

College Outcomes: Using Data to Track Earnings, Retention, and Return on Investment

Jason Pontius

Iowa Board of Regents

AI suggested titles

Policy and Postsecondary Alignment

1. From Data to Decisions: Advancing Higher Education Policy Through Evidence

Emphasizes the shift from raw data to actionable policy insights, with an audience of policymakers in mind

2. Connecting the Dots: Using Postsecondary Data to Shape Smarter Policies

Reflects the goal of using dual credit and workforce data to make more coherent, informed policy choices.

3. Turning Insight into Impact: Leveraging Data for Postsecondary Success

Captures the transformation of data into tools for improving outcomes at the individual and systems level.

Data can help answer some of the tough questions facing higher education



Why is the college going rate of high school graduates dropping?



How will my state be impacted by the enrollment cliff?



What is the impact of dual enrollment & concurrent enrollment?



Is a college degree worth the expense and debt?



Are college degrees aligned with my state's workforce needs?

Profiling six sources of data

SLDS	Statewide Longitudinal Data System
BLS	Bureau of Labor Statistics
NSC	National Student Clearinghouse
IPEDS	Integrated Postsecondary Education Data System
CS	College Scorecard
Census	U.S. Census PSEO

Colleges Were Already Bracing for an ‘Enrollment Cliff.’ Now There Might Be a Second One.

By [Dan Bauman](#) | February 7, 2024



Forbes

The Cliffs Of Higher Ed: Who's Going Over And Why?

David Rosowsky Contributor

I write about higher ed issues, leadership, finance, and innovation.

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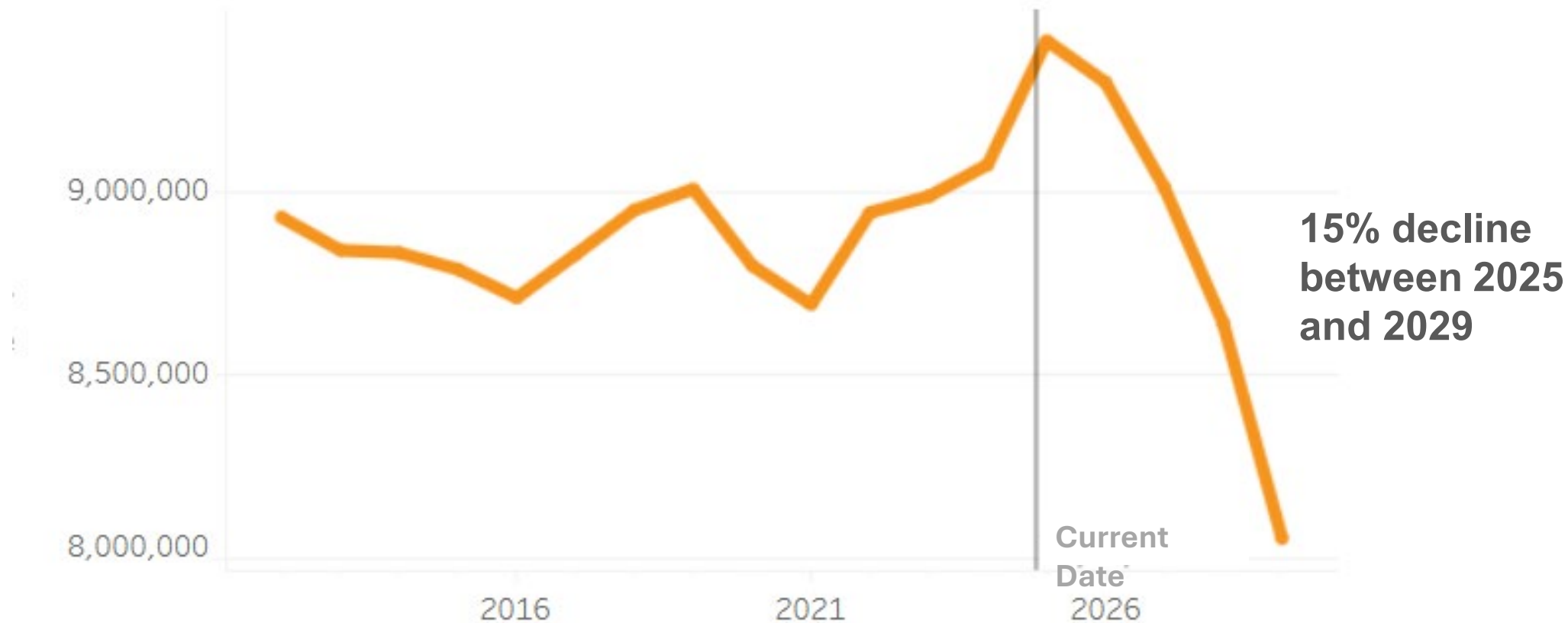


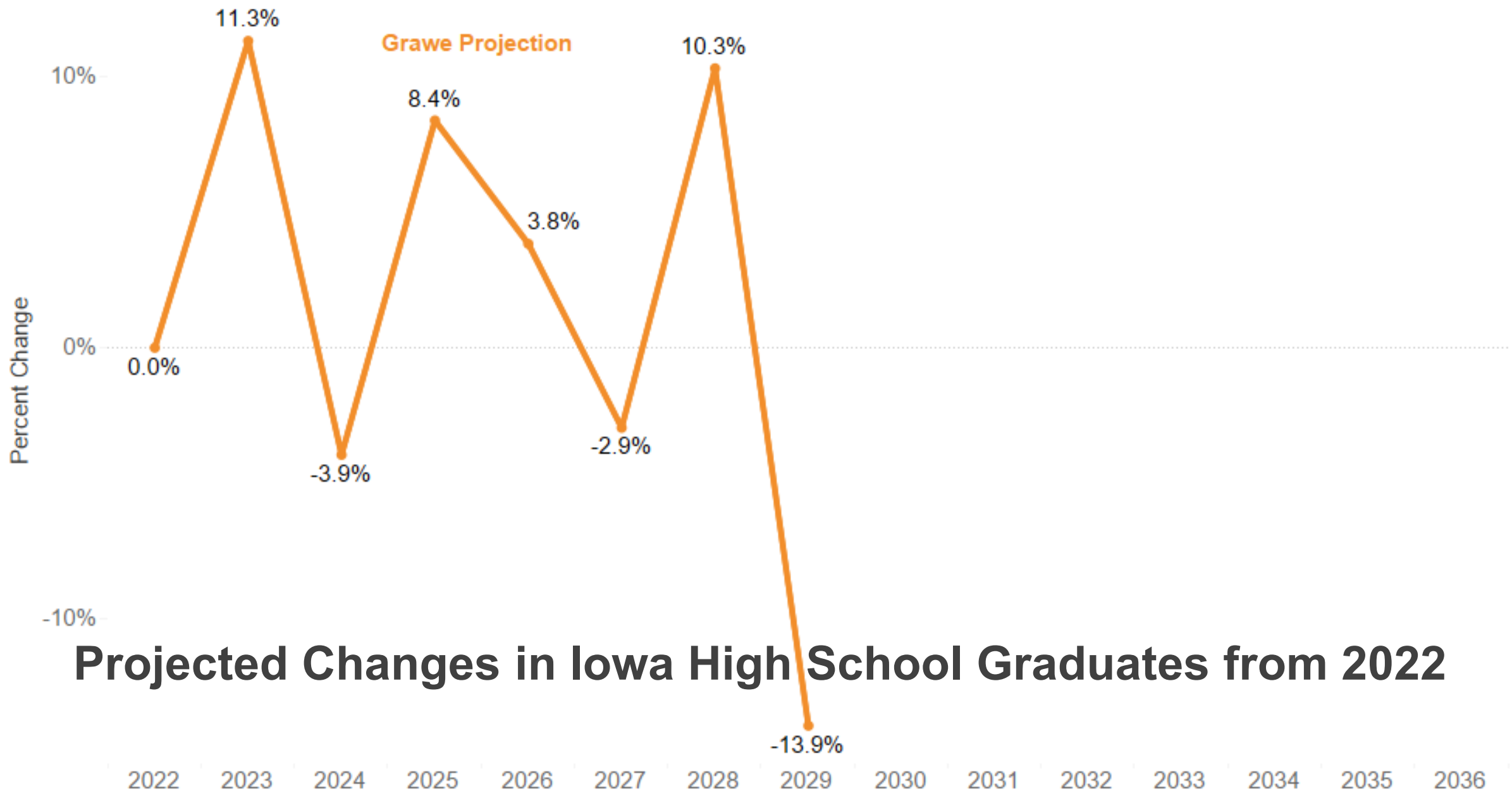
Feb 3, 2024, 01:14pm EST

Updated Feb 8, 2024, 09:36am EST



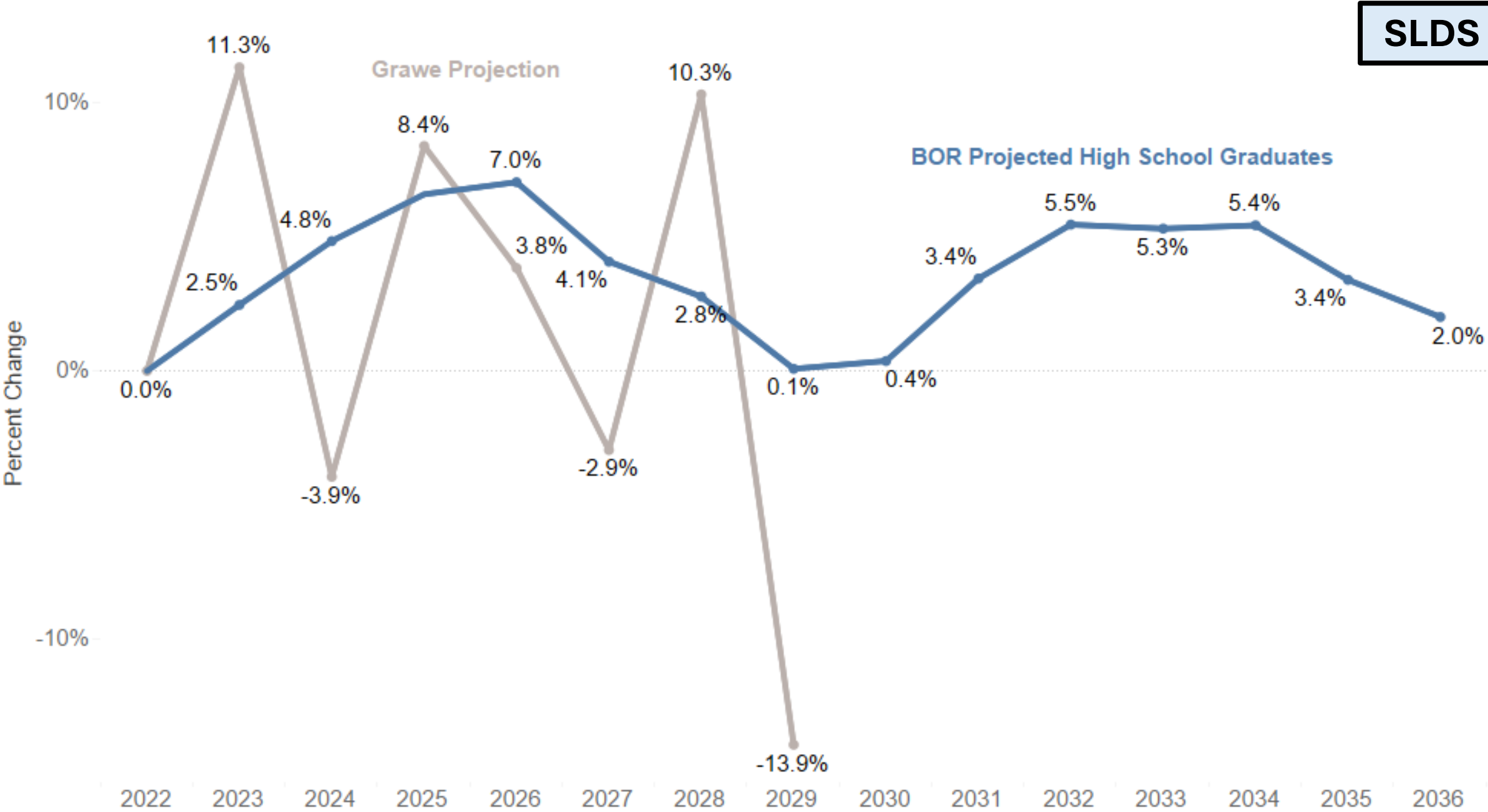
National Trend in the Number of High School Graduates



