

Using Data to Inform Policy and Improve Student Outcomes in Virginia

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Agenda

- Welcome and introductions
- Overview of Virginia's statewide longitudinal data system
- Data in action
- Value of Regional Educational Laboratory (REL) partnerships
- Questions and answers



Presenters



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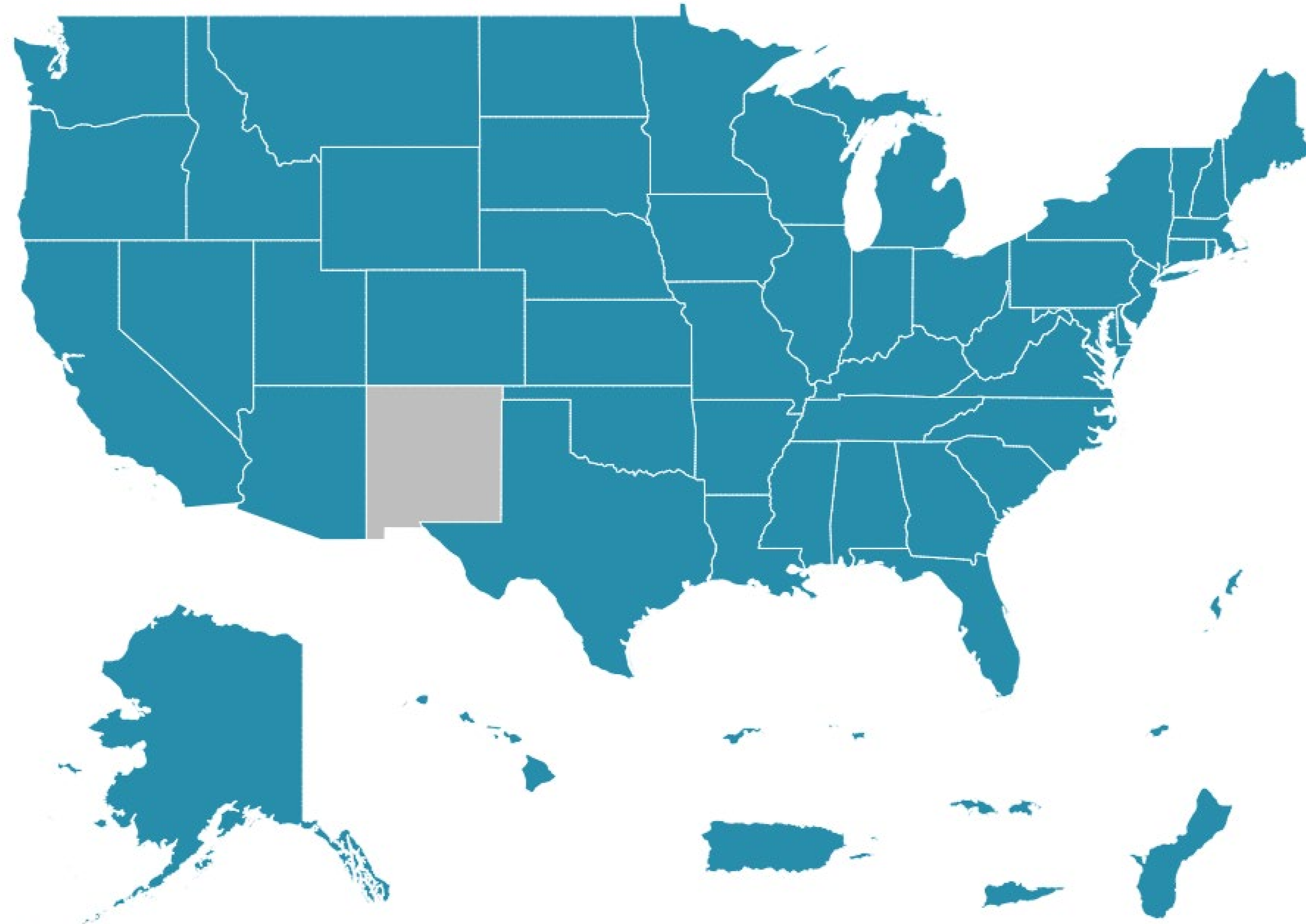
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Overview of Virginia's Statewide Longitudinal Data System

Longitudinal data systems in the U.S.



