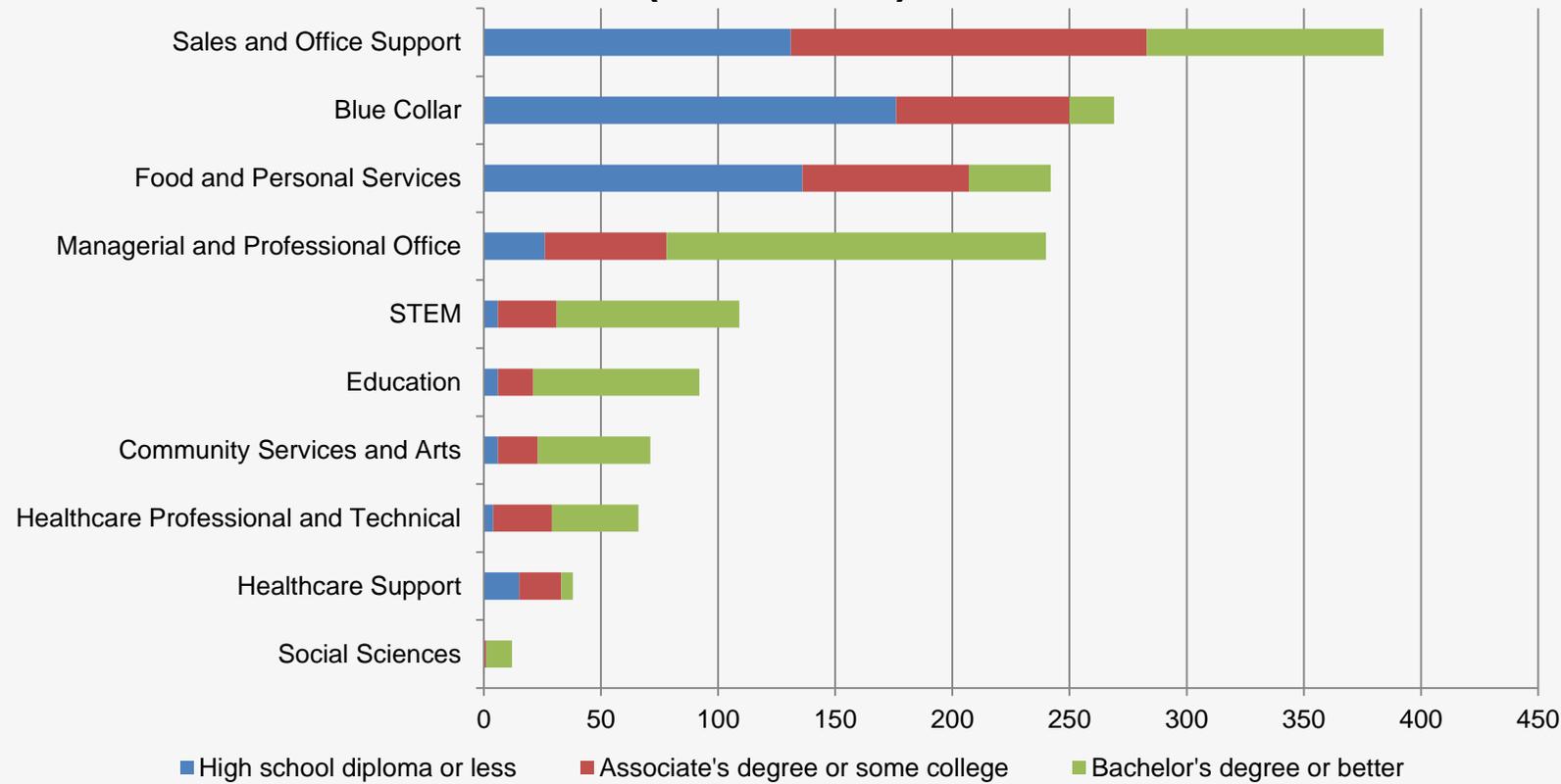
## VA TOTAL JOBS, excluding military



Despite job decline during recession years, Virginia is expected to experience job growth at a rate of 21% in the post-recession decade.

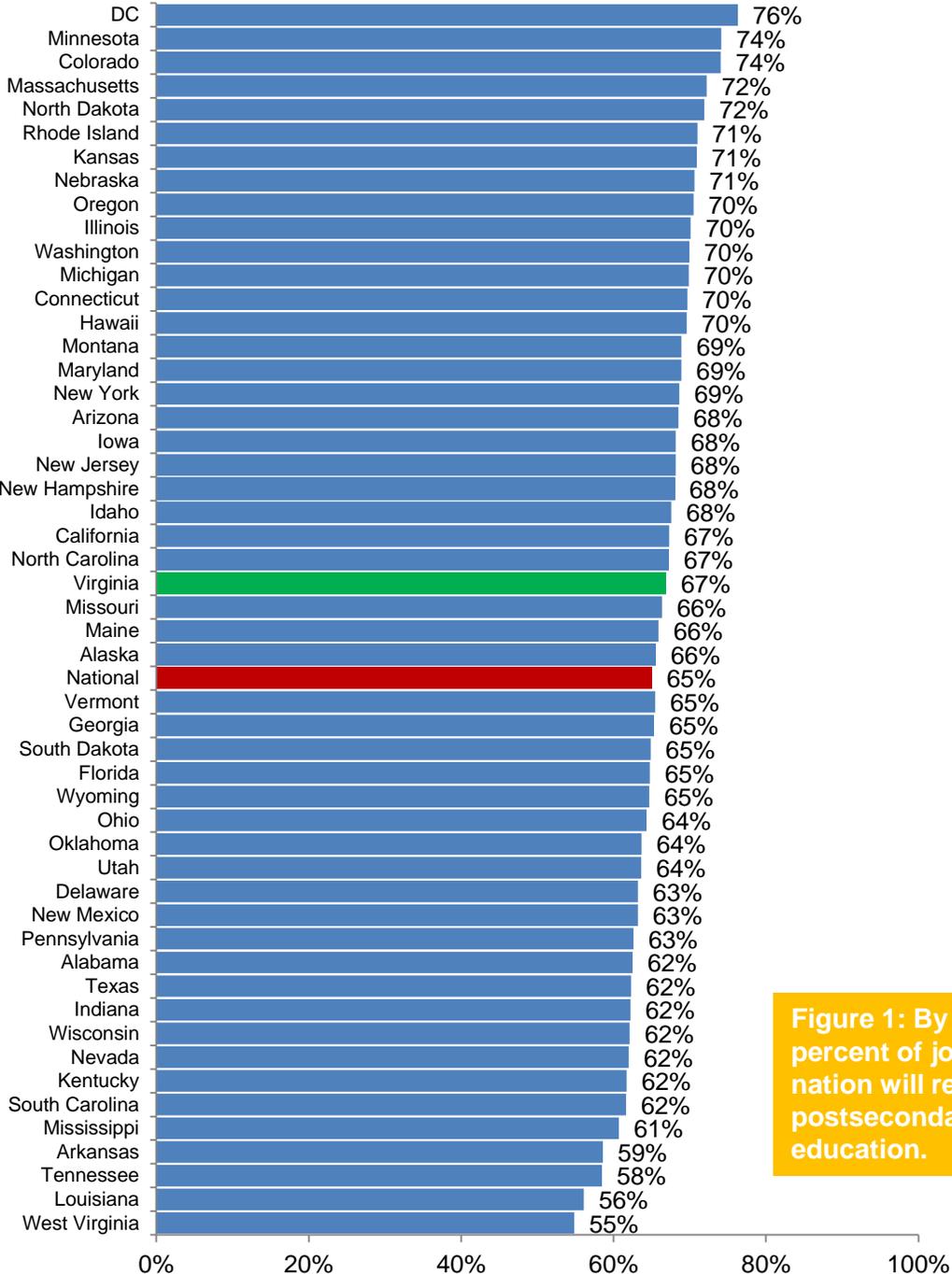
Of the 1.5 million job openings from newly created jobs and retirement, most will require postsecondary education and training.

Virginia New and Replacement Jobs, 2010-2020 (thousands)



Source: CEW, Recovery 2020 State Report

**Nearly two-thirds of the job openings in Virginia will require a postsecondary degree, above the national average of 65 percent.**



**Figure 1: By 2020, 65 percent of jobs in the nation will require postsecondary education.**

Source: CEW, *Recovery 2020 State Report*

## Growth in Non-Degree Credentials

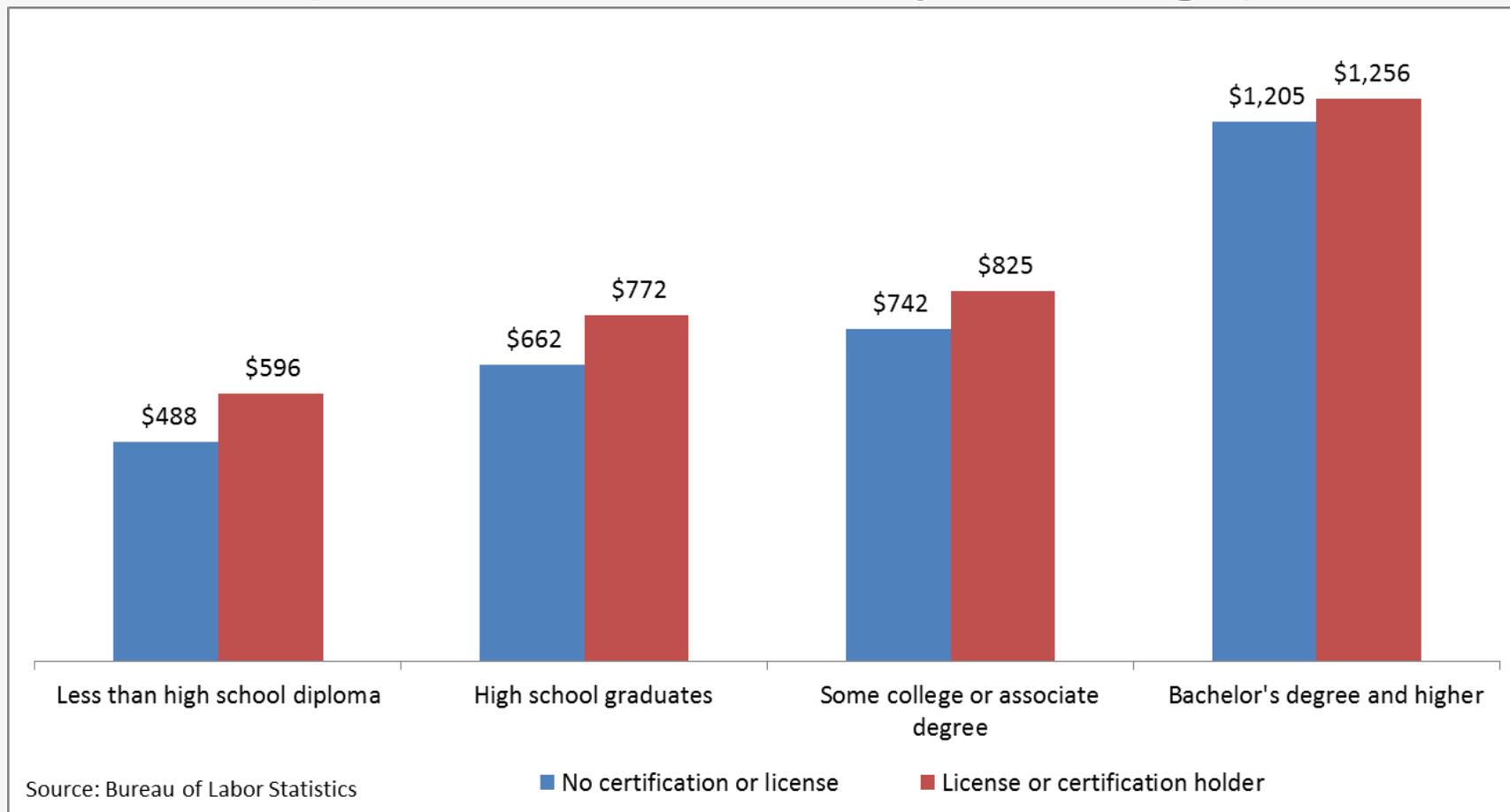
- Nearly 9 percent of adults (19 million) in the U.S. hold an educational certificate.
- About 18 percent (45 million) hold a certification or a license.