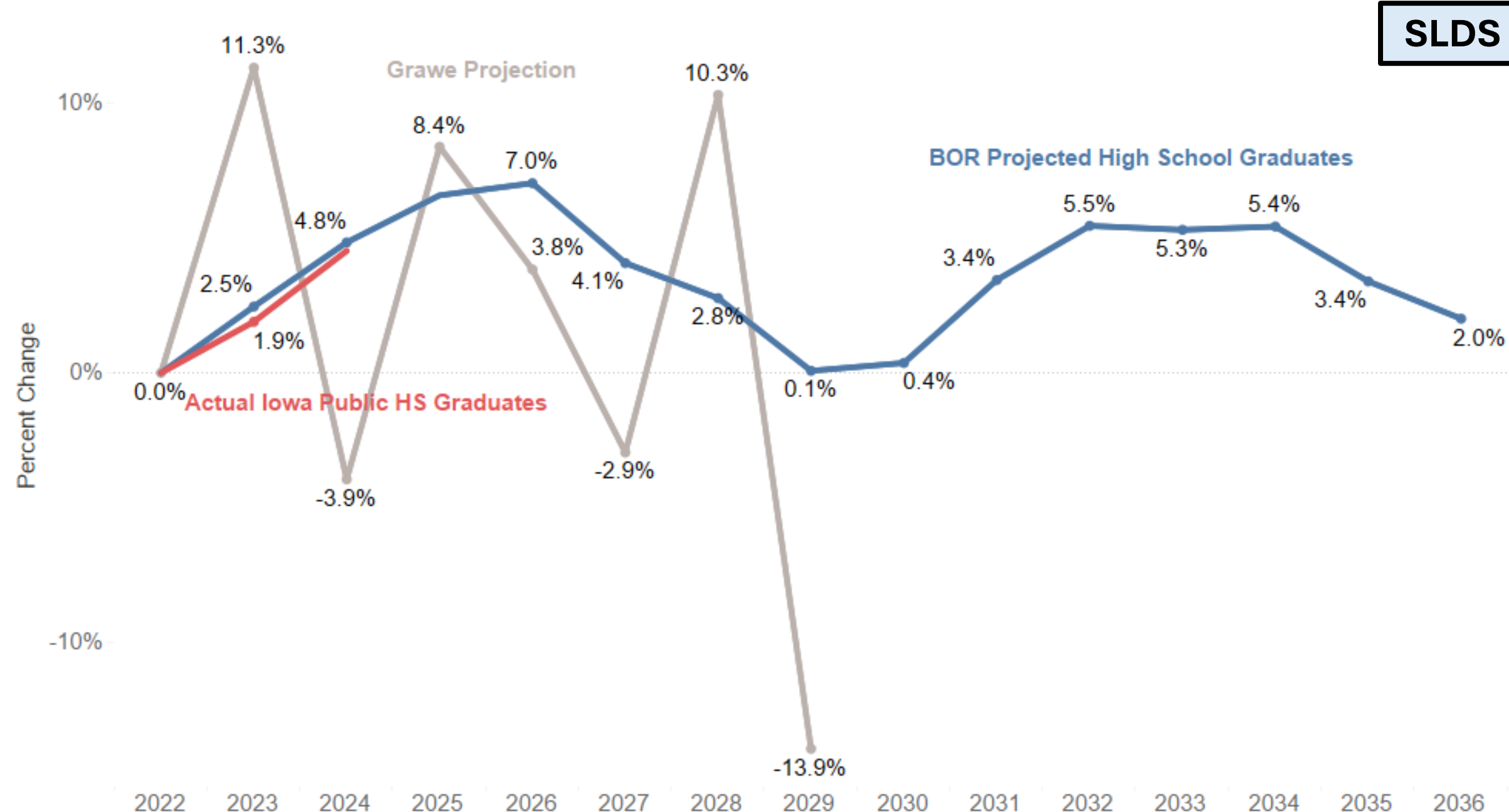


Projected Changes in Iowa High School Graduates from 2022

Sources: Projection determined using trends in current Iowa K12 enrollment to predict the number of future high school graduates.



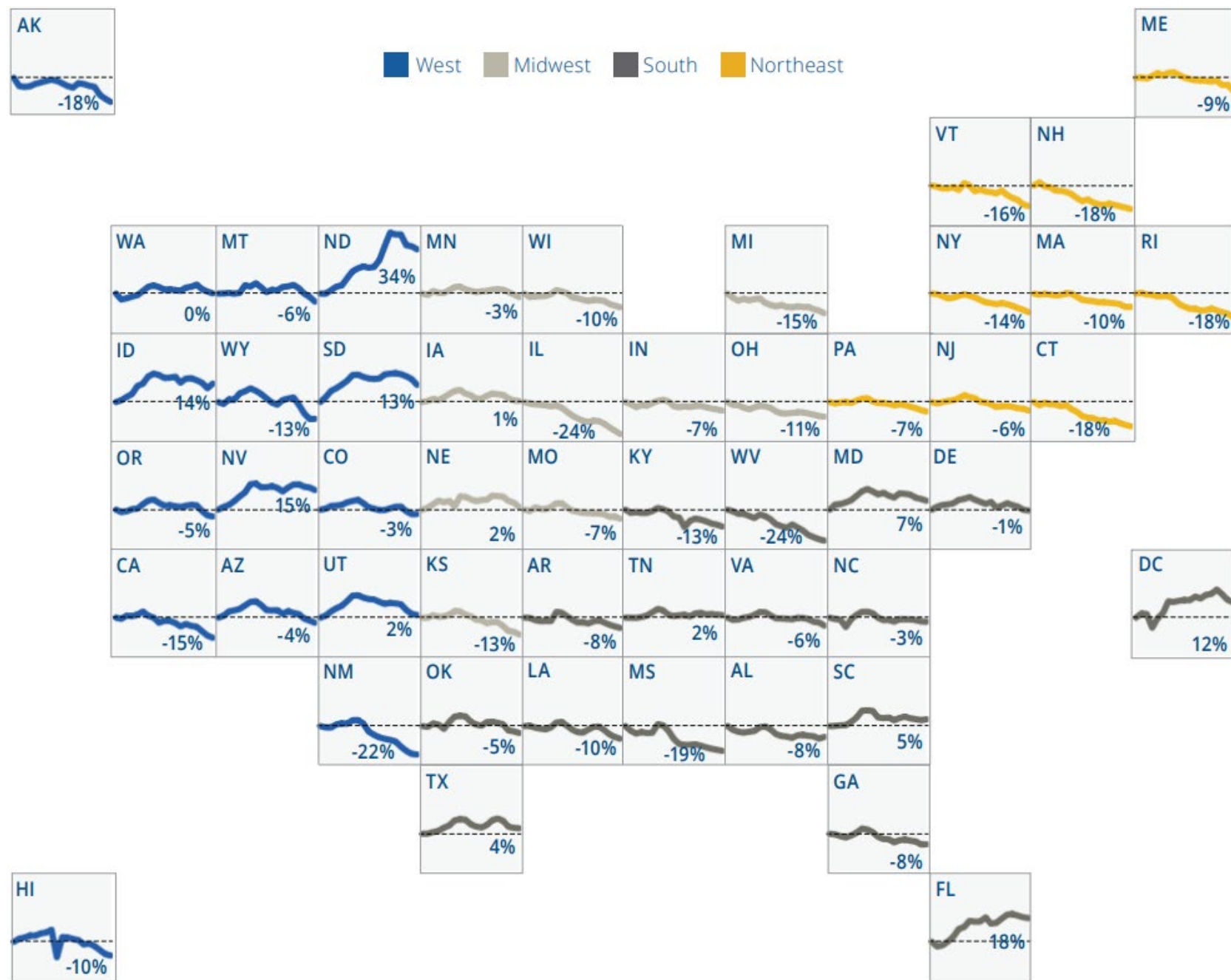
Sources: Projection determined using trends in current Iowa K12 enrollment to predict the number of future high school graduates.



Sources: Projection determined using trends in current Iowa K12 enrollment to predict the number of future high school graduates.