Source: National Center for Education Statistics, Statewide Longitudinal Data Systems Grant Program

Overview of the Virginia Longitudinal Data System (VLDS)

Designed to address cross-sector research questions pivotal to citizens and policymakers by merging data across partner agencies

- Algorithm matches then de-identifies data across agencies
- Data sharing agreement allow researchers access to data from the system

Federated model with 11 participating agencies and non-profit organizations

Operational since 2013

- 44 active research projects
- 131 researchers



VLDS agency partners



State Council of
Higher Education for Virginia



VIRGINIA DEPARTMENT OF
SOCIAL SERVICES



VLDS burning questions



Critical research needs addressed by VLDS:

1. **Impact on Virginia's economy** of health, social service, education, and workforce pipeline
2. **Return on investment** of health, social service, education, and workforce opportunities and programs
3. **Alignment to known and projected employers' needs** of health, social service, education and workforce programs;
4. **Collective, long-term impact** of health, social service, education, and workforce programs on people serve
5. **Pathways to the workforce**, patterns of employment, and factors or conditions that predict success
6. **Factors or conditions** with the greatest impact on educational achievement and later productivity

Who uses VLDS?



System is designed to support research

- Public and private university researchers
- Research centers
- Partner agency staff

How does VLDS work?



Research process:

- Work with agency sponsor to develop and refine research questions
- Submit proposal and gain formal approval
- Develop data query
- Conduct research
- Communicate findings

What is the value of VLDS?

- Career and technical education credential attainment
- Algebra I and college preparatory diploma outcomes
- Impact of preschool participation in Virginia on achievement
- Return on investment of workforce programs
- College outcomes of high school graduates
- Impact of career and technical education on college success
- Examining the Virginia teacher pipeline

What's next for VLDS?



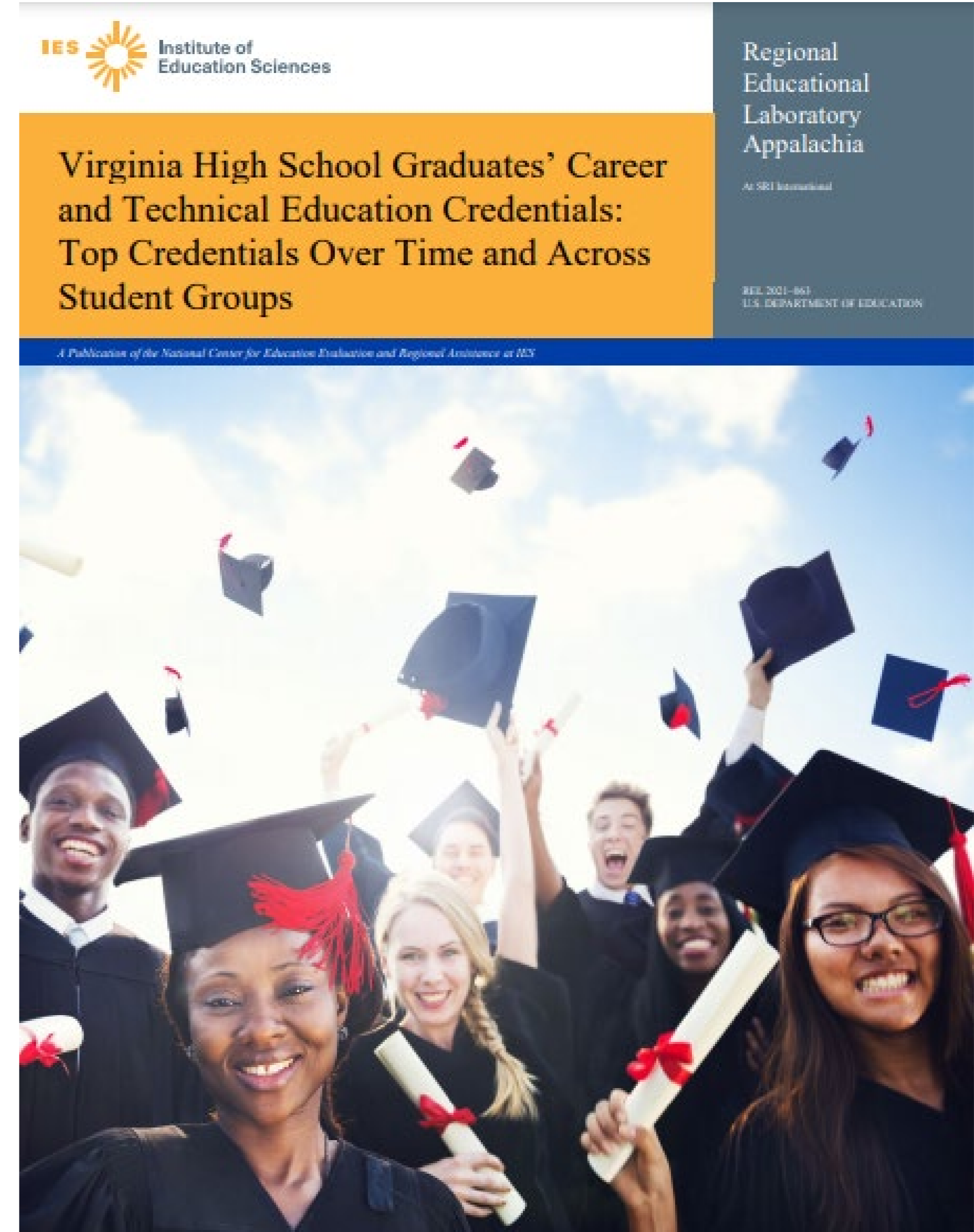
- Modernizing system output with dashboards and visualizations
- Adopting an equity-centered data use model
- Expanding reach to practitioners by developing tools to measure performance and exchange data
- Bridging the research-policy-practice gap through stronger partnerships, a new research agenda, and annual forums