Sources: Census Bureau, *Measuring Alternative Credentials*, 2012 and Bureau of Labor Statistics, *Certification and License Data*, 2016





## Wage Boost from Non-Degree Credentials (2015 median weekly earnings)



## Policy Implications

- Improve measurement of certificate and non-degree attainment and outcomes
- Make sense of the credentialing marketplace
- Deepen our understanding of competencies in demand and how to cultivate them

## For more information:

*Visit: [cew.georgetown.edu](http://cew.georgetown.edu)*



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## The Intersection of Education & Workforce Readiness

**Joel Burch**

Vice President & General Manager, Nuclear Operations Group – Lynchburg

October 13, 2016

# Nuclear Operations Group-Lynchburg

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- Manufacture naval nuclear reactors for submarines and aircraft carriers
- Highly complex, disciplined and regulated work environment
- 2,000+ employees in many job categories, hire 100+ annually to account for attrition, above-average pay scale
- Jobs require government security clearances



# Critical Workforce Needs

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- Positions
  - Engineers
  - Highly skilled operators
  - State-certified crafts
  - Specialty occupations (chemists, statisticians)
- Long-term employment



# Critical Workforce Needs

- Soft skills
  - Strong communication skills working in a team environment
- Clean background
- Manufacturing Technician-1 Certification
  - Consistent and timely attendance
  - Interviewing skills
  - Math skills



# Current Programs

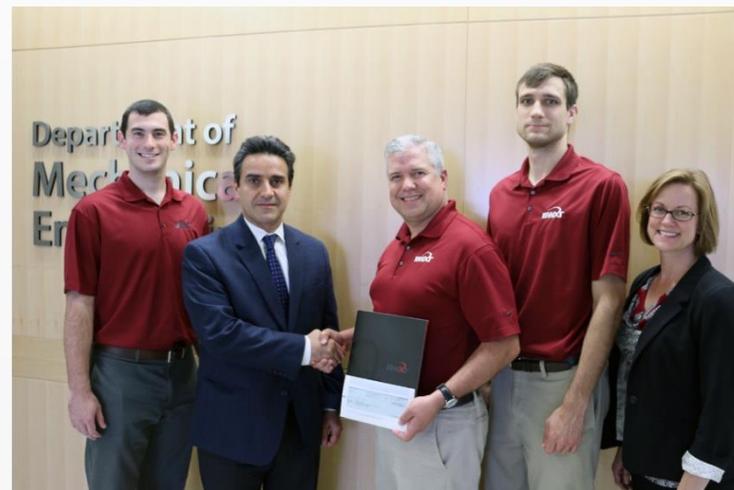
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- Elementary, middle school and high school STEM programs
- High school mentoring
- Governor's School
- Career fairs
- Scholarships
- Four-year college affiliations
- Community college partnerships



# Current Programs

- Internship Program
- Women In Manufacturing Chapter
- Multiple board positions held by senior management
  - Lynchburg City Schools Foundation, Lynchburg Regional Business Alliance, boards and committees at CVCC, DCC, LC, VT, UVA, ODU
- Employee referral program
- Tuition reimbursement for employees



# Concerns

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- Difficult-to-fill jobs
  - State-certified crafts for major projects
  - Specialists: statisticians, IT, electromechanical techs/operators
  - Experienced crafts for full-time employment
  - Diversity
- Pipeline for machinists/inspectors/engineers is good, but could be impacted by new businesses in region
  - Travel distances from home
- Work culture: work/life balance
- “Under-appreciation” of skilled labor
  - Stability
  - Wages
  - Opportunity to move up



# Workforce Development





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## The Intersection of Education & Workforce Readiness

**Joel Burch**

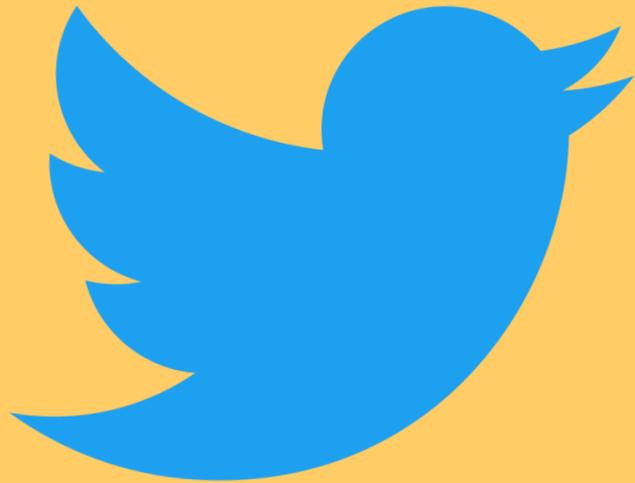
Vice President & General Manager, Nuclear Operations Group – Lynchburg

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# Understanding ESSA

## And State Leadership (in 3 1/2 Slides)

2016 Virginia Education Summit  
October 13, 2016

Scott Palmer  
Managing Partner  
Education Counsel LLC

**Education**Counsel  
Policy | Strategy | Law | Advocacy

## Hypothesis 1

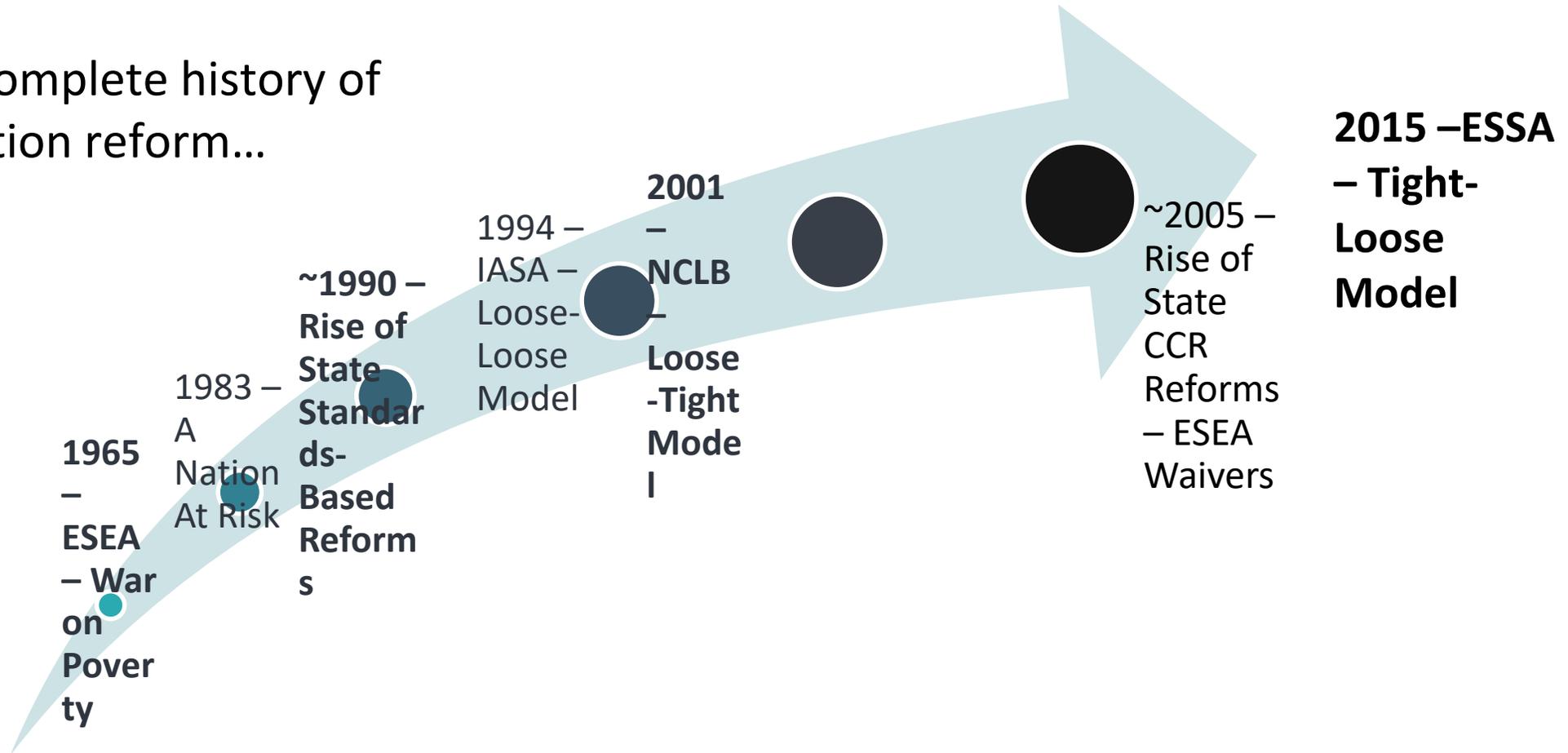
### This is a critical moment of need and opportunity in education

- ❑ Consensus goal to prepare **all students for success** in college, career, and life – with an array of knowledge and skills.
- ❑ Achieving this bold goal will require **fundamental shifts in teaching, learning, and supports**, consistent with our increased understanding of the science of learning and development.
- ❑ **Longstanding inequities** in education opportunity and outcomes paired with continuing demographic shifts increase the **urgency for action**.
- ❑ This calls for a **new frame for education reform** that is broader, deeper, more balanced, anchored in research and data, focused on equity, etc. This means maintaining/improving and adding to the current, dominant pillars of reform. **Biggest shift is move from compliance to continuous improvement and learning systems...**

# Hypothesis 1

## This is a critical moment of need and opportunity in education

An incomplete history of education reform...



## Hypothesis 2

### ESSA could be a big driver of these shifts

#### ESSA in One Slide:

- ❑ **ESSA focuses on two big goals:** (1) college and career readiness and (2) equity.
- ❑ **ESSA then devolves authority** toward states and districts to design key systems. Creates opportunities and risks.
- ❑ But ESSA requires those state and local actions to be **aligned with CCR and equity goals; connected through evidence/research; deeply informed by stakeholder engagement and transparent data; and continuously reviewed and improved over time.**

**Requires big shift in mindset from NCLB. From compliance toward learning systems**

## Hypothesis 3

**ESSA consolidated plans (state and local) could provide important leverage**

**USED pending regulations focus on seven priorities**

- 1 Challenging Academic Standards & Assessments
- 2 Accountability, Support, and School Improvement
- 3 Supporting Excellent Educators
- 4 Supporting All Students
- 5 Stakeholder Consultation
- 6 Coordination with Other Programs and Systems
- 7 Continuous Improvement 

**Requires state-local architecture, sprint and marathon.**

**scott.palmer@educationcounsel.com**

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Policy | Strategy | Law | Advocacy



# Virginia's K-12 Accountability: A Single State-Led Accountability System Under ESSA

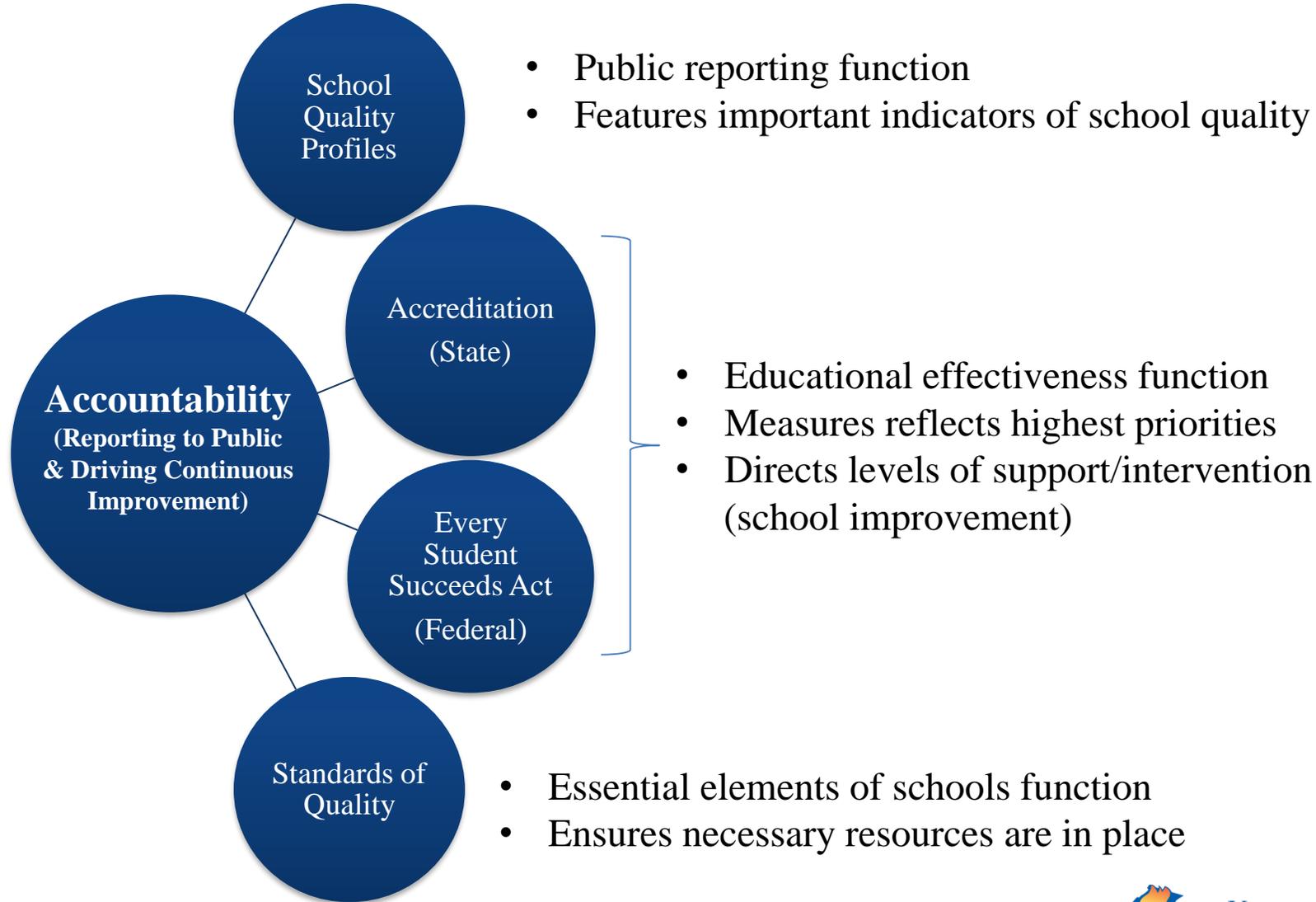
Presented by Joan E. Wodiska  
Vice President  
VA State Board of Education