WICHE: Predicted change in high school graduates by state

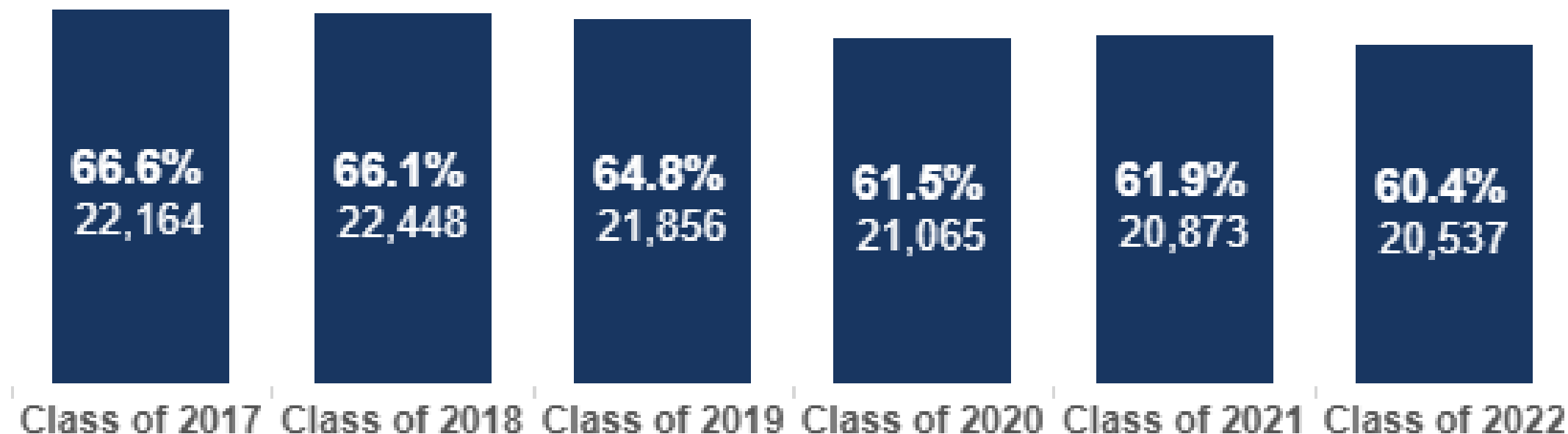
2019 - 2037



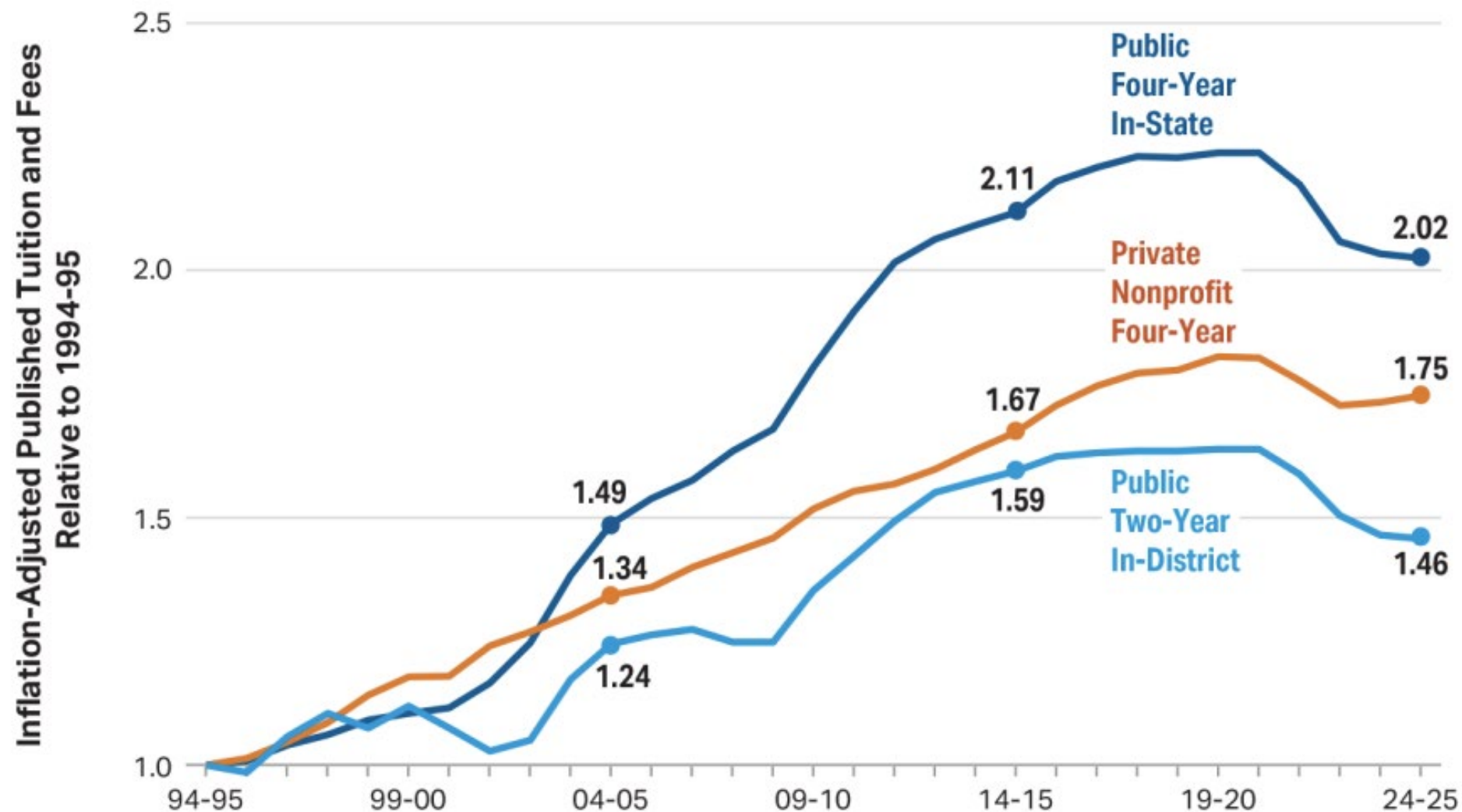
Source: Western Interstate Commission for Higher Education, *Knocking at the College Door*, 10th edition, 2020. WICHE projections and analysis.
Note: The percent change listed in each box represents the projected change in graduates from 2019 to 2037.

Why is the college-going rate of high school graduates dropping?

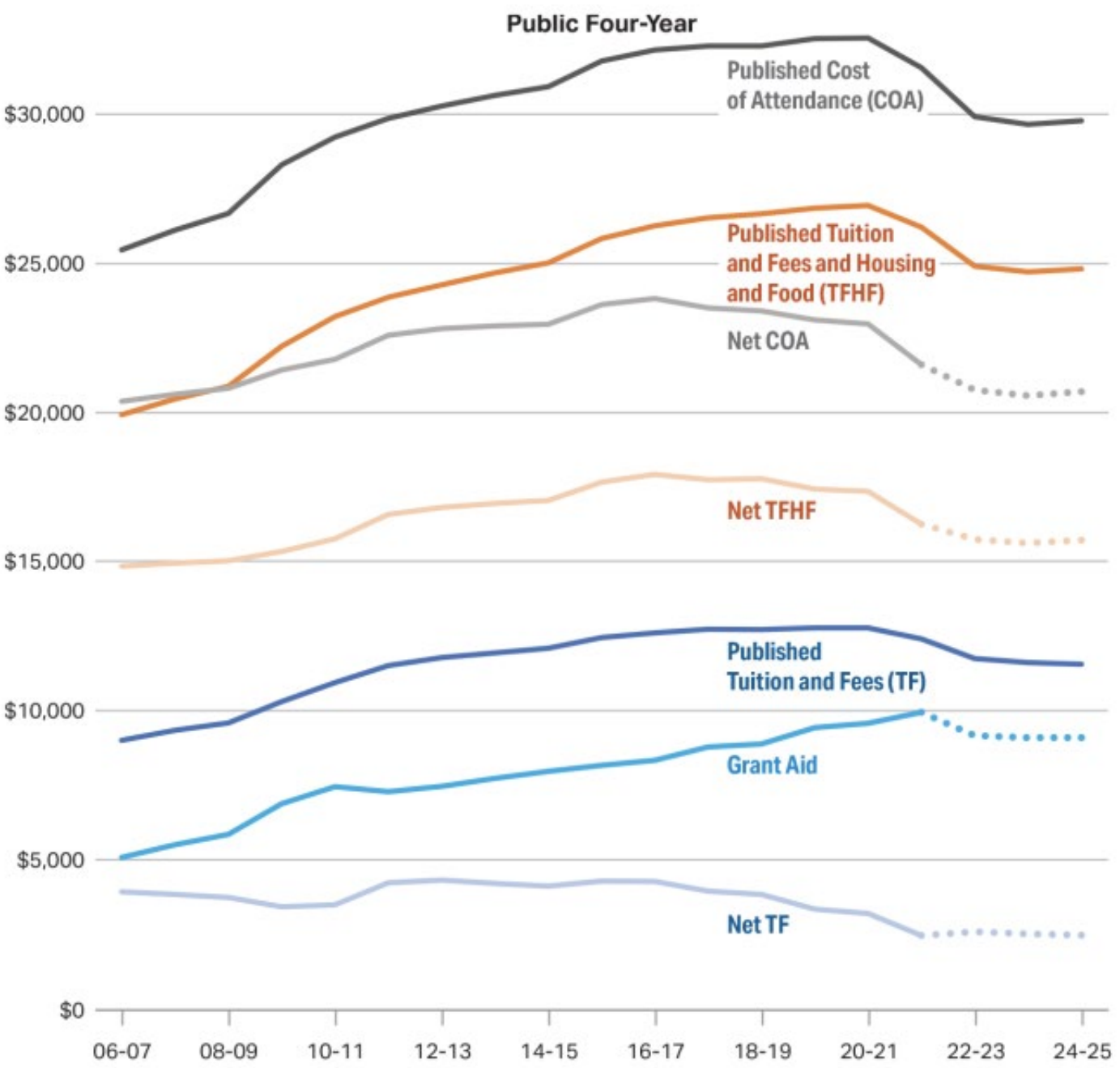
Percent and Number of Iowa Public HS Graduates Enrolled in College Within One Year of HS Graduation