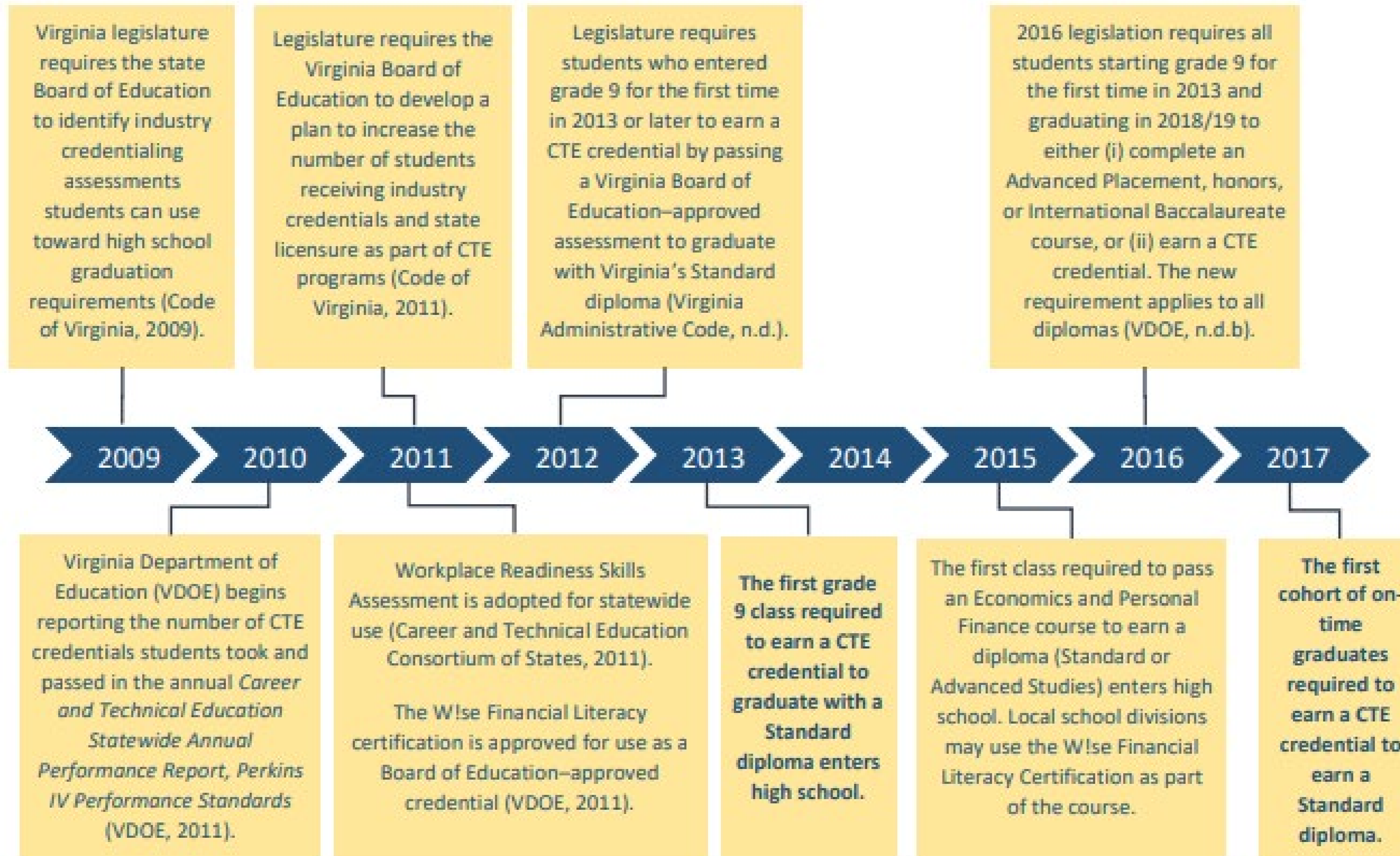
Data in Action

Why this study?

- To understand **what CTE credentials students earned** in the years leading up to and after Virginia added a career and technical education (CTE) credential to the **requirements for earning a Standard diploma**



Virginia's CTE policy timeline

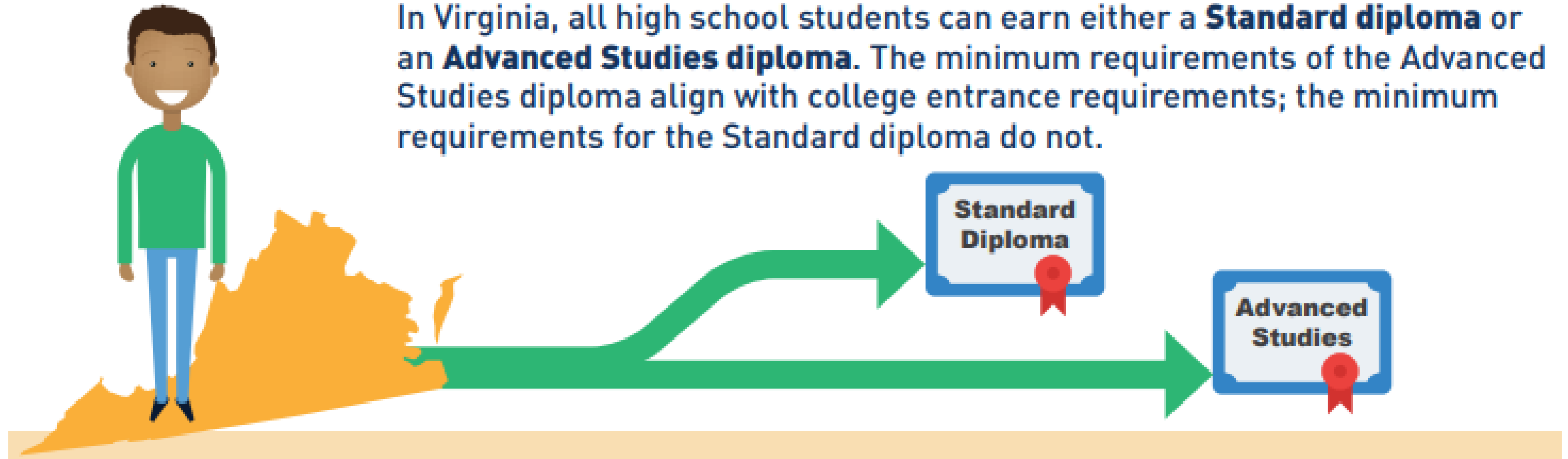


Policy context

- Policy first applied to students who **started grade 9 in the 2013/14** school year (on-time graduation 2016/17).
- Only applied to Standard diploma graduates.
- VDOE **approved 471 credentials** for the 2016/17 school year (VDOE, 2016).
- Some credentials **broadly measure a variety of content areas** (for example, the Workplace Readiness Skills assessment), while others are **more narrowly aligned with a particular industry** (for example, the cosmetology licensure).