October 13, 2016

# Virginia's Philosophy: The Purpose of Accountability

- **Provides comprehensive picture of school quality**
- **Drives continuous improvement for all schools**
- **Builds on strengths and addresses gaps in current system**
- **Informs areas of technical assistance and school improvement resources**

# Virginia's Mechanisms of Accountability

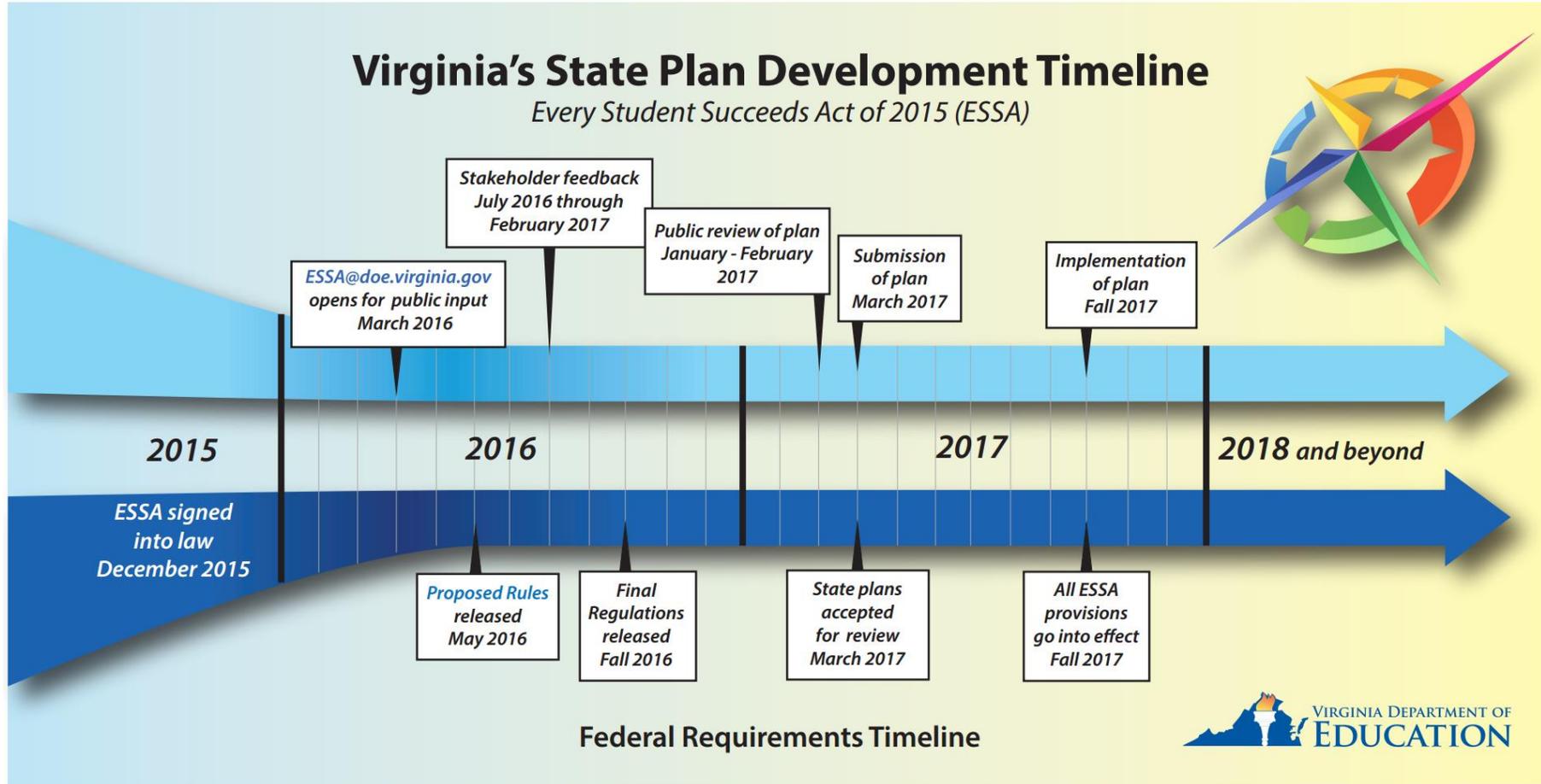
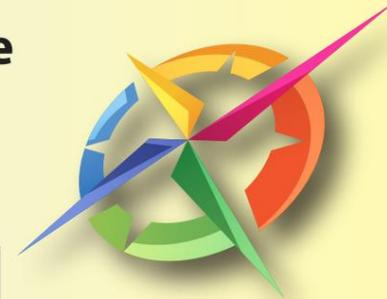


# SBE Lesson Learned: Why Schools Struggle or Fail?

- School culture undermines or fails to support student learning and effective teaching practices
- Ineffective school leadership
- Inadequate support to ensure high-quality teaching and learning
- Misalignment between curriculum and standards of learning

# Virginia's State Plan Development Timeline

Every Student Succeeds Act of 2015 (ESSA)



Federal Requirements Timeline



# Public Feedback to SBE (to date)

**Virginia's accountability system must:**

- (1) provide tiered interventions aligned to need**
- (2) encourages continuous improvement for all schools**
- (3) measures and reports multiple indicators of school quality**

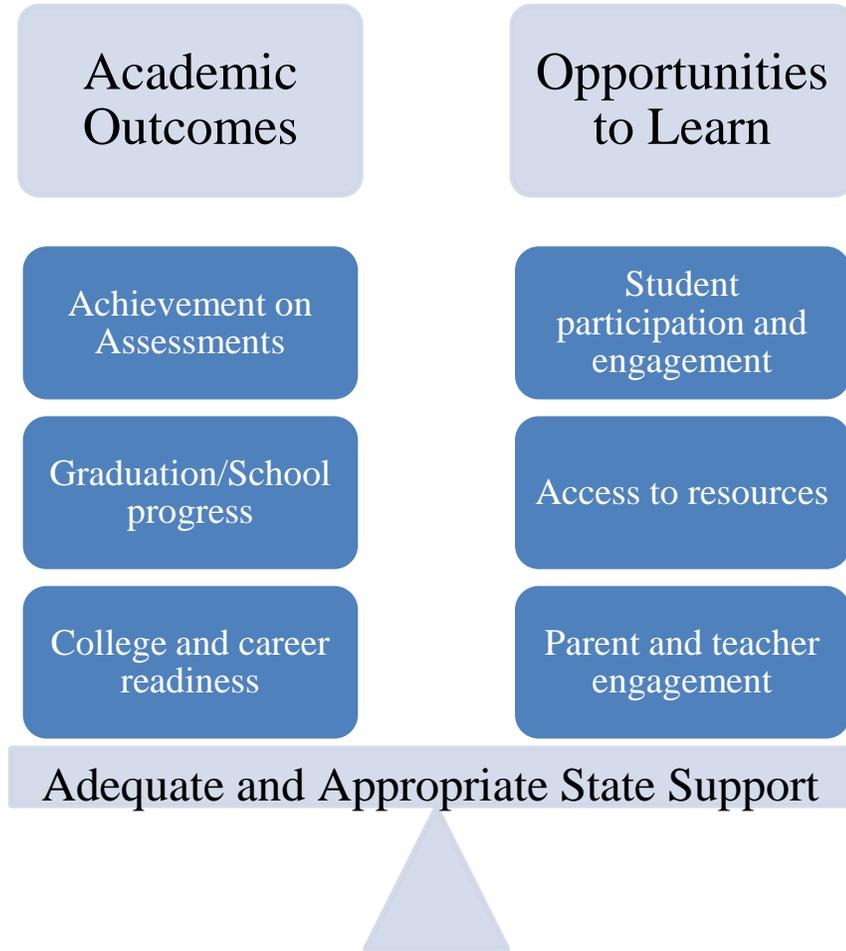
# Applying Lessons: Considerations in Accreditation Model

- Framework aligned with priorities for school performance
- Multiple measures to examine student achievement and opportunities
- Matrix model to support targeted, strategic interventions
- Transparency in school effectiveness and quality
- Additional considerations: Student and parent participation and engagement, leader & teacher effectiveness and engagement.

# Changing Student Context: The Difference in a Decade

- **While Va's total student population increased by 6%:**
  - Poor: Economically disadvantaged students increased by 39% (39 of total population live in poverty)
  - ELL: English language learners increased by 63% percent (10% of the student population)
  - SPED: The number of students identified with autism increased by 222%. Students identified in the other health impairments disability category increased by 26%.

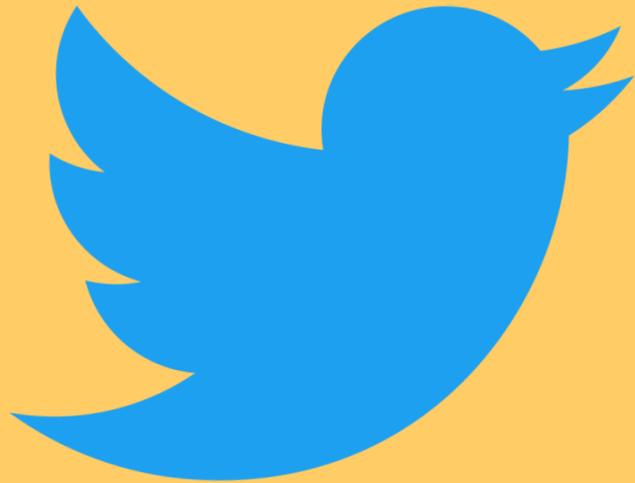
# Multiple Indicators of Performance





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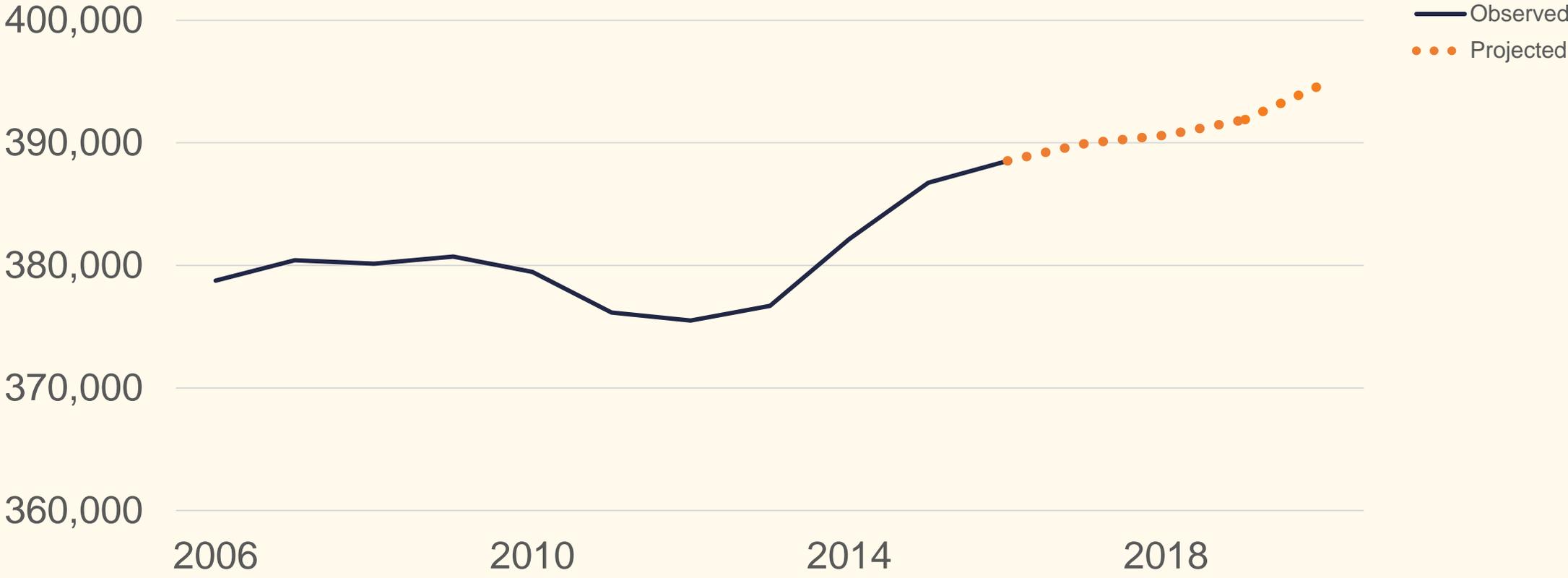
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# Virginia's High School & College-Bound Students