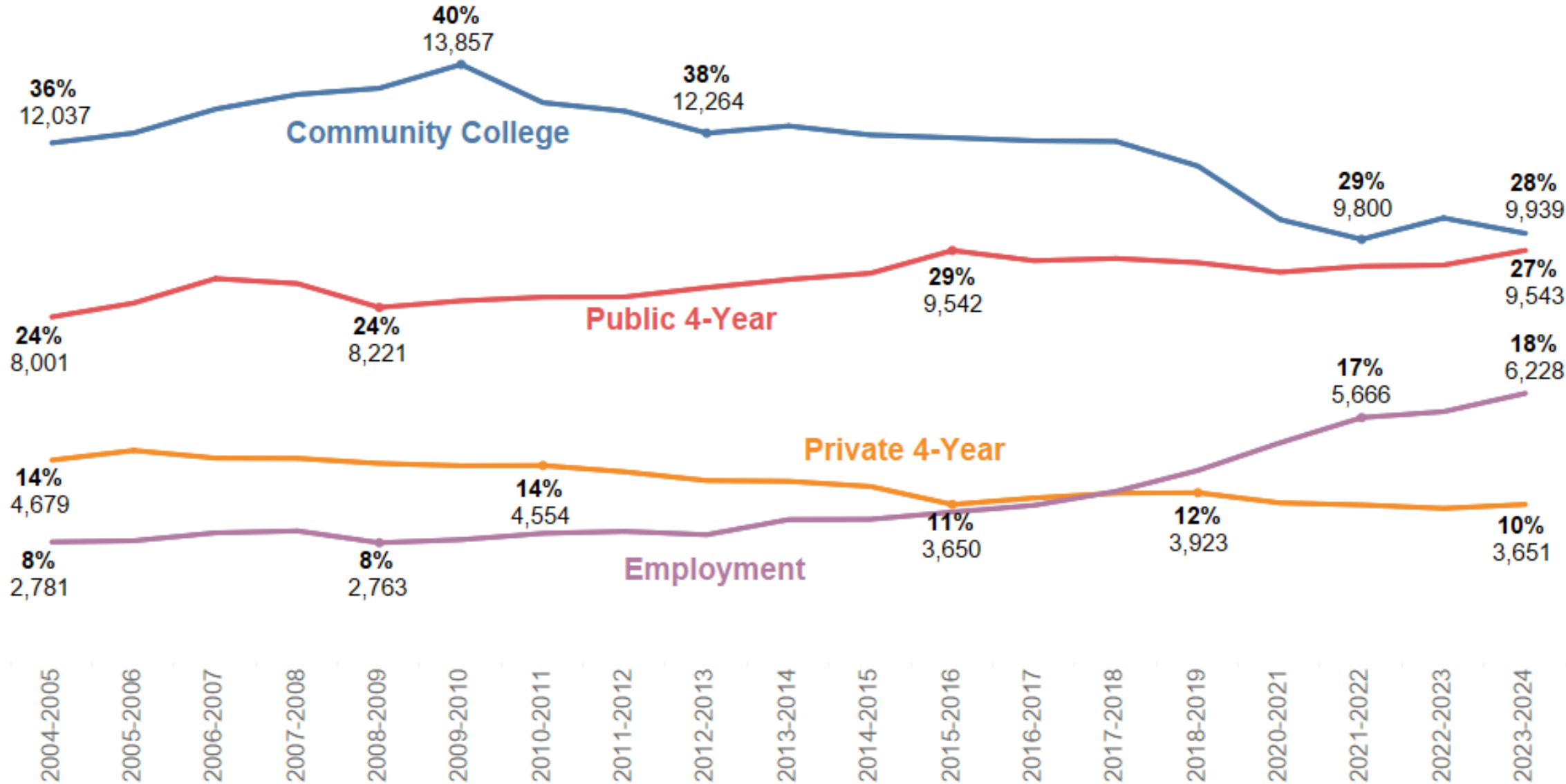
Inflation-Adjusted Published Tuition and Fees (Enrollment-Weighted) Relative to 1994-95, 1994-95 to 2024-25 (1994-95 = 1.0)



Average Published and Net Prices in 2024 Dollars, First-Time Full-Time In-State Undergraduate Students at Public Four-Year Institutions, 2006-07 to 2024-25

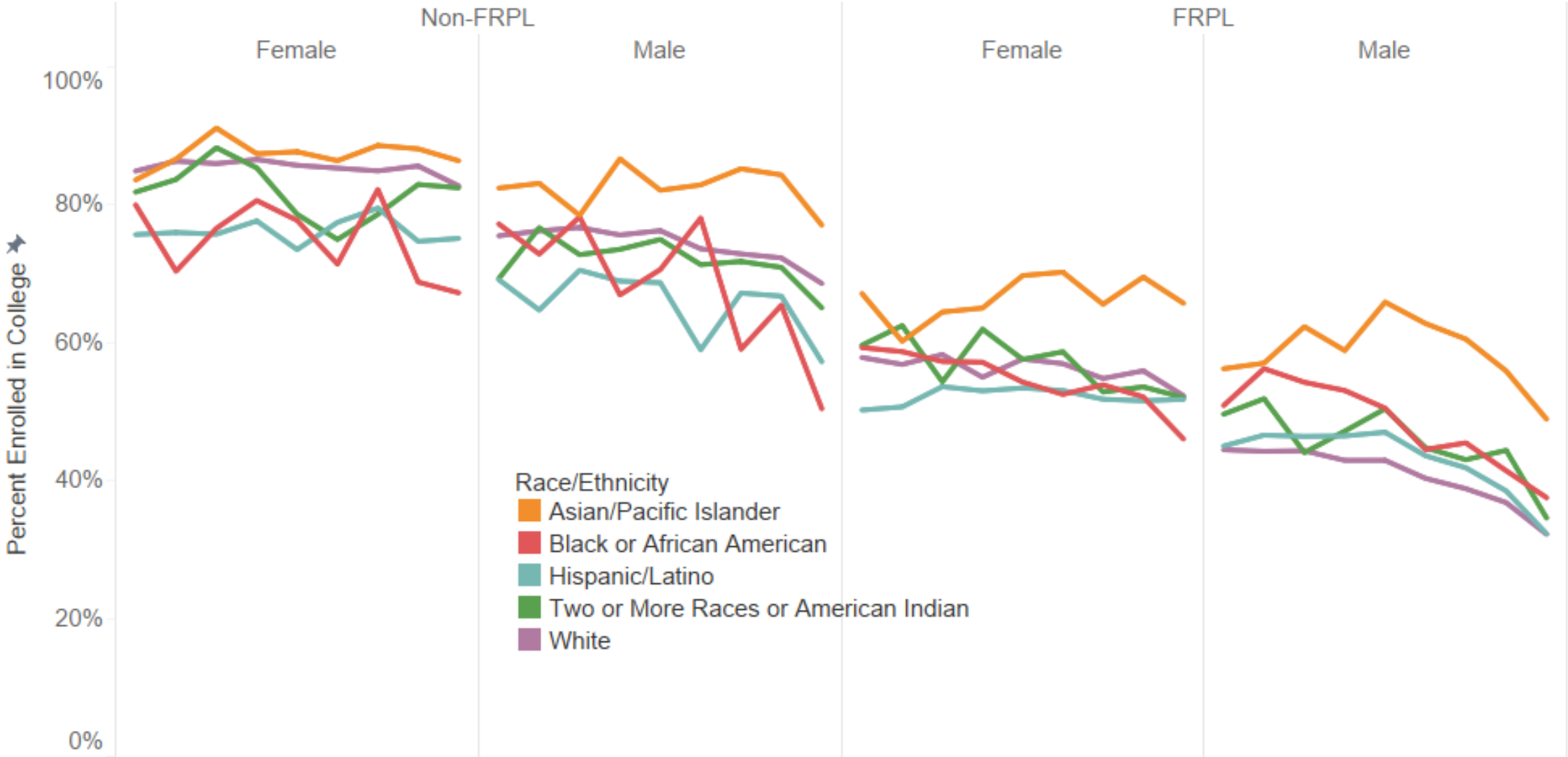


Iowa High School Post-Graduation Intent



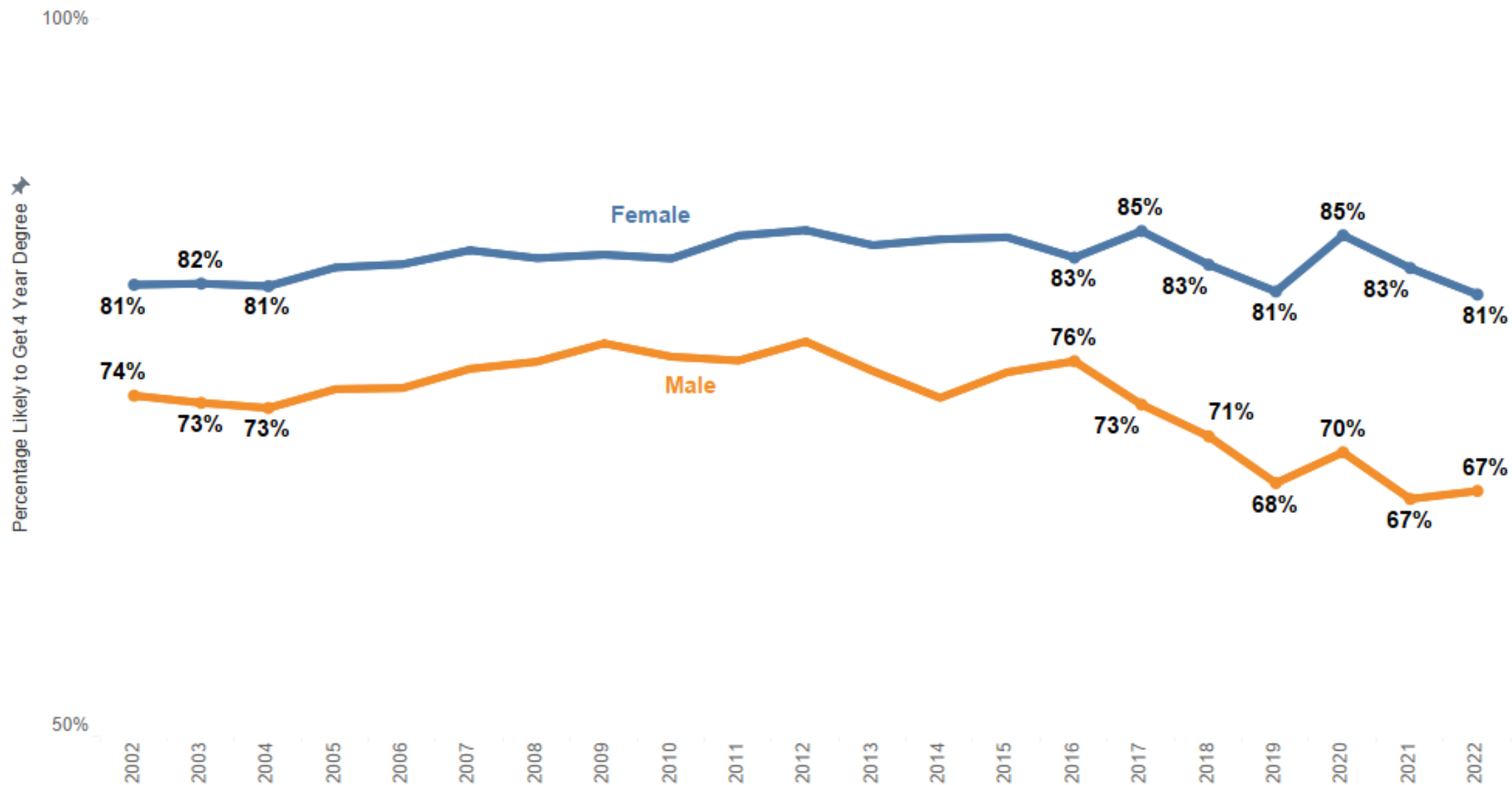
Source: Post graduation intent is based on Iowa high school surveys of graduating high school seniors as reported to the Iowa Department of Education.