Policy context

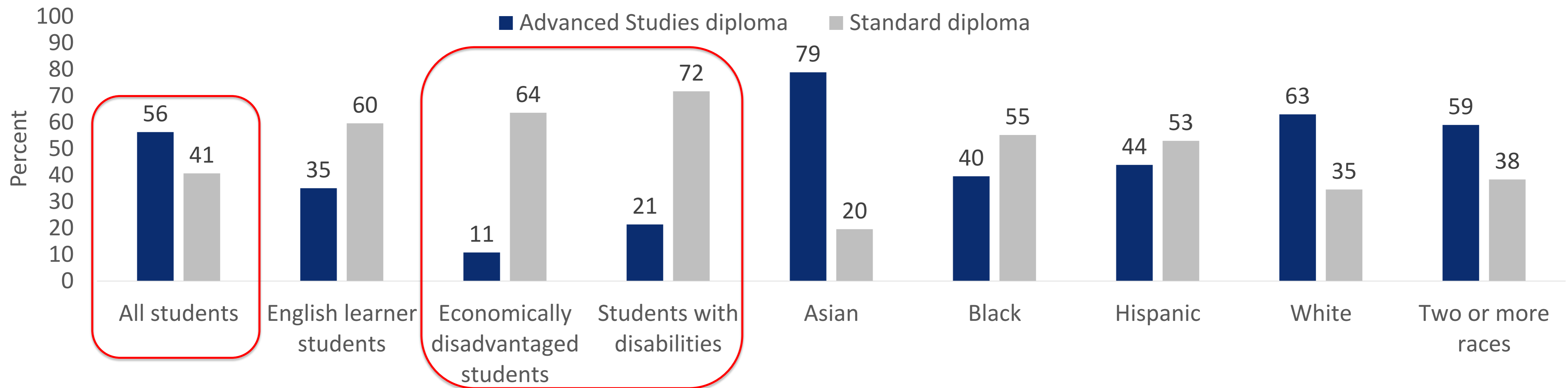
In Virginia, all high school students can earn either a **Standard diploma** or an **Advanced Studies diploma**. The minimum requirements of the Advanced Studies diploma align with college entrance requirements; the minimum requirements for the Standard diploma do not.



Policy context

- Less than half of students who earn the Standard diploma go to college. Therefore, it is critical to prepare these students for careers and additional postsecondary training in high school.
- Further, Standard diplomas are disproportionately awarded to students who have been historically underserved.

Percentage of 2017 graduates earning either the Advanced Studies or Standard diploma by student subgroup