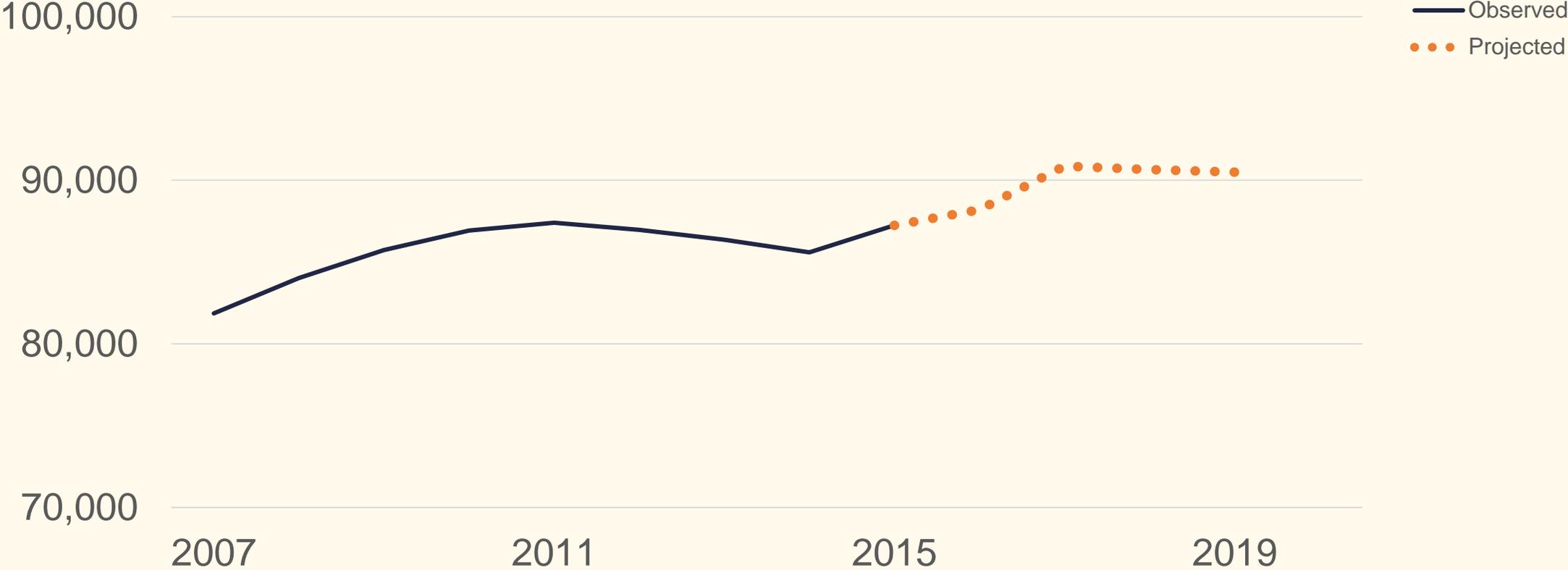
Qian Cai & Meredith Gunter

Weldon Cooper Center for Public Service  
Demographics Research Group

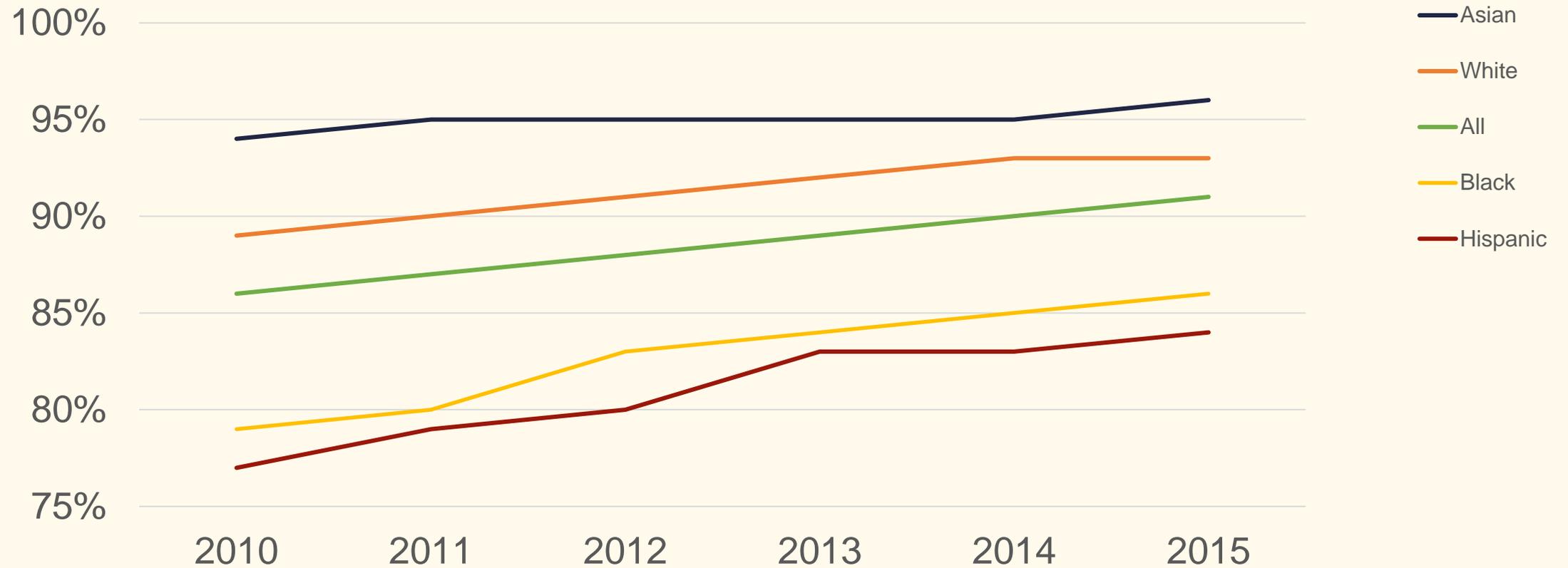
# Public High School Enrollment



# Public High School Graduates



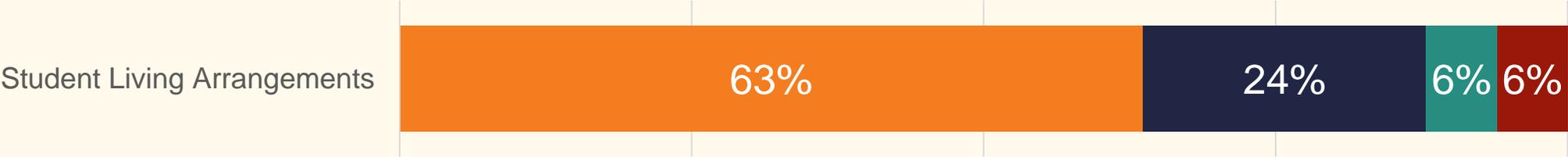
# Graduation Rates by Race



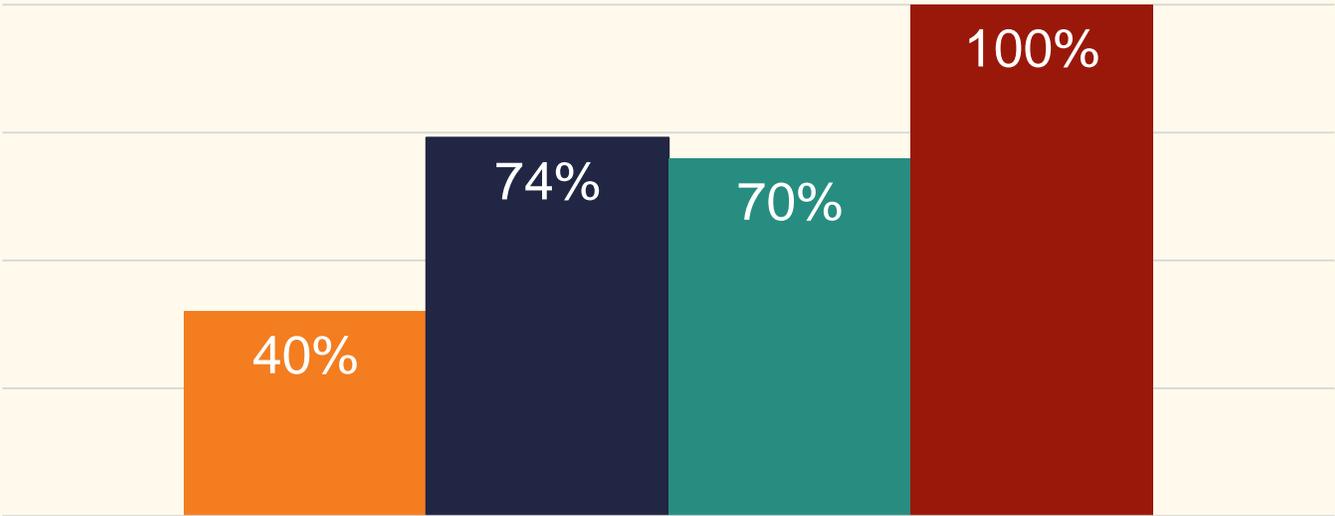
# Characteristics of Virginia's High School Population

# Living Arrangement & Parental Education

Two-Parent Single-Mother Single-Father Neither

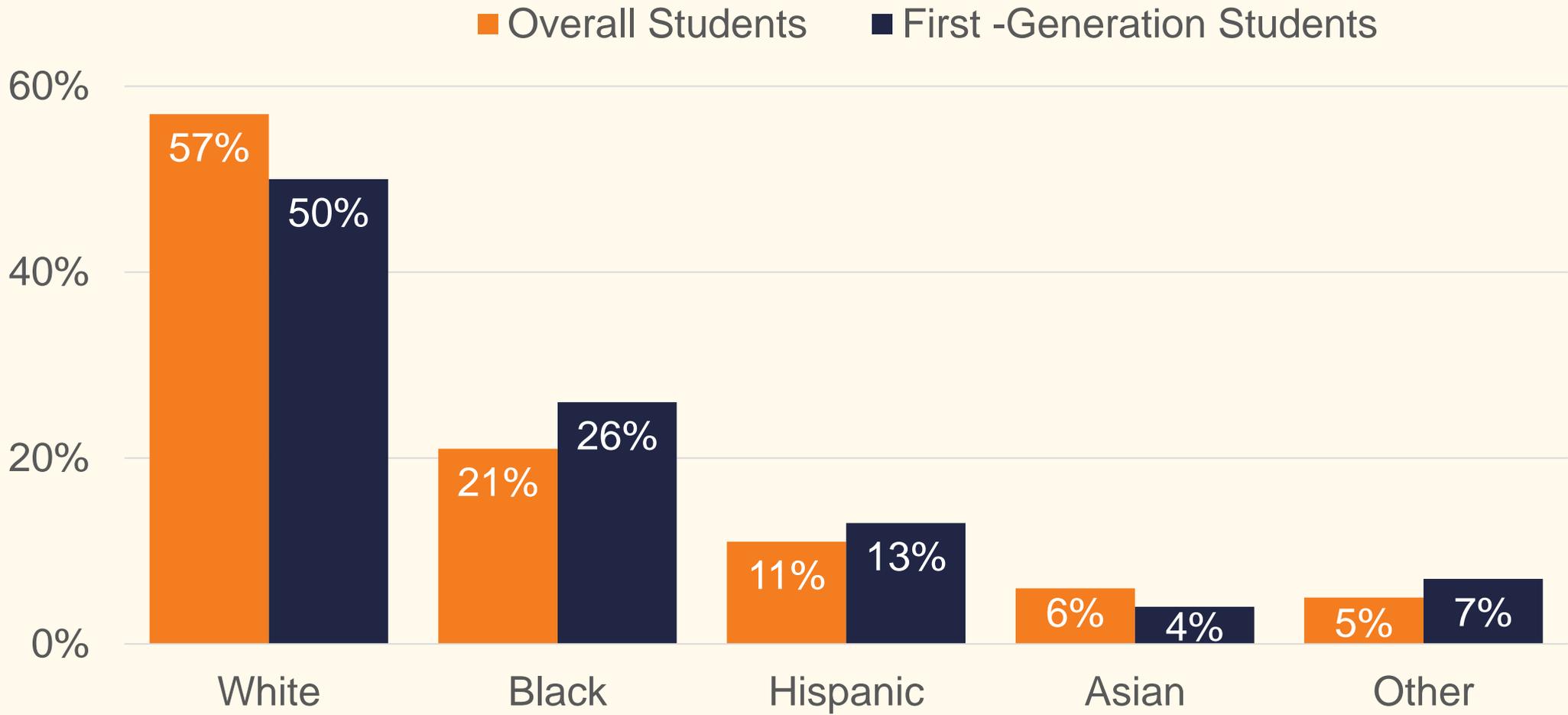


- 54% of all students live in households where co-residing parents do not have a college degree