College Enrollment within One Year of Graduating from an Iowa High School
by Race/Ethnicity, Gender, and Free or Reduced-Price Lunch Eligibility
Graduating Classes of 2011-12 to 2019-20



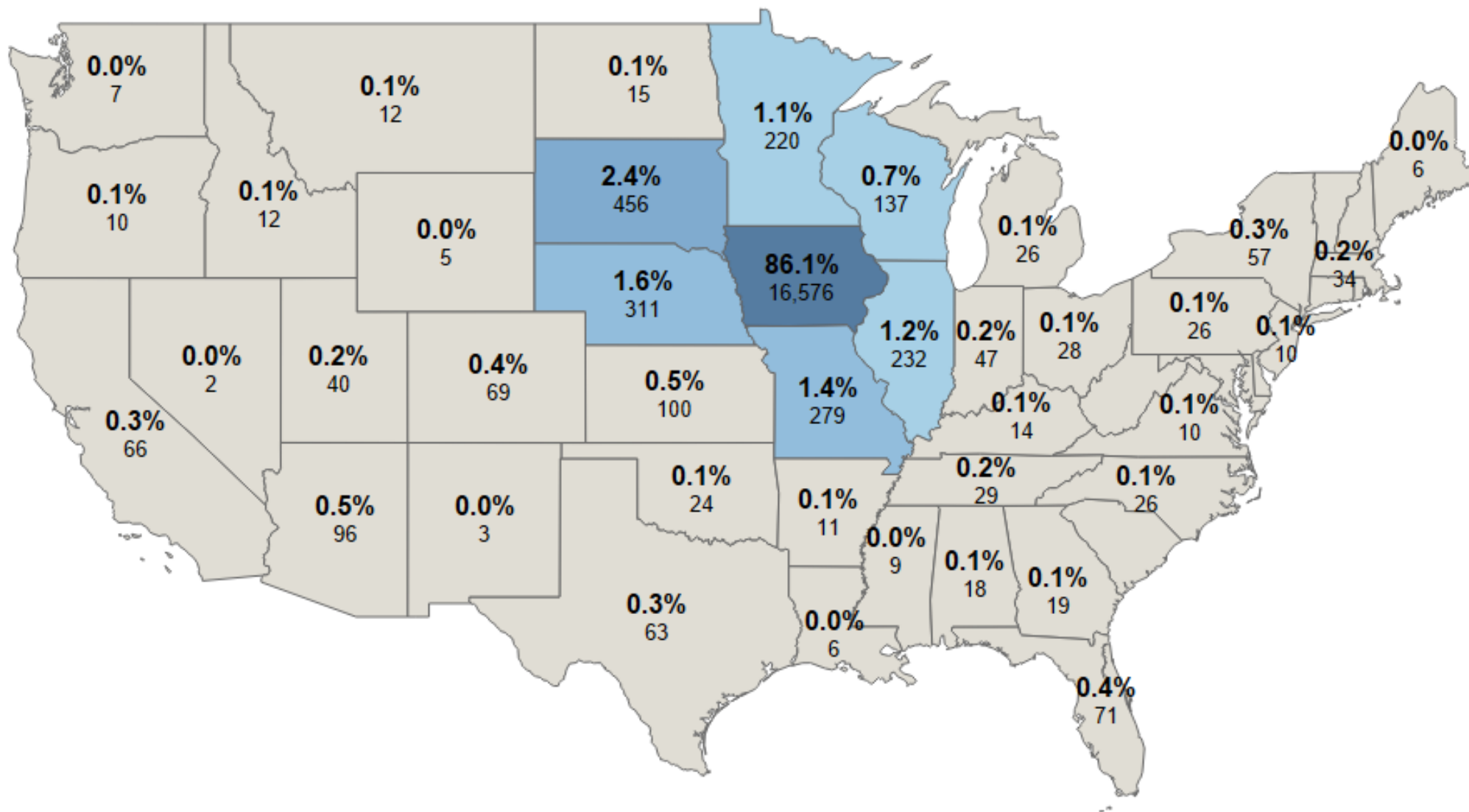
Source: Iowa Statewide Longitudinal System

12th Graders Very Likely or Somewhat Likely to Pursue a 4-year Degree



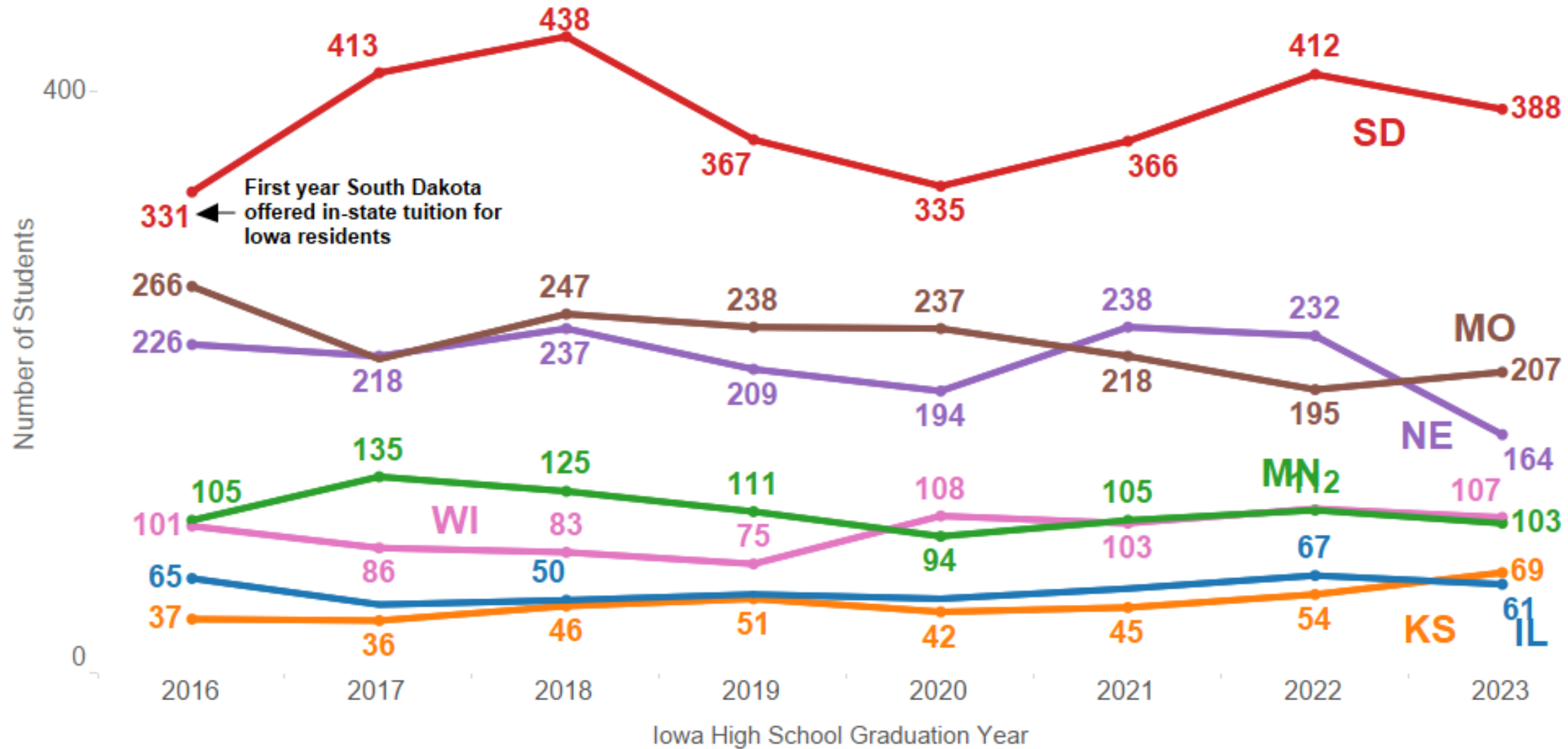
Source: University of Michigan's *Monitoring the Future: A continuing study of American youth*

College Destination by State for 2022-2023 Iowa HS Graduates



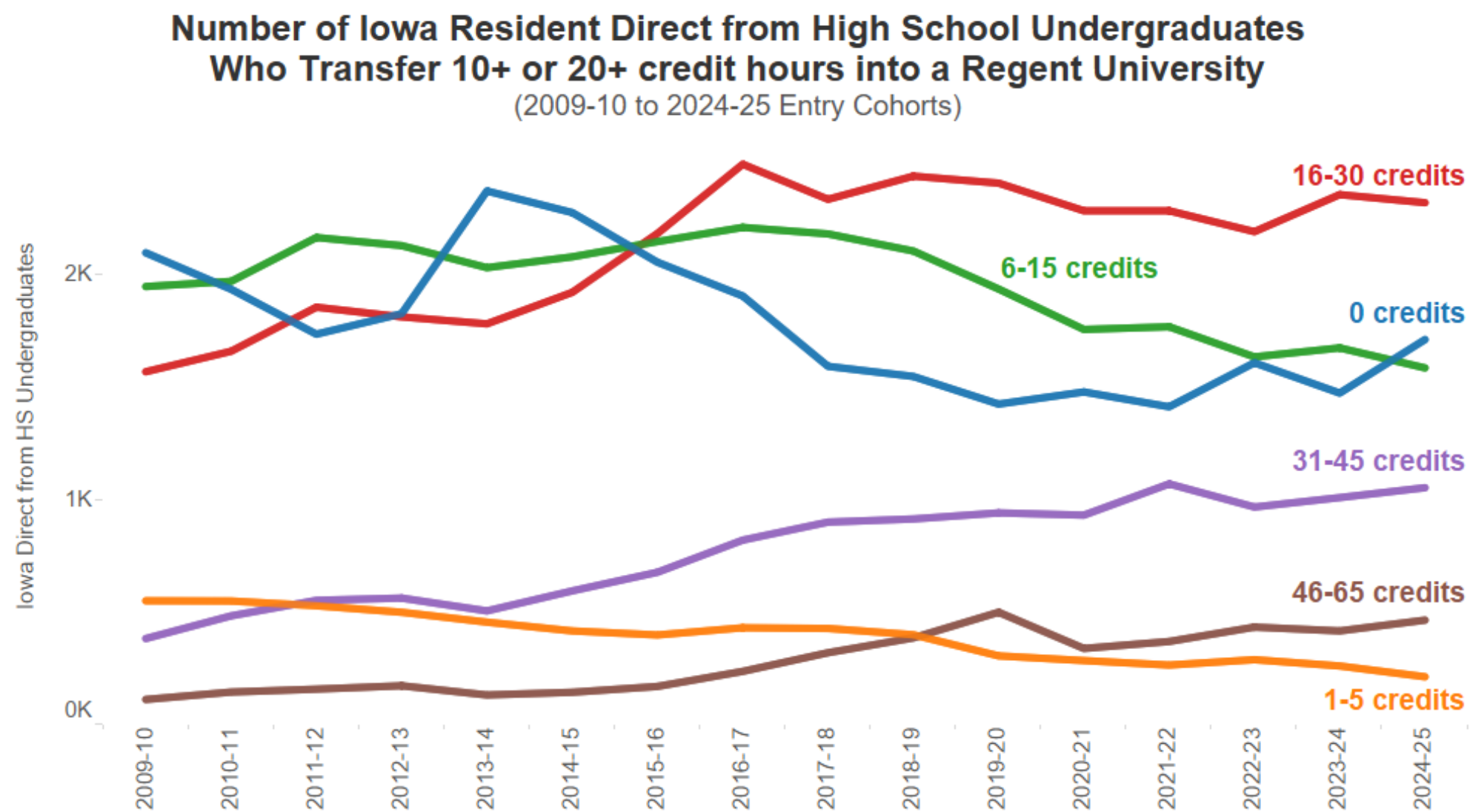
Iowa High School Graduates Attending a 4-Year Public University in Another State