Data from VLDS



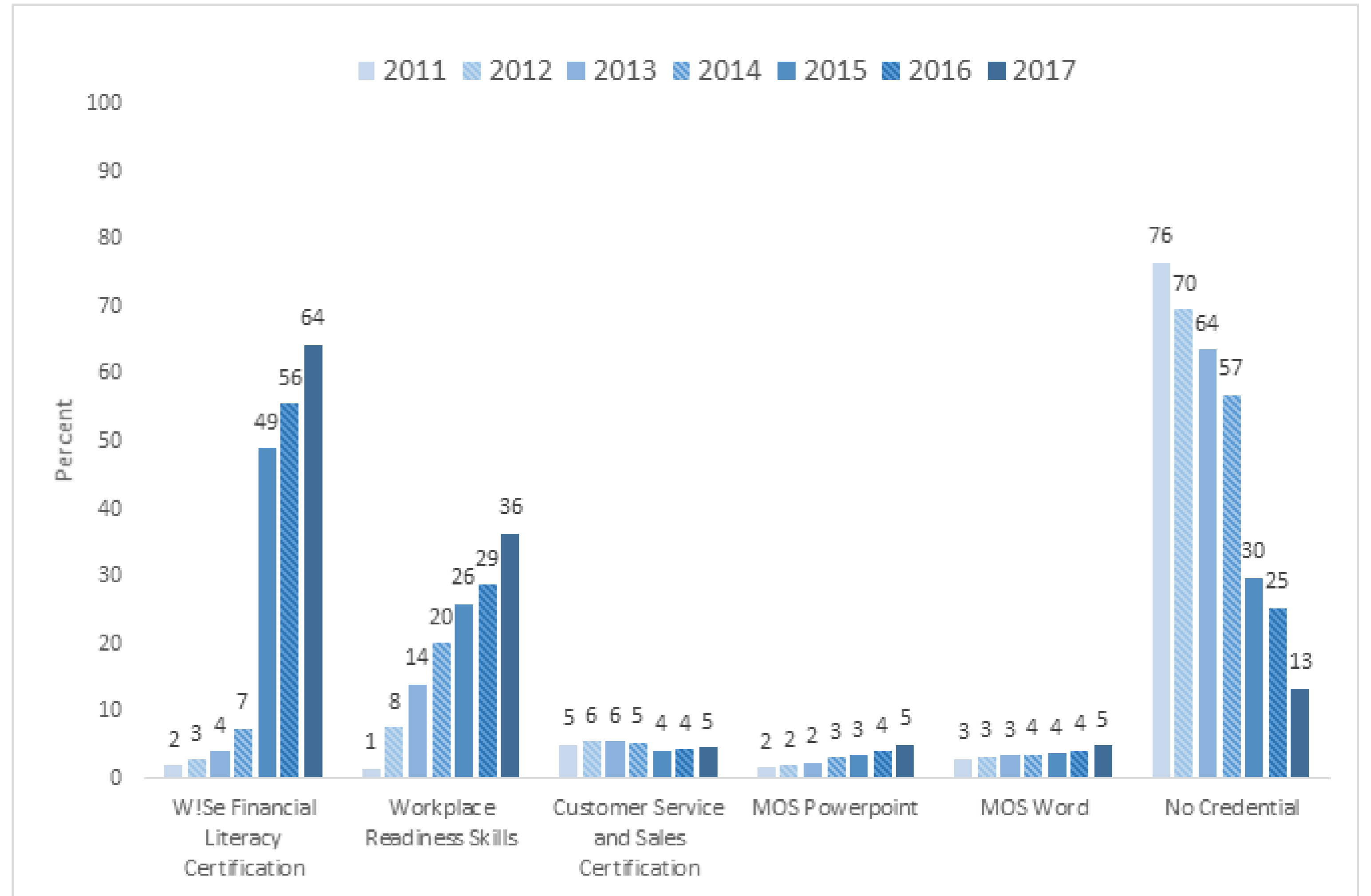
- This study utilized data from VLDS.
- Included the following data:
 - Demographics
 - Graduation records (diploma type and year)
 - CTE credential attainment (credential name and type)
- The longitudinal nature of the data allowed us to examine seven years of graduates (2011-2017).

What did we do?

- Identified the **5 most commonly earned credentials**, by graduation year, from 2011–2017 (regardless of diploma type).
- For 2017 graduates, identified the **top 10 credentials** for Standard and Advanced Studies graduates.
- Looked for **differences in the most common credentials** that 2017 Standard diploma graduates earned **across student characteristics and by region**.

Top five credentials of graduates from 2011 through 2017

- The five most commonly earned CTE credentials remained the same from 2011–2017.
- More than a 30-fold increase in the percentage of students earning the WRS and W!se Financial Literacy Certification credentials.
- Percentage of students earning the other credentials was relatively stable.



Top 10 credentials for 2017 graduates

Broad credentials

Credential name	Standard diploma graduates			Advanced Studies diploma graduates		
	Rank	Percent	Number	Rank	Percent	Number
W!se Financial Literacy Certification	1	63.4	22,55	1	70.4	34,308
Workplace Readiness Skills	2	40.6	14,468	2	36.2	17,634
MOS PowerPoint (Industry)	3	4.6	1,641	4	5.9	2,890
MOS Word	6	3.8	1,359	3	6.1	2,972
College and Work Readiness	10	1.0	370	6	3.4	1,666
National Career Readiness Certificate	5	3.8	1,365	9	1.2	567
MOS Excel	na	na	na	7	2.6	1,273
Number of students	na	na	35,604	na	na	48,743

Narrow credentials

Credential name	Standard diploma graduates			Advanced Studies diploma graduates		
	Rank	Percent	Number	Rank	Percent	Number
Customer Service and Sales Certification	4	4.0	1,411	5	5.4	2,637
Armed Services Vocational Aptitude Battery	7	1.6	582	8	1.2	571
National Nurse Aide Program	na	na	na	10	1.0	498
Cosmetology Licensure	9	1.1	375	na	na	na
ServSafe Manager Certification	10	1.0	361	na	na	na
Number of students	na	na	35,604	na	na	48,743