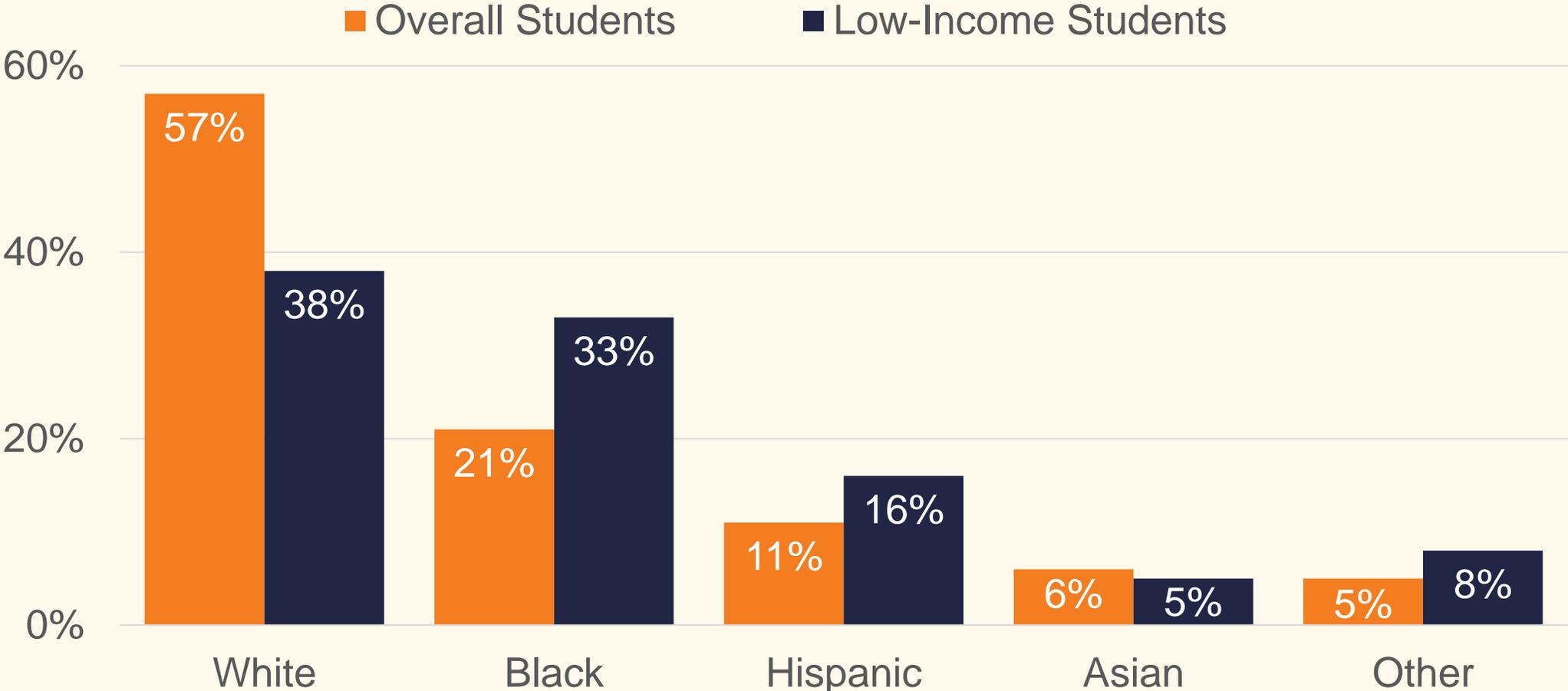


Percent of Students First-Generation

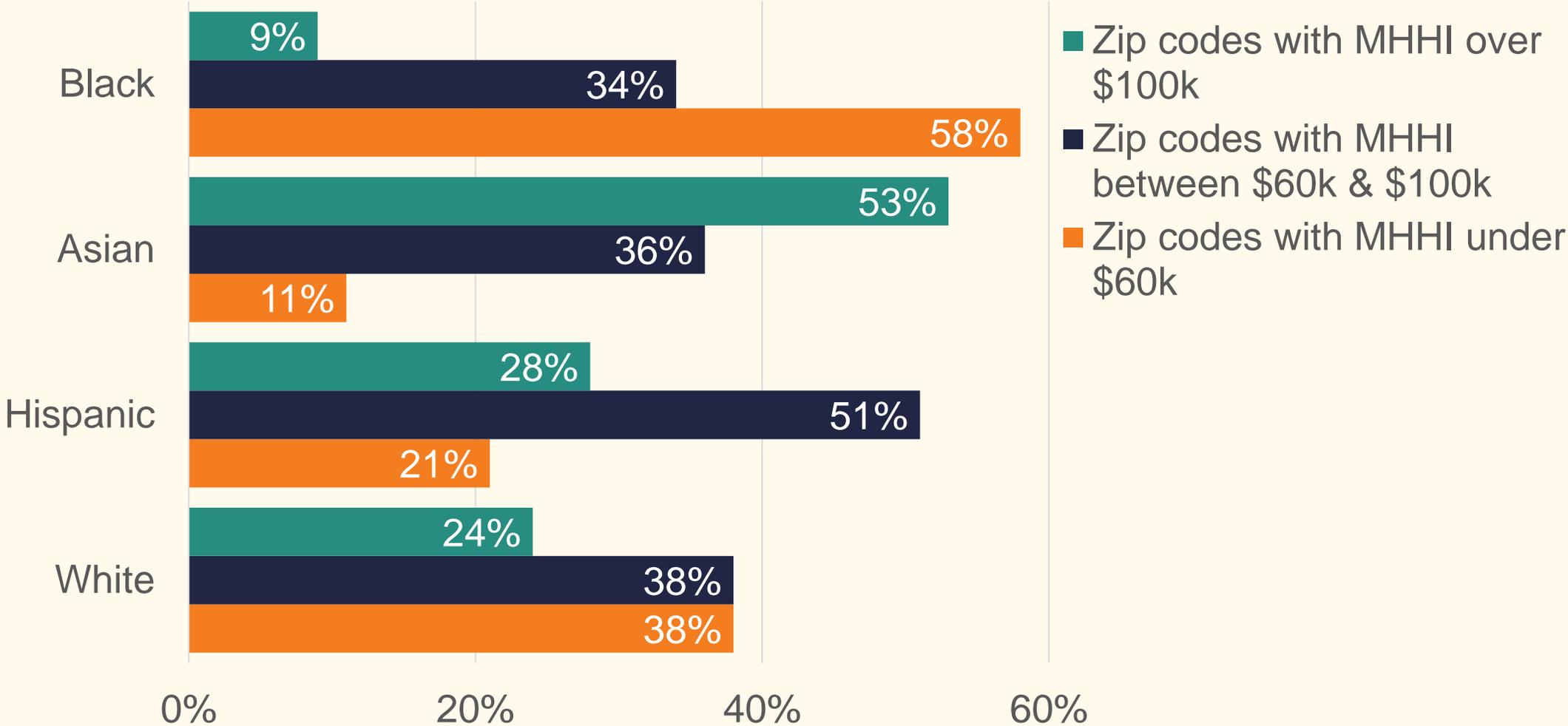
# First-Generation Distribution by Race



# Low-Income Distribution by Race



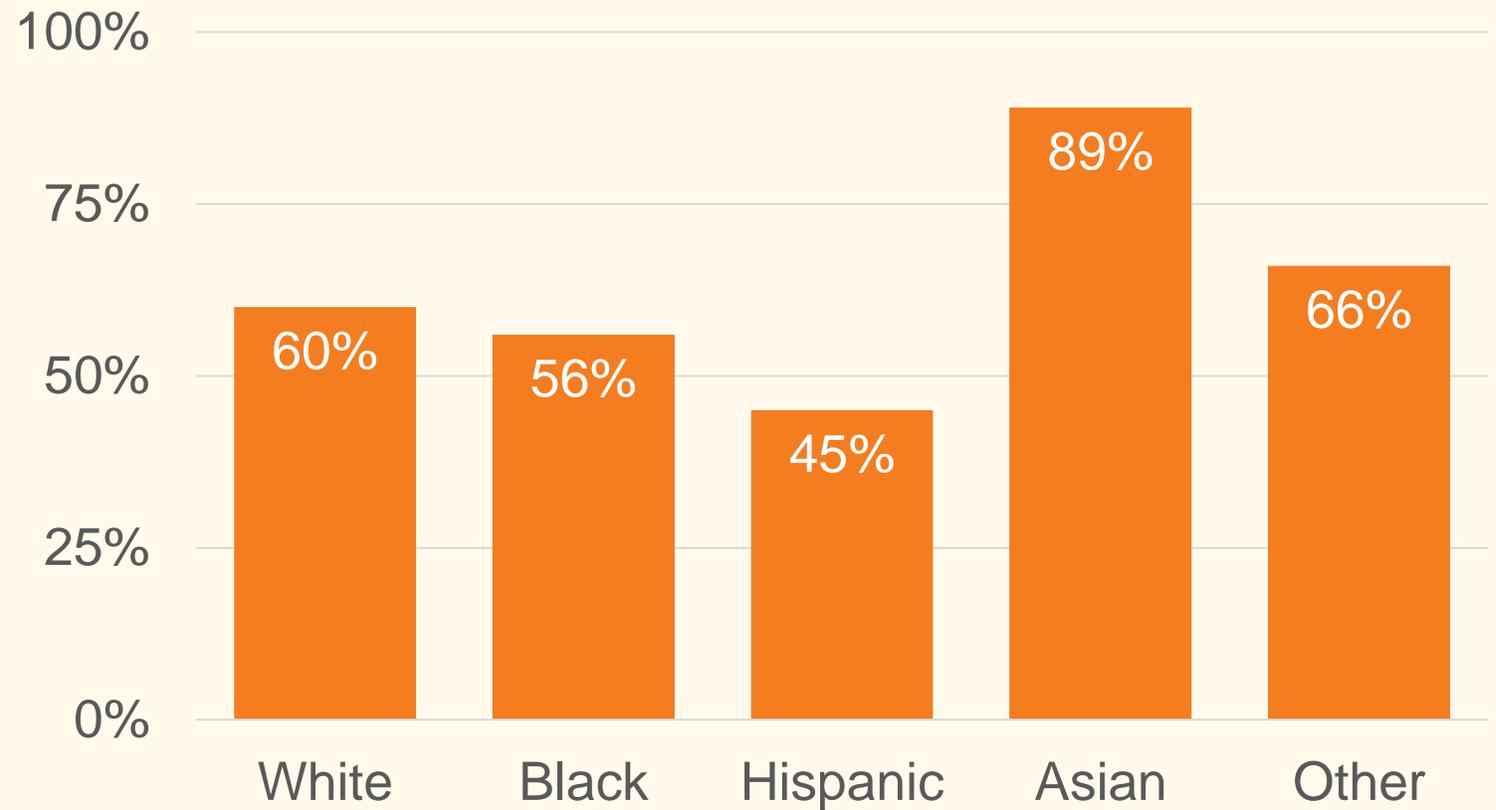
# Neighborhood Income Level by Student Race