Top States



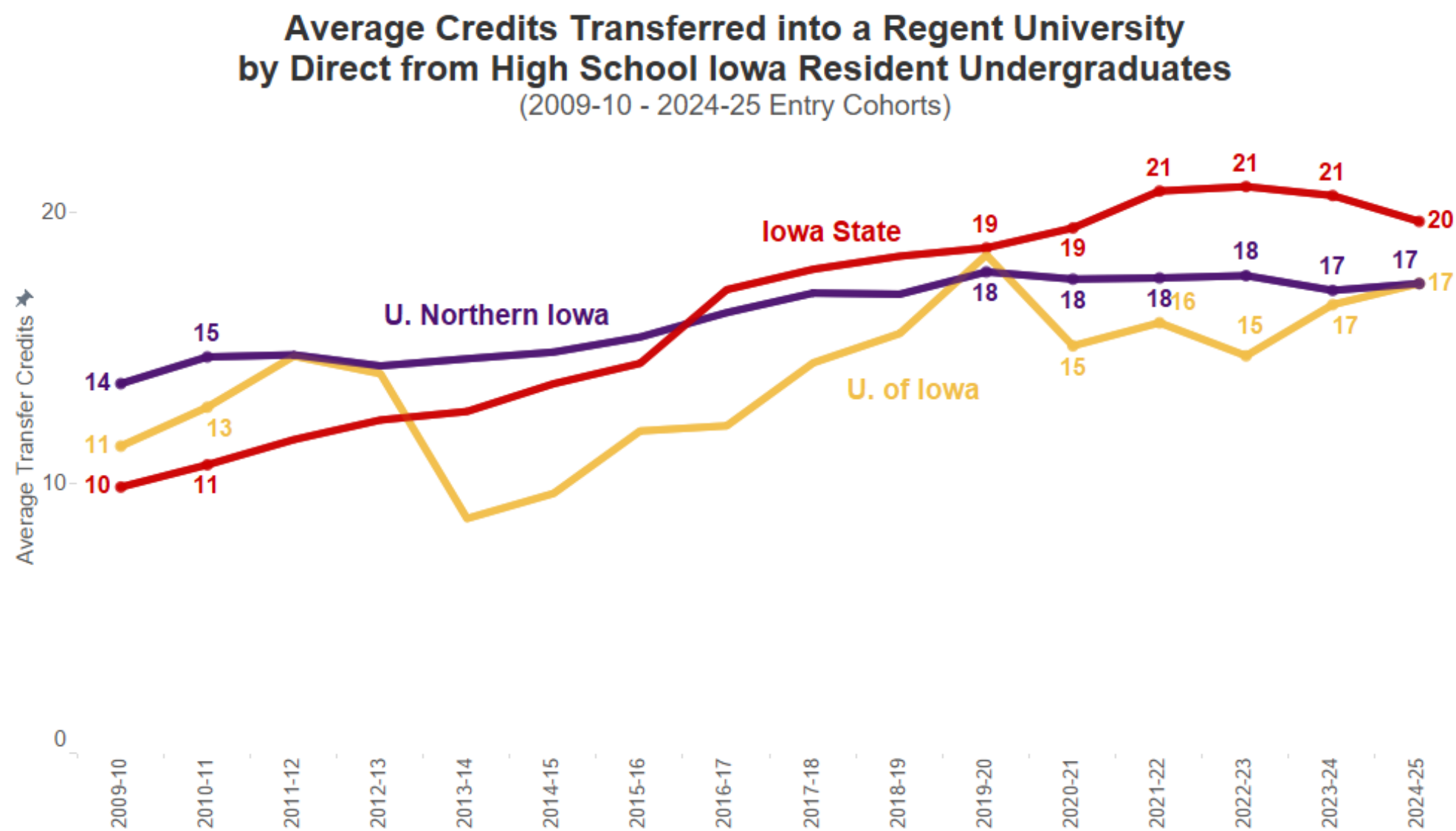
Source: National Student Clearinghouse (first college attended after high school graduation)

Dual Enrollment



Source: Iowa Board of Regents. Data show only Iowa residents who entered a Regent university directly from high school. Transfer credits include concurrent enrollment, PSEOs, and AP/IB credit.