Top broad credentials for 2017 Standard diploma graduates, by region

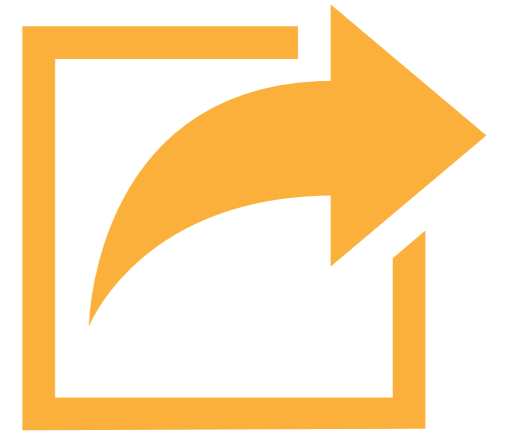
Credential name	Central Virginia (Region 1)	Tidewater (Region 2)	Northern Neck (Region 3)	Northern Virginia (Region 4)	Valley (Region 5)	Western Virginia (Region 6)	Southwest (Region 7)	Southside (Region 8)
Broad credentials								
Wise Financial Literacy Certification	70.4	71.1	58.0	61.3	63.1	62.1	52.0	37.8
Workplace Readiness Skills	29.3	41.8	50.3	47.1	34.0	38.4	46.6	9.0
MOS PowerPoint	2.3	4.2	6.1	3.2	5.2	6.2	10.0	12.7
MOS Word	1.9	5.2	2.4	3.0	2.2	6.2	7.7	5.2
National Career Readiness Certificate	5.5	na	na	1.2	3.8	12.3	na	43.2
College and Work Readiness Assessment	na	4.7	na	na	na	na	na	na
MOS Excel	na	1.1	na	0.8	na	1.8	na	2.5
SkillsUSA: Customer Service Examination	2.6	na	na	na	na	na	na	na
AAFCS: Broad Field Family and Consumer Sciences	na	1.6	na	na	na	na	na	na
Number of students	5,361	7,573	2,437	11,111	3,042	2,500	2,458	1,001

Top narrow credentials for 2017 Standard diploma graduates, by region

Credential name	Central Virginia (Region 1)		Northern Neck (Region 3)	Northern Virginia (Region 4)		Valley (Region 5)	Western Virginia (Region 6)		Southwest (Region 7)	Southside (Region 8)
	Tidewater (Region 2)									
Narrowly aligned credentials										
Customer Service and Sales Certification	3.6	9.7	3.1	1.7	na	3.9	3.7	na		
Armed Services Vocational Aptitude Battery	1.3	1.9	3.6	1.4	na	2.4	na	2.1		
Cosmetology Licensure	na	na	1.6	0.7	1.5	na	3.1	na		
ASE Student Certification Automotive: Maintenance and Light Repair	1.1	na	1.4	0.6	1.5	na	na	na		
National Nurse Aide Assessment Program	na	na	na	na	2.5	na	3.6	1.7		
Beef Quality Assurance Certification	na	na	na	na	na	na	2.9	na		
NCCT Core: Introductory Craft Skills	na	na	na	na	1.8	na	3.1	na		
Private Applicator Certification	na	na	na	na	na	1.6	na	2.6		
ServSafe Manager Certification	1.7	0.9	na	na	na	2.8	na	3.4		
ASE Student Certification Automotive: Suspension and Steering	na	na	1.6	na	na	na	na	na		
ASE Student Certification Automotive: Brakes	na	na	1.4	na	1.4	na	na	na		
Cosmetology Assessment	na	na	na	na	na	na	2.6	na		
Number of students	5,361	7,573	2,437	11,111	3,042	2,500	2,458	1,001		

Dissemination of this work

- [Publicly available report](#)
- [Infographic](#)
- [Blog post](#)
- Presentations to key stakeholders and partnership members