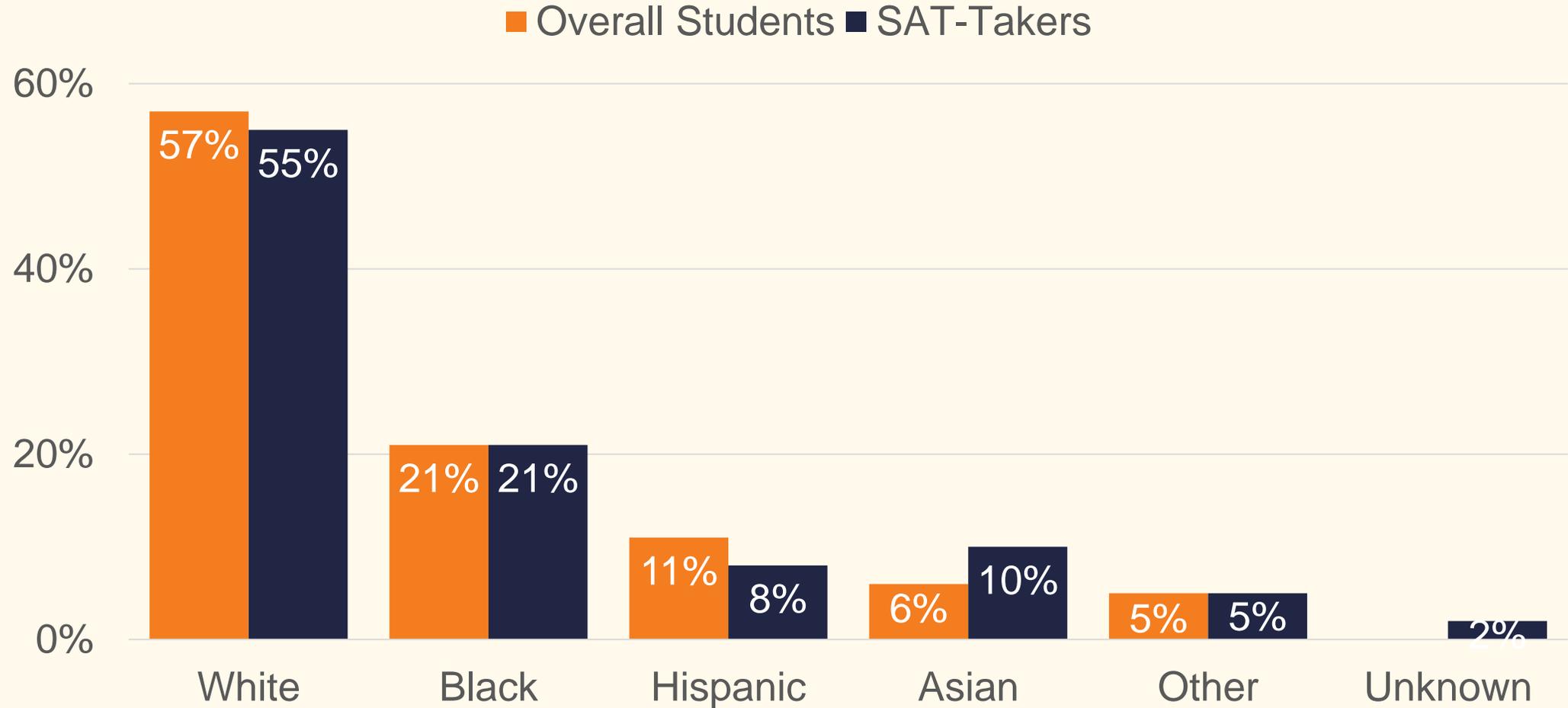
# Virginia's College-Bound Population

# SAT Participation Rates by Race

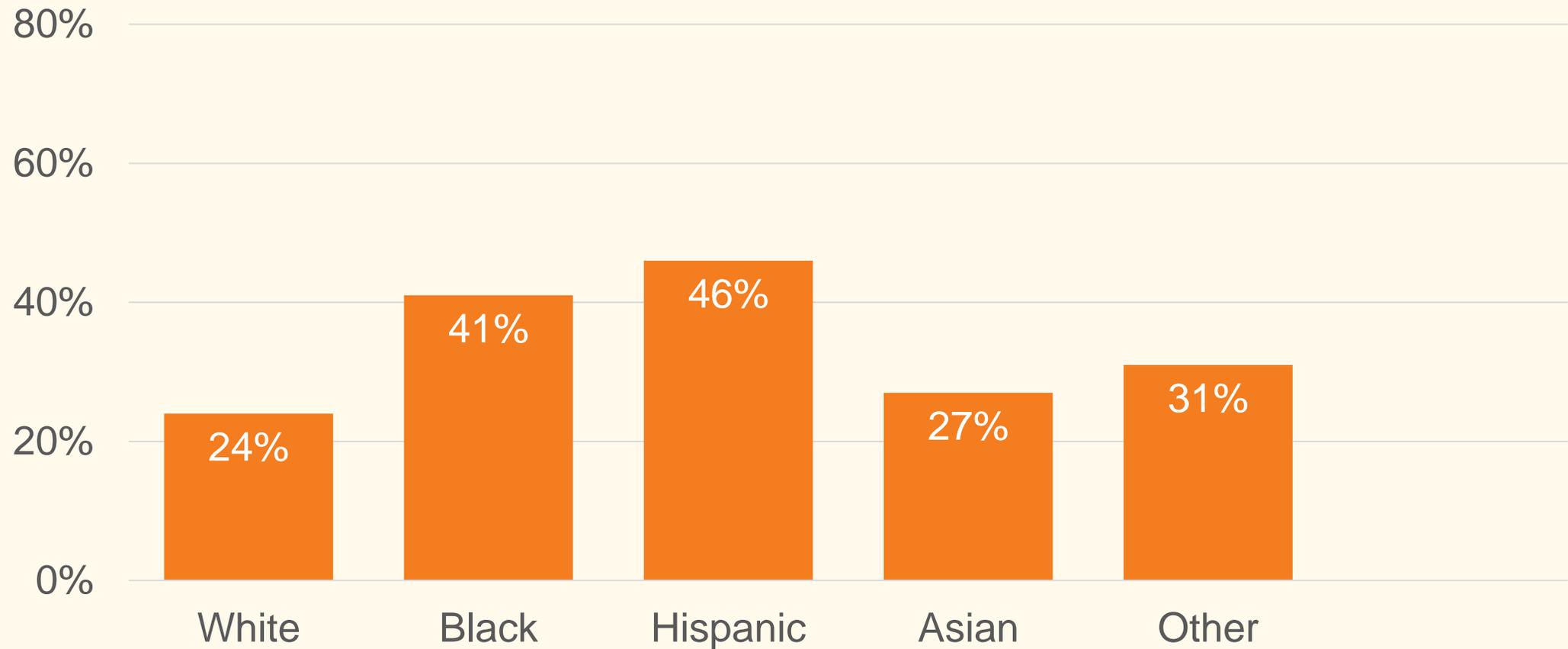
- 60% of Virginia's 2015 high school graduates took the SAT



# SAT Takers by Race



# SAT Takers' First-Generation Status by Race



# Contact Information

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[www.coopercenter.org/demographics](http://www.coopercenter.org/demographics)



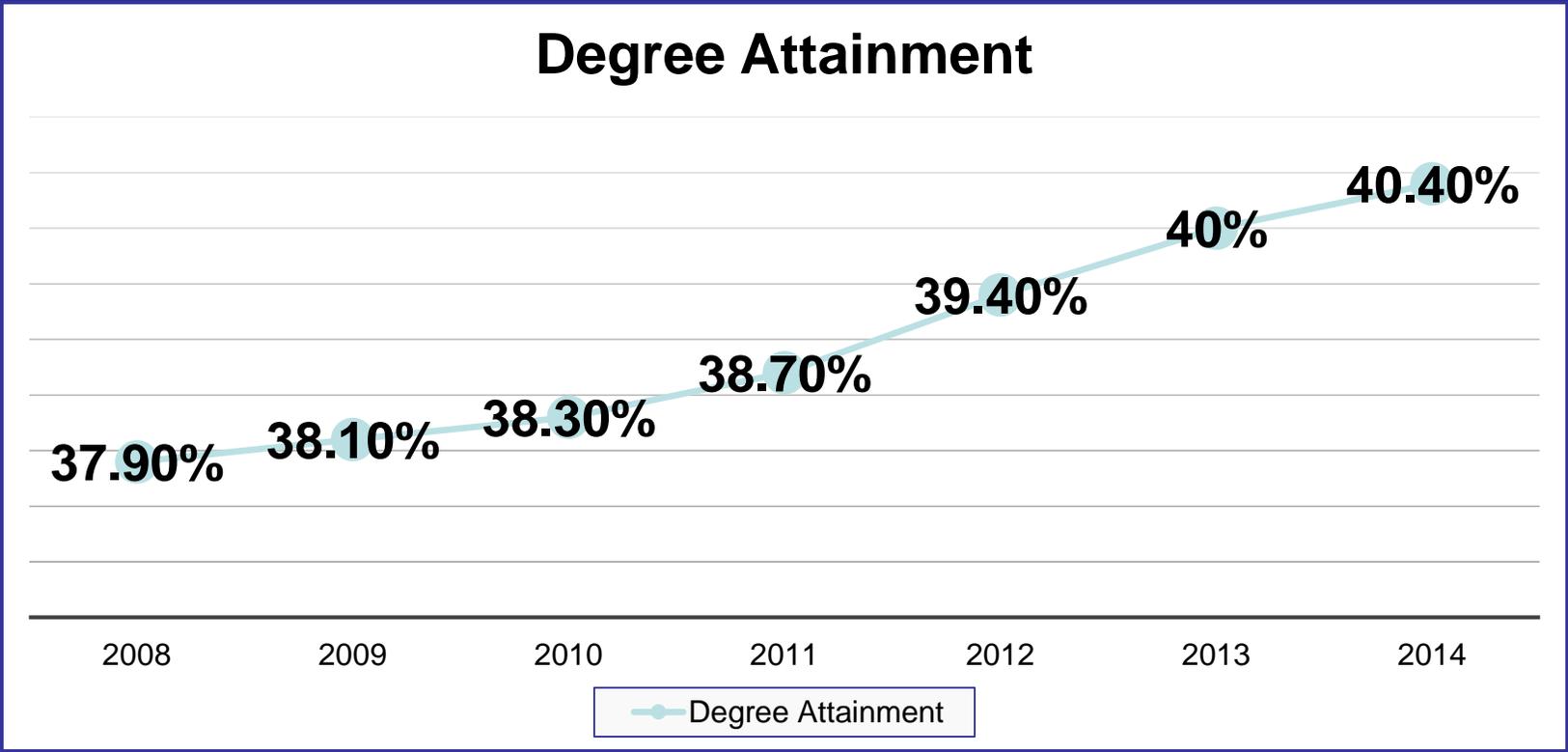
## Goal 2025:

To increase the proportion of Americans with degrees, certificates, and other **high-quality**<sup>1</sup> credentials to 60% by the year 2025.

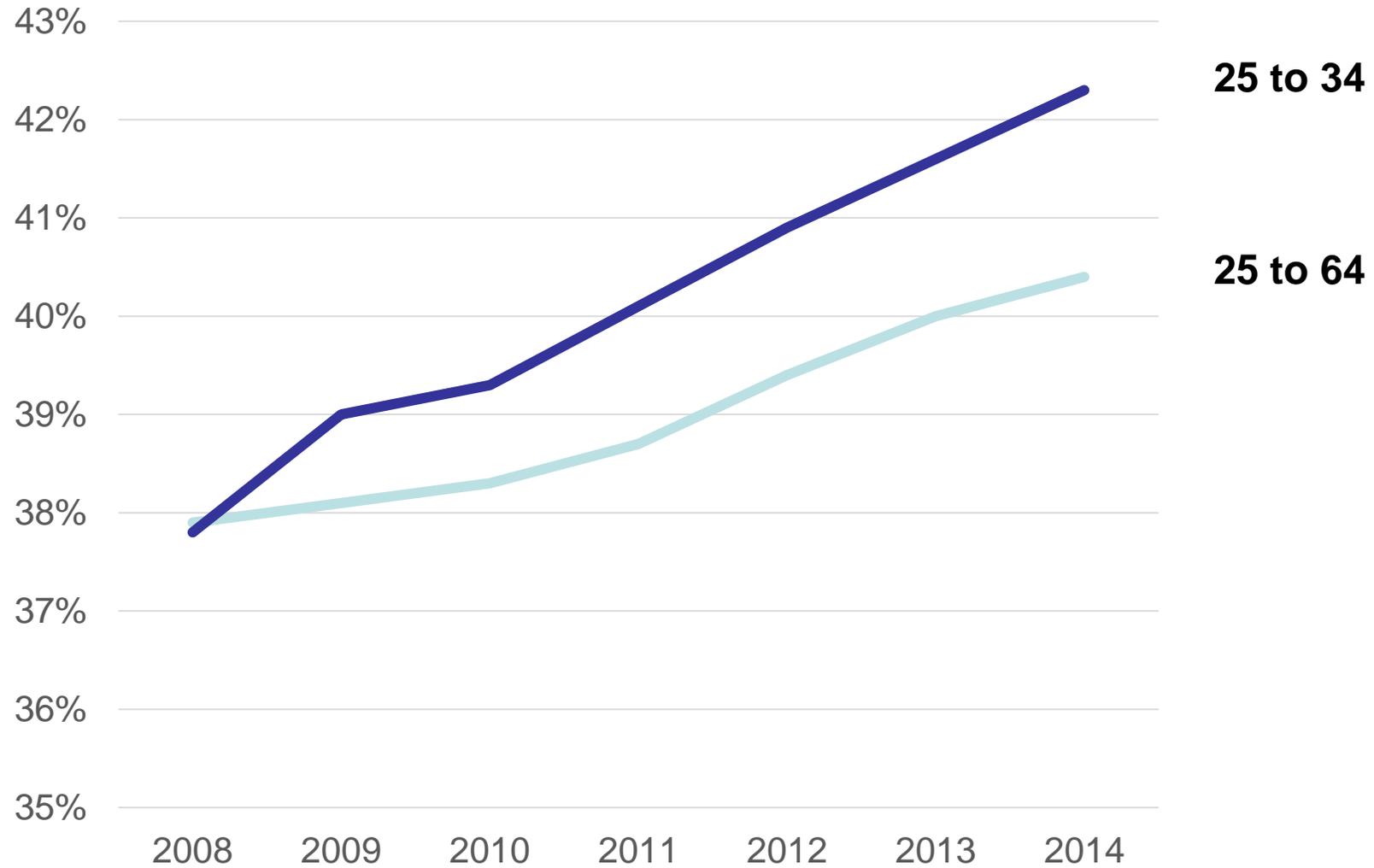
<sup>1</sup> High-quality credentials have clear and transparent learning outcomes leading to further education and employment.