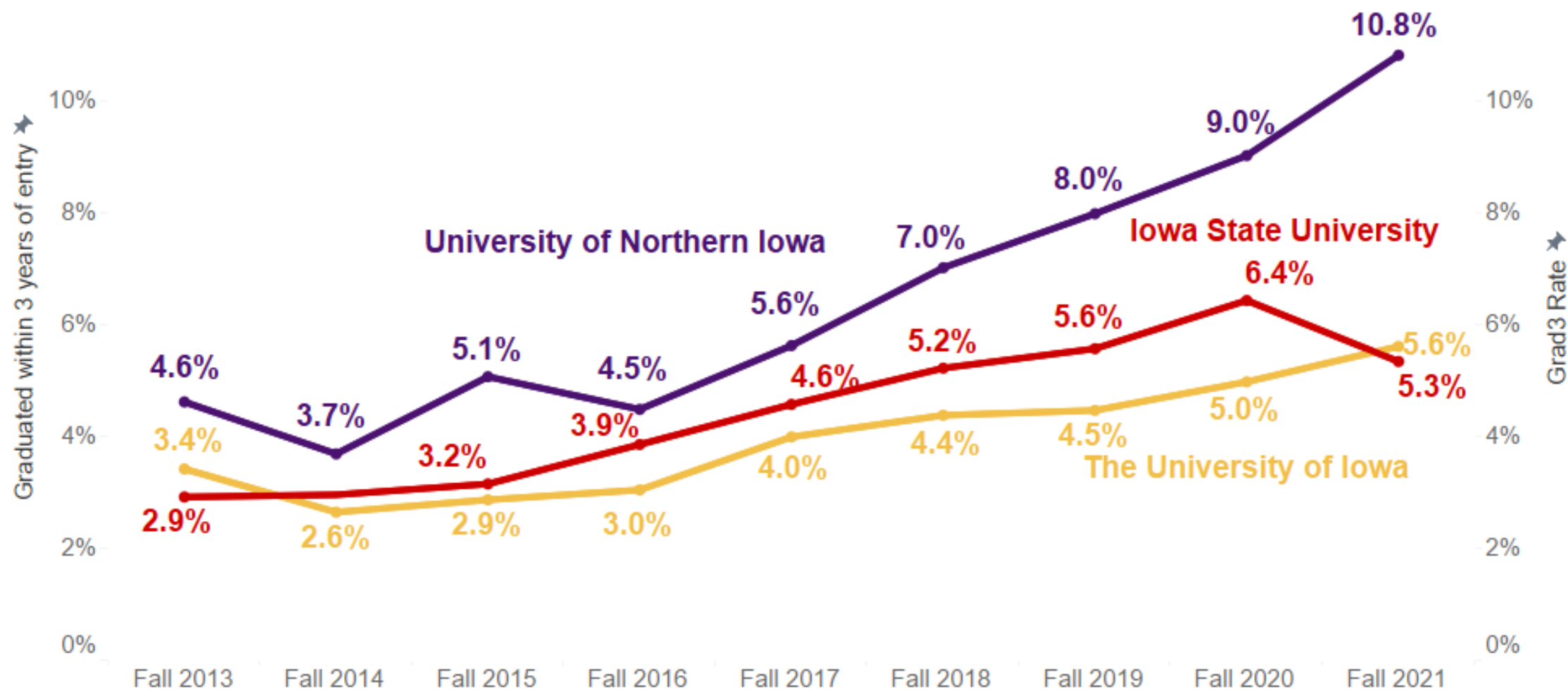
Dual Enrollment



Source: Iowa Board of Regents

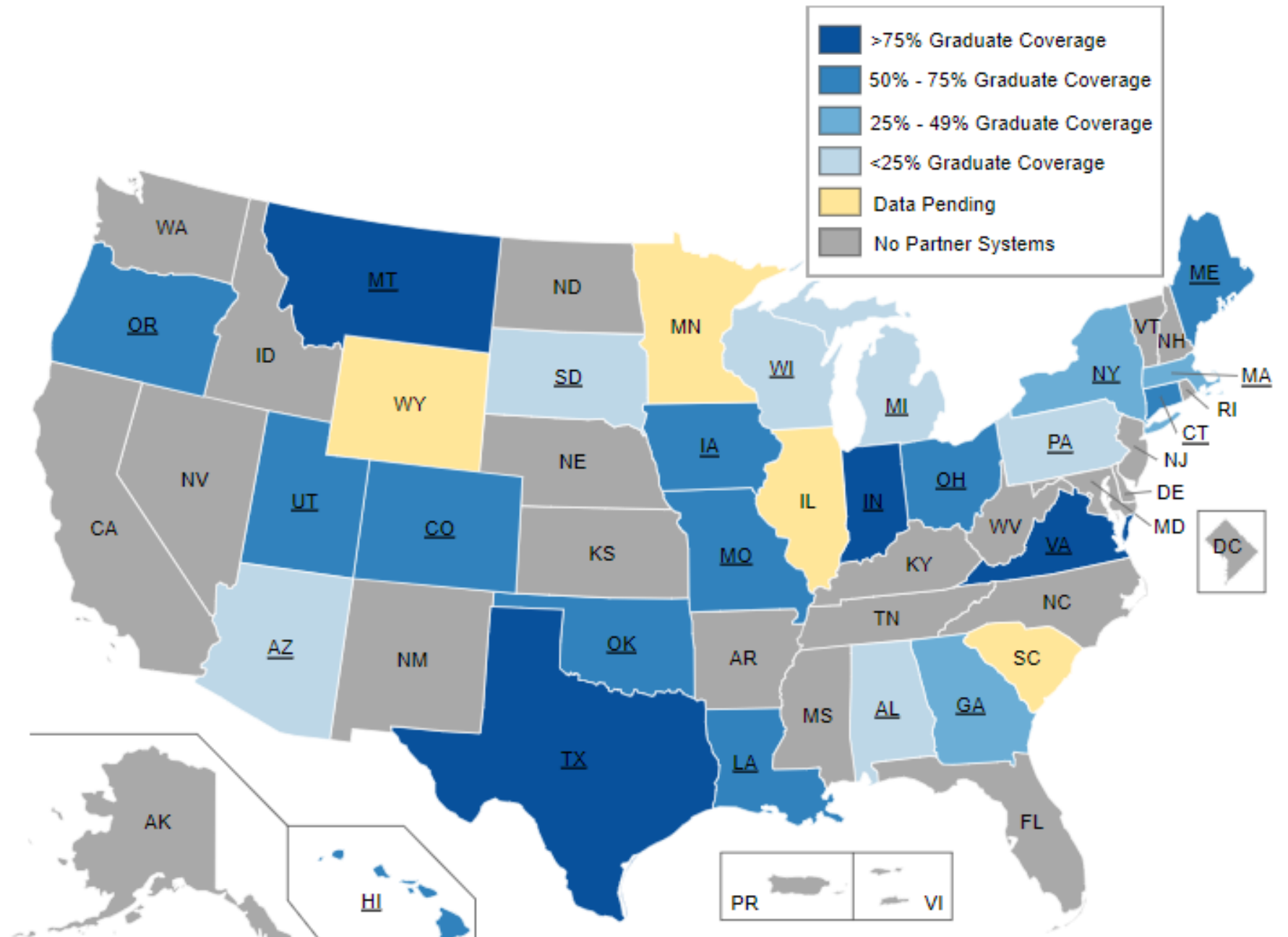
Percent of Undergraduates Who Graduate Within Three Years

By Regent University



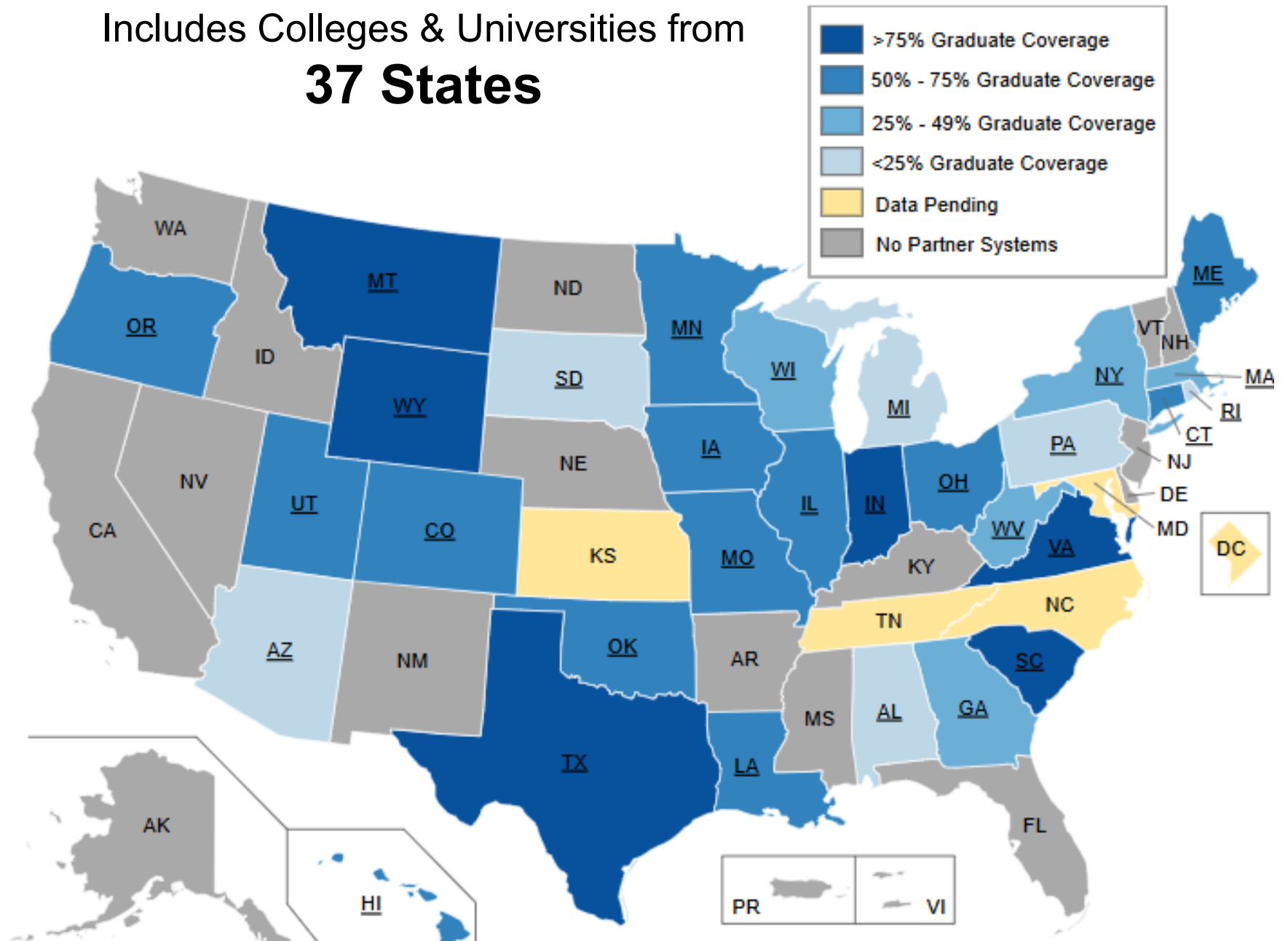
Source: Iowa Board of Regents Data Warehouse
Graduation and retention rates based on counts of full-time new transfer undergraduates.
Workbook: Graduation & Retention Report Graphs & Charts, SQL Tables

U.S. Census Bureau's Post-Secondary Employment Outcomes (PSEO)



U.S. Census Bureau's Post-Secondary Employment Outcomes (PSEO)

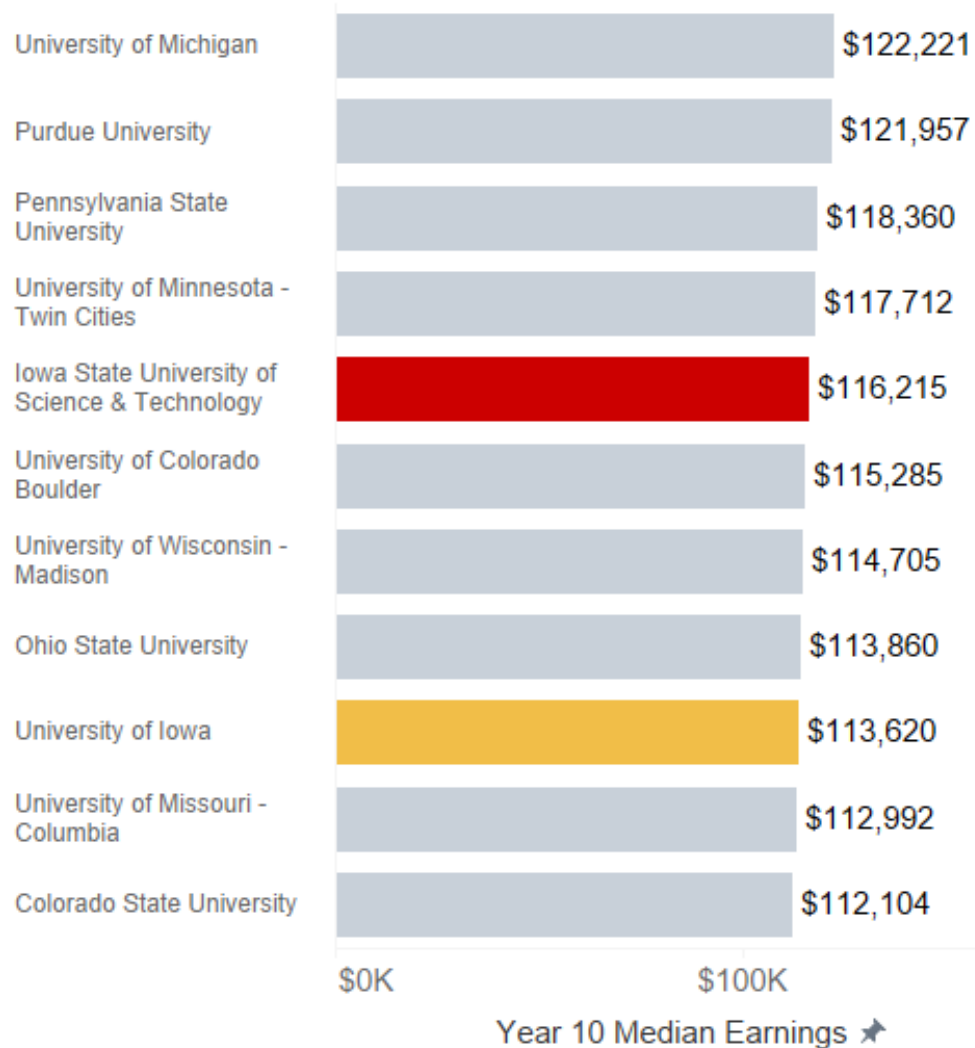
Includes Colleges & Universities from
37 States