Forthcoming study

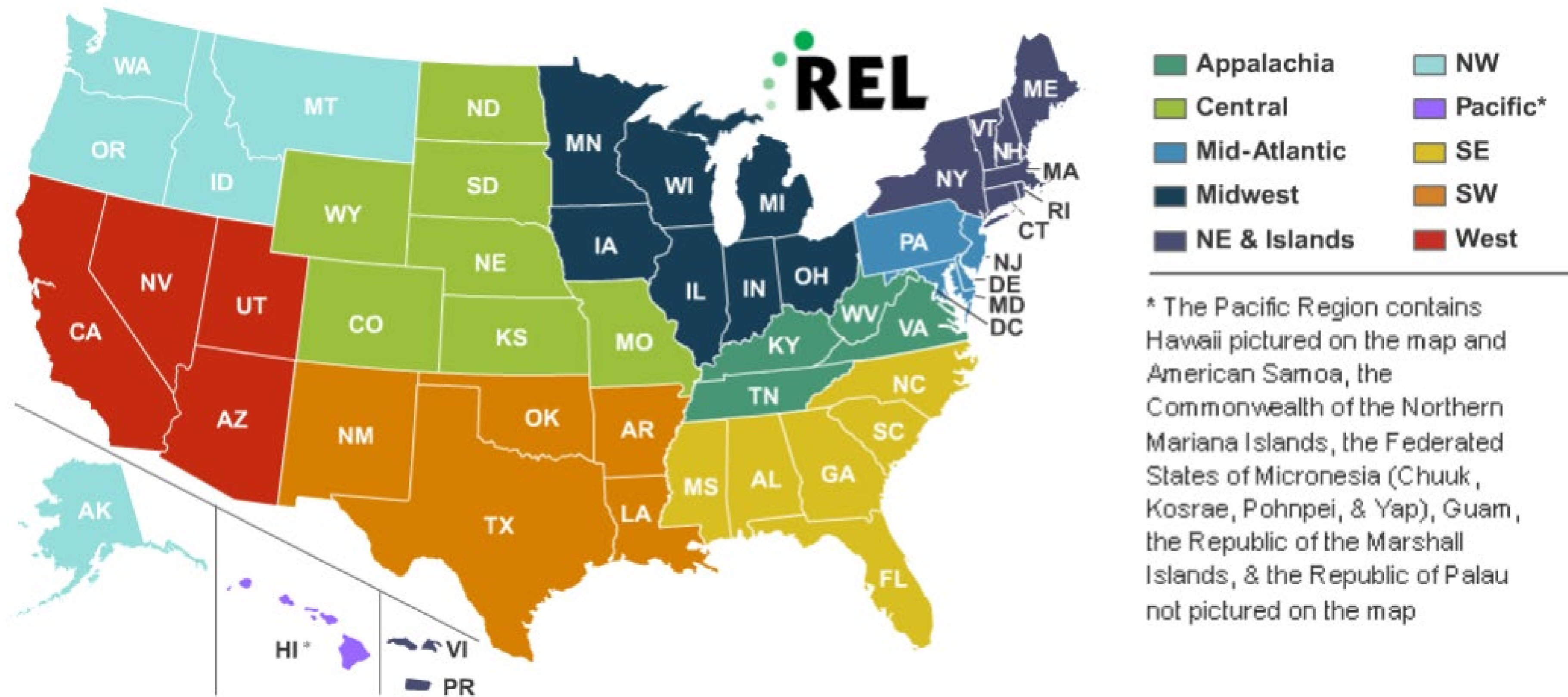
- **Report 2: [Virginia High School Career and Technical Education Credentials: Trends in Attainment and Postsecondary Enrollment Outcomes](#)**
- Research questions focus on credential attainment rates and postsecondary enrollment:
 - How did CTE credential-attainment rates for Standard diploma graduates vary by graduation year (2011–2017), type of credential, number of credentials, and program of study completion?
 - What was the credential-attainment rate for Standard diploma graduates across various student characteristics (demographics, federal program participation, and academic achievement), by graduation year (2011–2017)?
 - How did the college-enrollment rate of Standard diploma graduates vary by graduation year (2011–2017), CTE credential-attainment, type of credential, number of credentials, and program of study completion?
- **Publication expected in 2021**



Value of REL Partnerships

Regional Educational Laboratory (REL) Program

The Regional Educational Laboratories



A closer look at REL AP partnerships



You can learn more about our partnership resources by clicking on the partnership icons on the REL Appalachia partnerships [page](#).

REL AP partnership with Virginia



Guiding questions:

- How do REL partnerships work and how do they support state education agencies?
- How has VDOE used work from REL AP to inform policy and practice?
- How important has VLDS been in terms of the partnership's efforts?



Questions and Answers

Questions and answers



Thank you!



<https://ies.ed.gov/ncee/edlabs/regions/appalachia>



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