**WHERE ARE WE?**

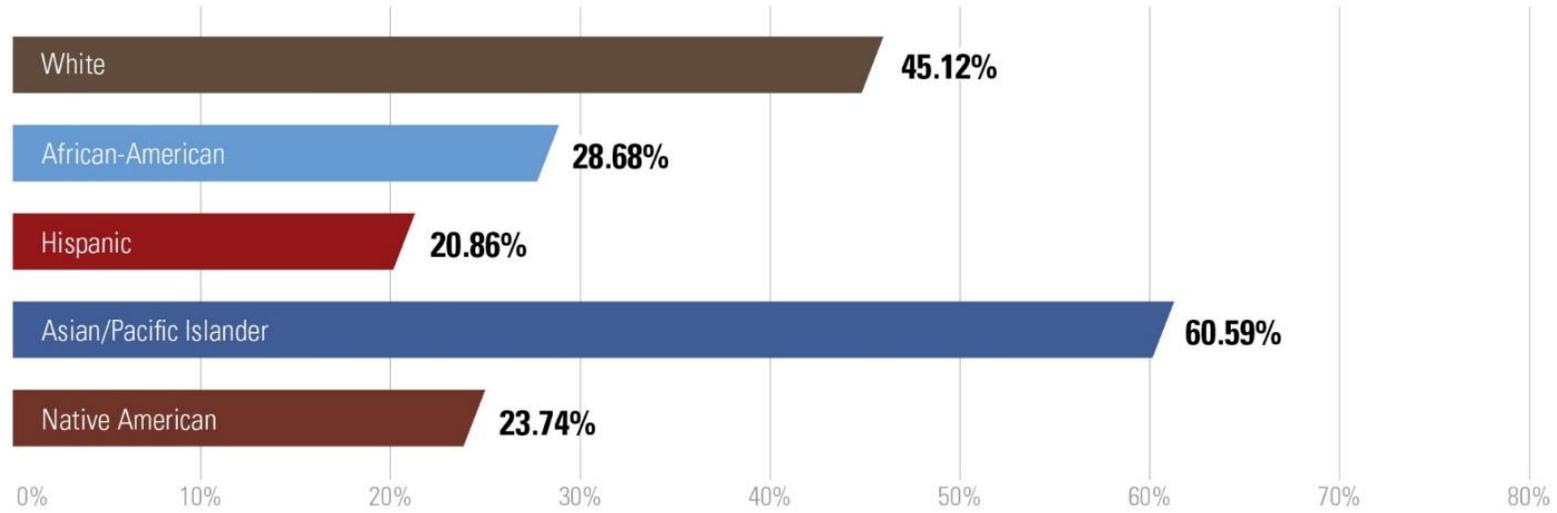
# Degree Attainment in the US



## Changes in Attainment since 2008

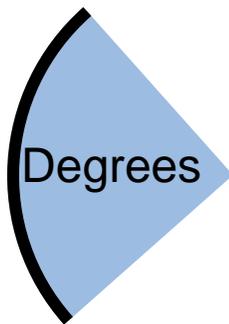


## Degree-attainment rates among United States residents (ages 25-64), by population group



*Source: U.S. Census Bureau, 2012-14 American Community Survey PUMS File*

Less than ninth grade	7,860,755	4.69%
Ninth to 12th grade, no diploma	11,782,229	7.03%
High school graduate (including equivalency)	44,135,232	26.35%
<b>Some college, no degree</b>	<b>36,011,451</b>	<b>21.50%</b>
Associate degree	14,935,196	8.92%
Bachelor's degree	33,565,969	20.04%
Graduate or professional degree	19,219,899	11.47%

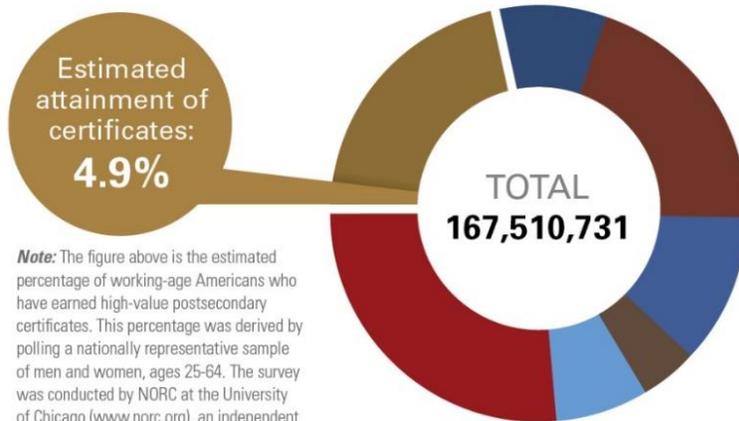


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National Degree Attainment = 40.4%  
 National Certificate Attainment = 4.9%  
**National Attainment = 45.3%**

Levels of education for United States residents, ages 25-64

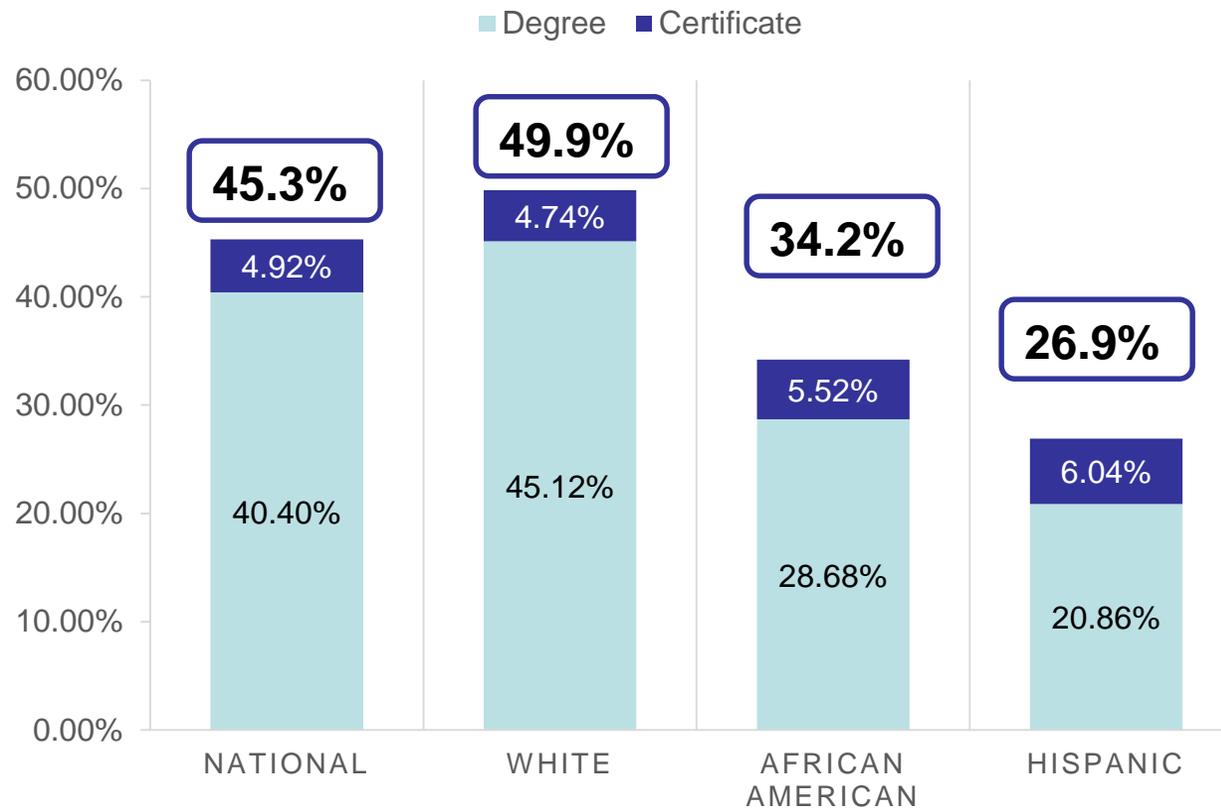


*Note:* The figure above is the estimated percentage of working-age Americans who have earned high-value postsecondary certificates. This percentage was derived by polling a nationally representative sample of men and women, ages 25-64. The survey was conducted by NORC at the University of Chicago ([www.norc.org](http://www.norc.org)), an independent research institution.

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

# Attainment Rate by Race/Ethnicity



# THE VIRGINIA PLAN

# Be the Best Educated State by 2030

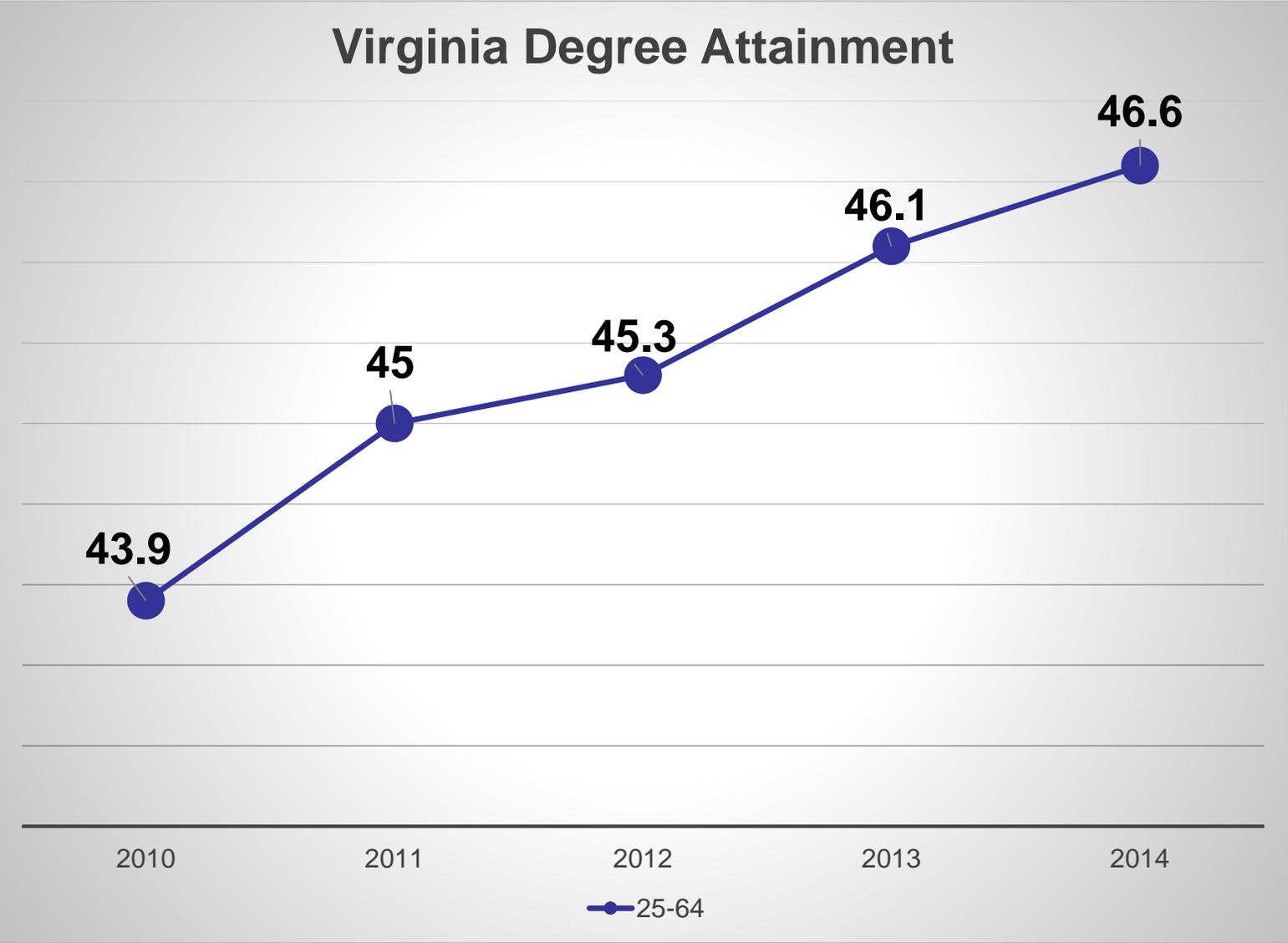
*The main objective of The Virginia Plan is to be the best-educated state by 2030. Becoming the best-educated state supports the future prosperity of Virginia, its citizens and its regions. An educated population and well-trained workforce increase economic competitiveness, improve the lives of individuals and support greater community engagement. The best-educated state means that Virginia supports higher education at all levels. This spectrum includes workforce credentials such as industry certifications, state licensures, apprenticeships and certificates, as well as traditional degrees.*

60.5% Degree Attainment

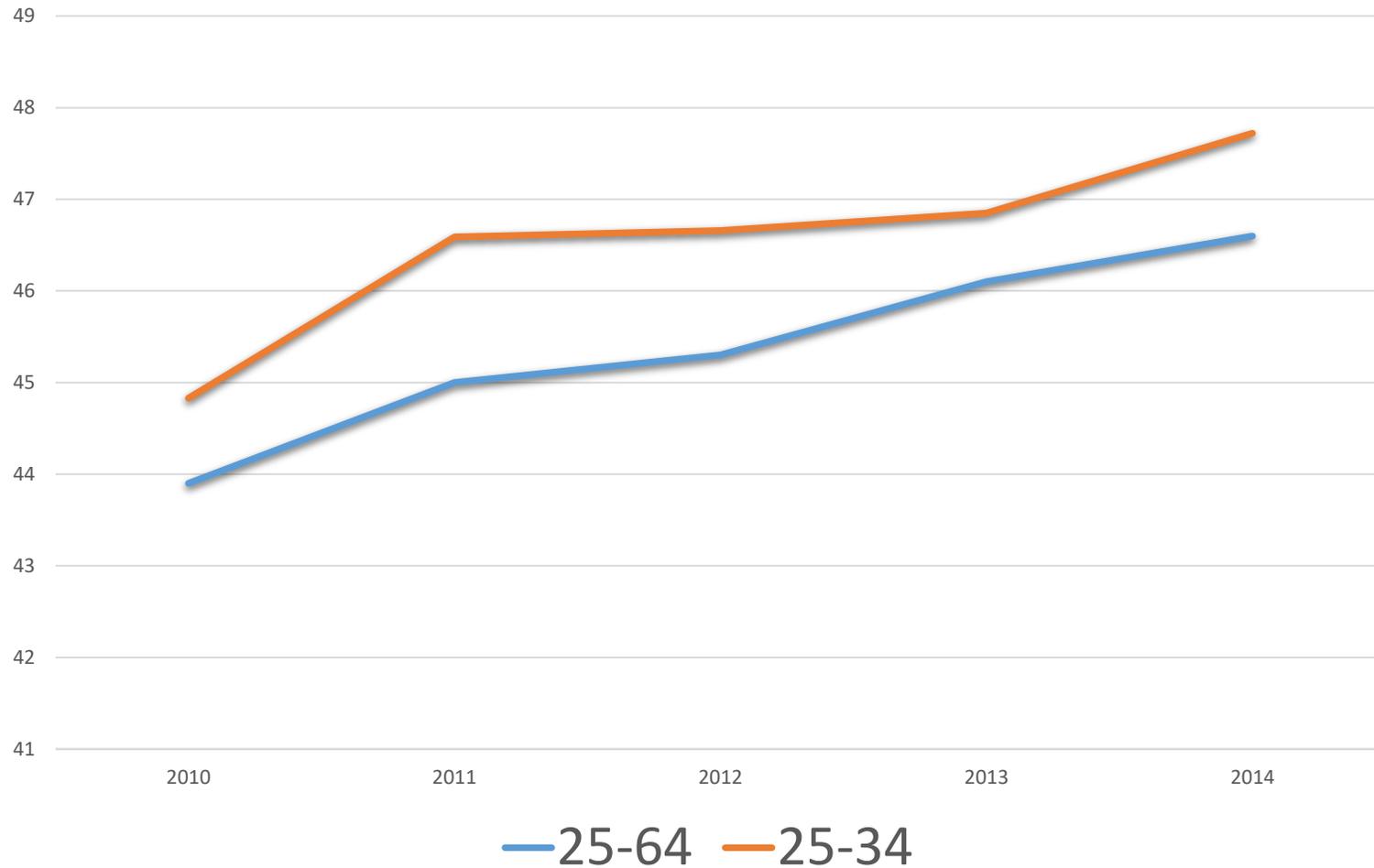
10% Certificate Attainment

**WHERE ARE YOU?**

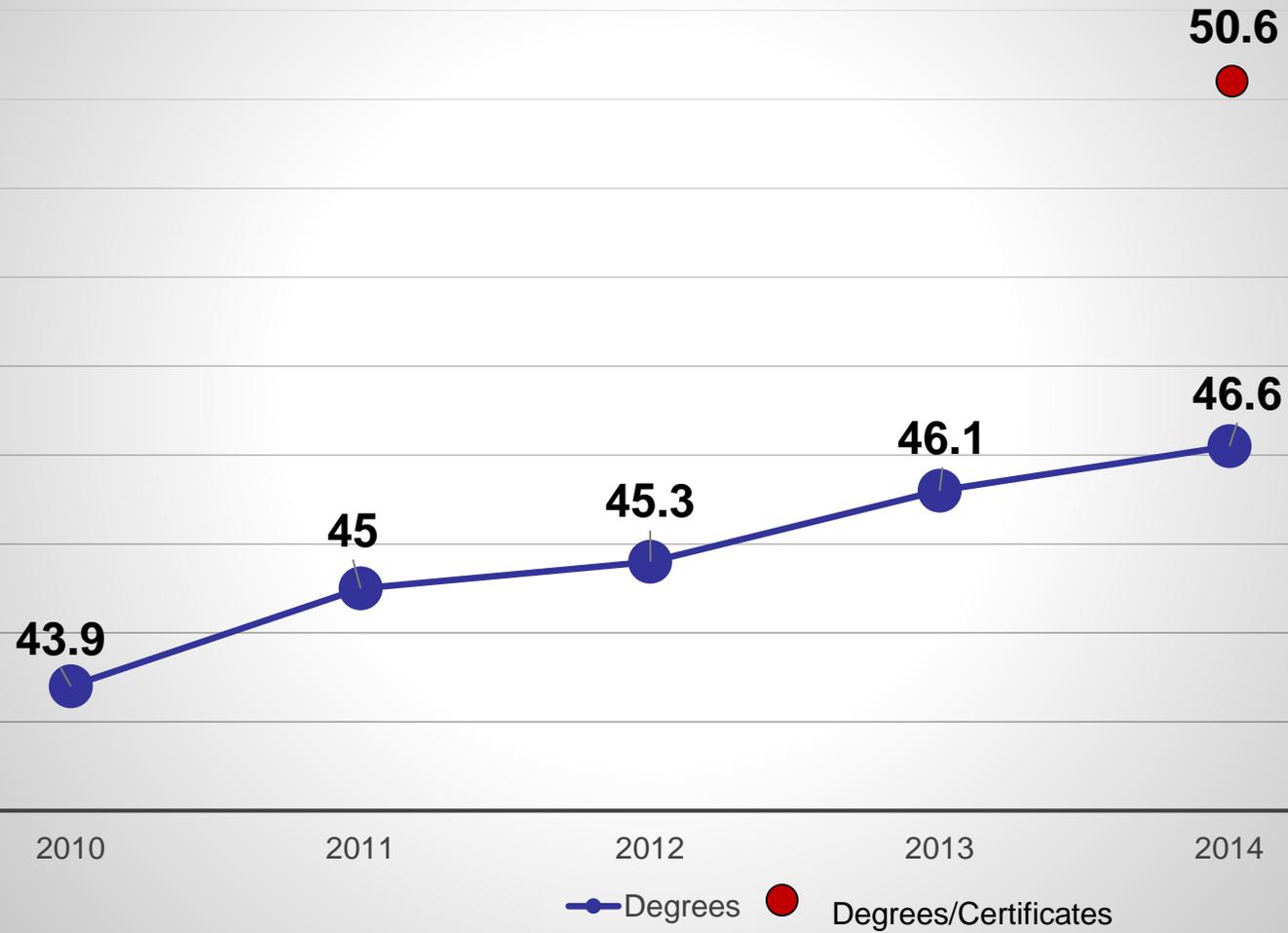
# Virginia Degree Attainment



# Virginia Attainment By Age Group



# Virginia Postsecondary Attainment

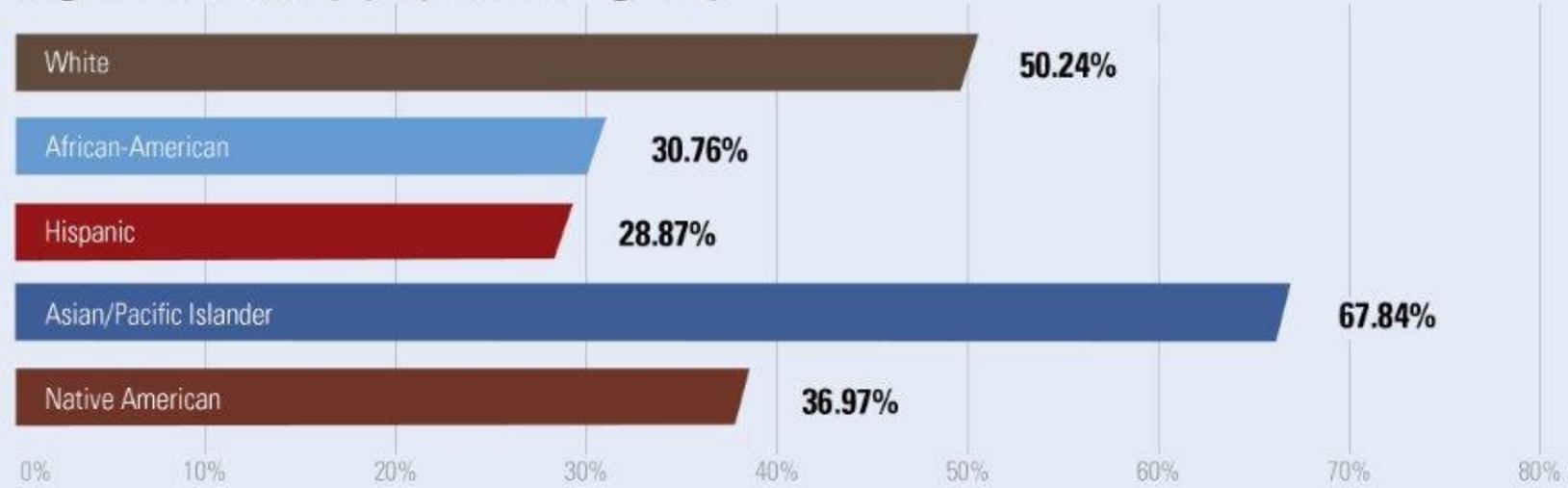


## Levels of education for Virginia residents, ages 25-64



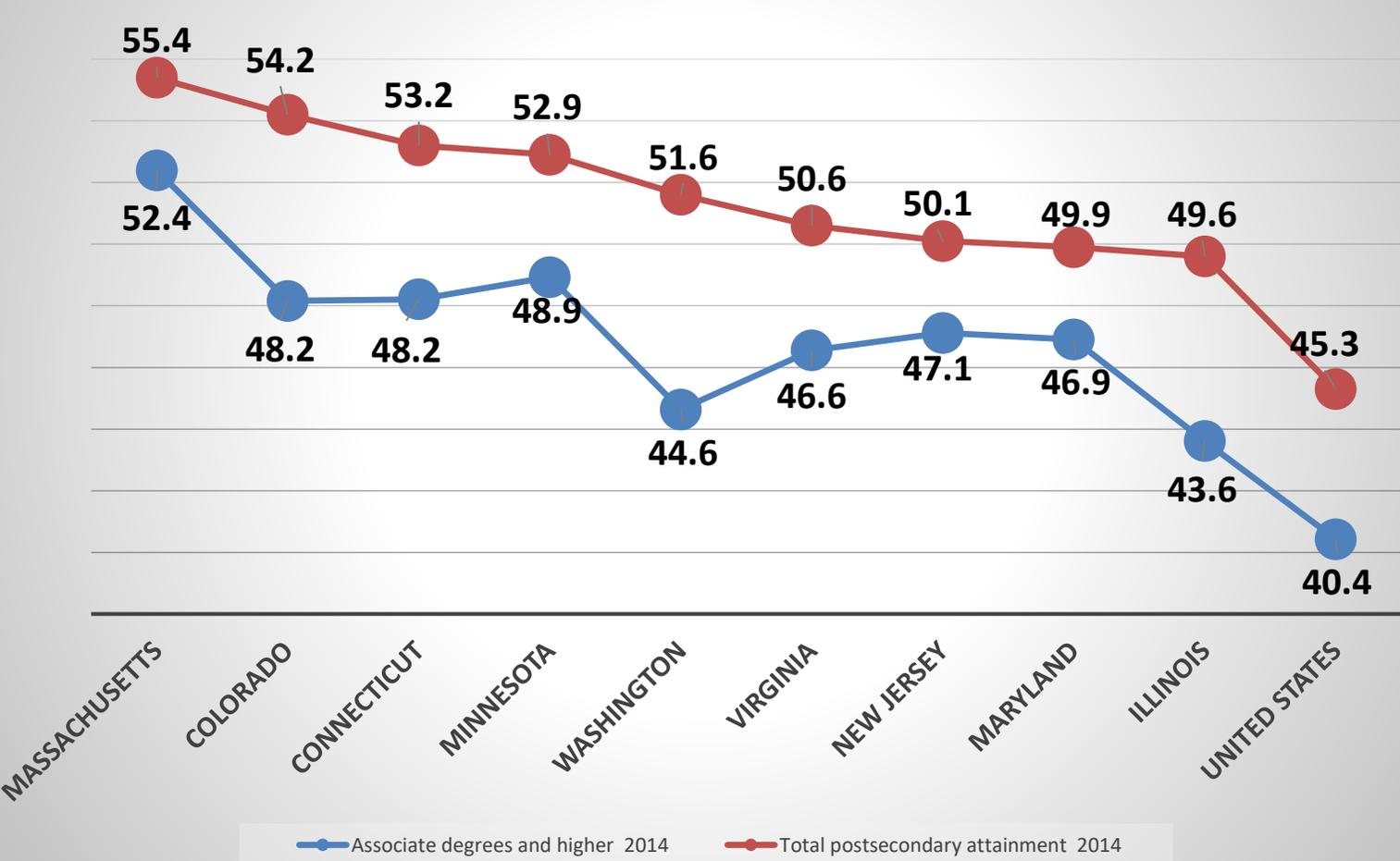
Source: U.S. Census Bureau, 2014 American Community Survey

## Degree-attainment rates among Virginia residents (ages 25-64), by population group



Source: U.S. Census Bureau, 2012, 2013, and 2014 American Community Survey One-Year PUMS Files

# Postsecondary Attainment



**HOW DO WE GET THERE?**

# How do we get to 60% by 2025?

Estimated Population in 2025: 176 Million

60% of the Population: 105 Million

*Current degree holders 18-54* 57 Million

*Current certificate holders 18-54* 7 Million

*New credentials by 2025* 24 Million

**2025 Credential Holders = 89 Million**

**105-89 = a 16 Million Gap**

# **Lumina Foundation**

## **Strategic Plan for 2017 to 2020**

Lumina Foundation will work to build an equitable, universal postsecondary learning system to meet national talent needs and close attainment gaps. The learner-centered, outcomes-focused system will expand postsecondary opportunity by recognizing learning wherever and however it is obtained, offering a wide range of transparent, high quality credentials at different levels, and connecting all forms of postsecondary learning through clear learning-based pathways.

# Roadmap for Reaching Goal 2025

- Under-represented traditional-aged students
- Adults with some college and no degree
- Adults with no recognized training and no credential