Median Earnings 10-years after Degree

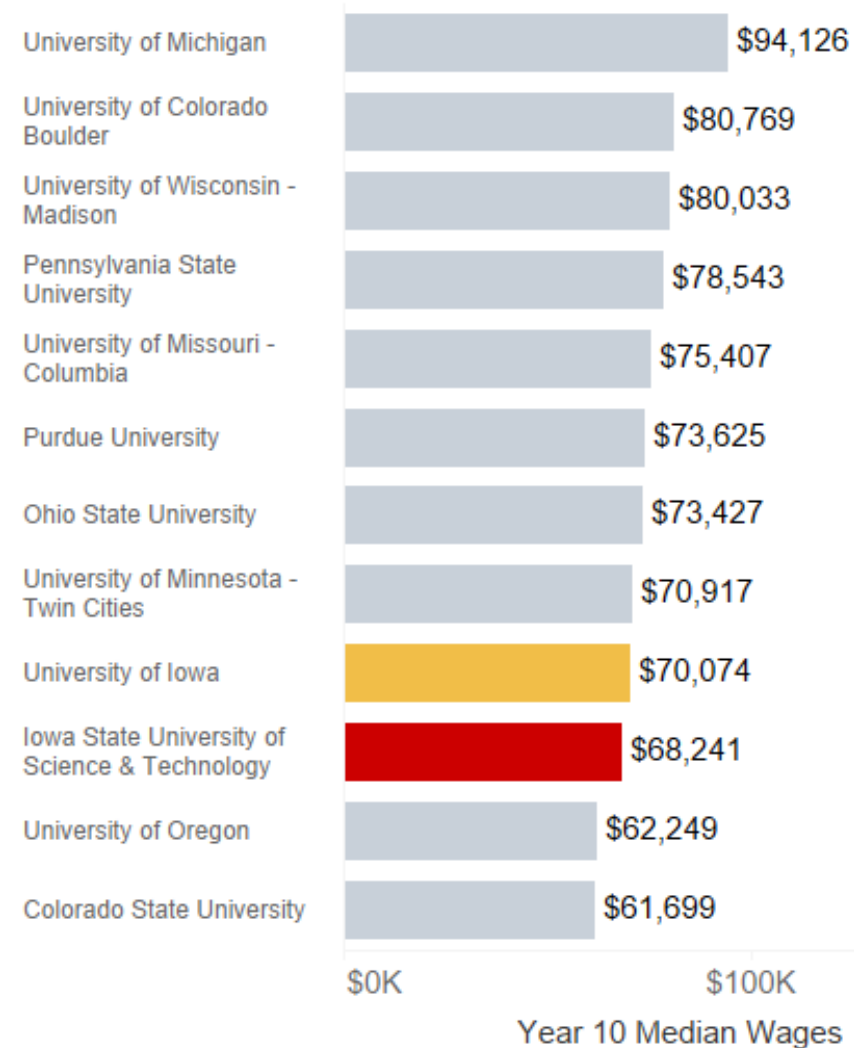
Mechanical Engineering

10 years after degree



Philosophy

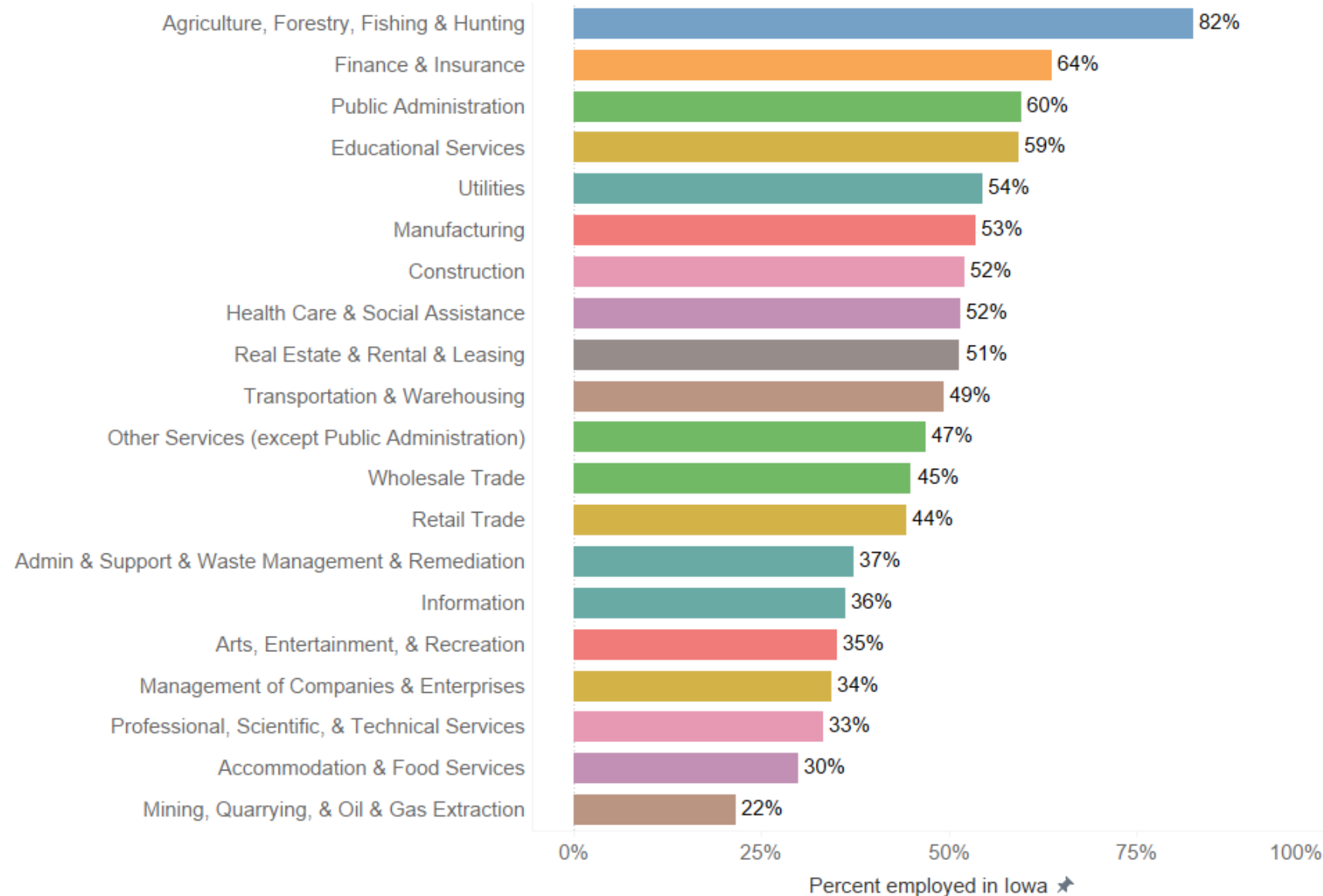
10 years after degree



Iowa Industry Retention of Regent Graduates after 10 years

Census

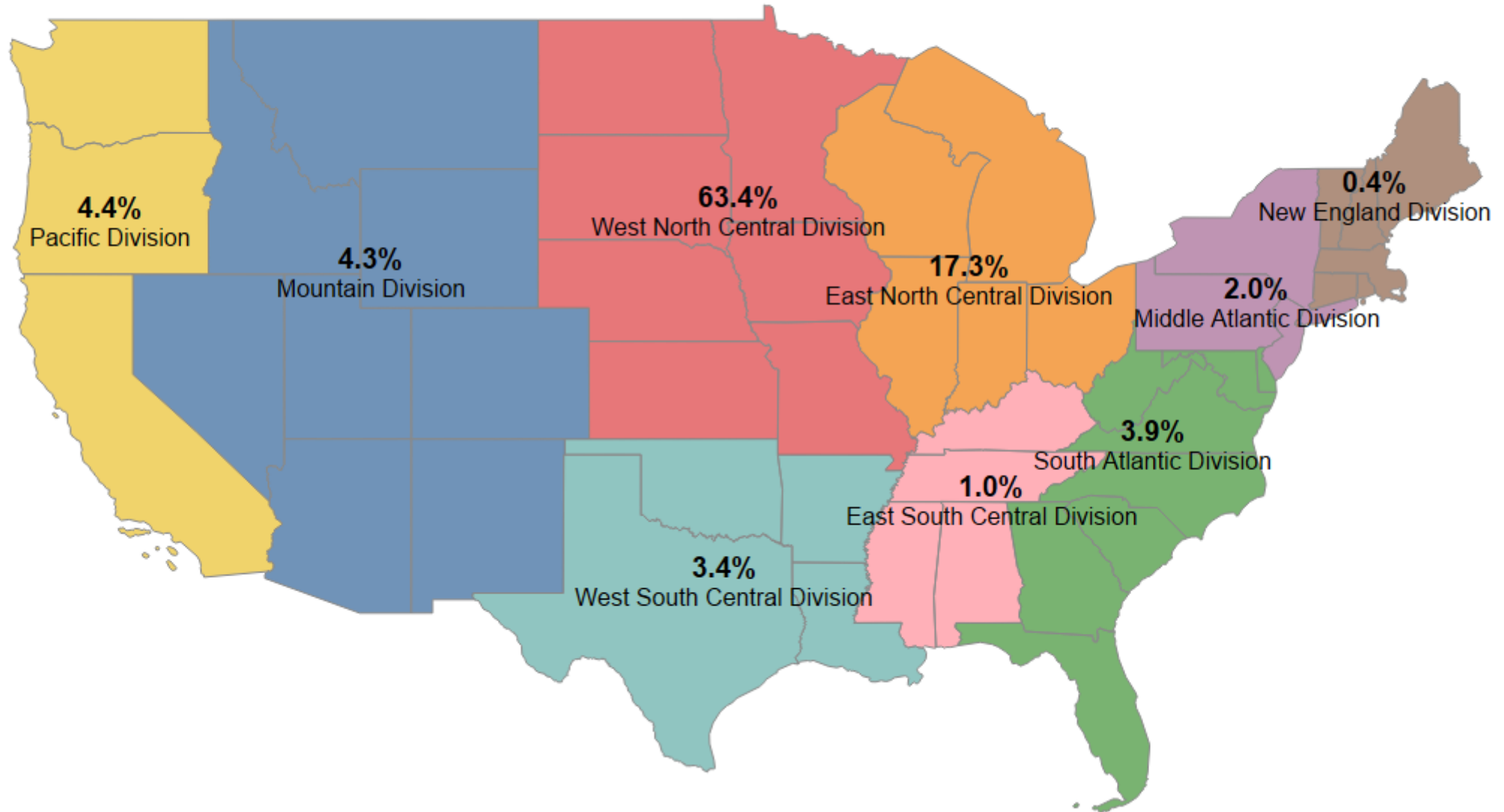
Bachelor's degrees



Source: U.S. Census Bureau matching of Unemployment Insurance Wage data for 47 U.S. States (excluding Alaska, Arkansas, and Mississippi). Employment only for full-time employed graduates making at least minimum wage. Self-employed, stay at home parents, and public officials not shown. Blank cells indicate suppression due to small cell size.

Retaining
graduates
in Iowa
with jobs

Location of Regent University **All Instructional Programs** Degree Recipients
Employed Five Years after Graduation
All Cohorts



Aligning Majors to Occupations: CIP to SOC

		Projected Iowa Job Openings, Annual	Projected Annual Job Growth in Iowa	Median Salary in Iowa	Projected U.S. Job Openings, Annual	Projected Annual Growth Rate in U.S.	Median Salary in U.S.
Bachelor's	Architectural and Engineering Managers	145	0.8%	\$139,166	1,500	0.6%	\$165,370
	Mechanical Engineers	360	1.5%	\$97,120	1,980	1.1%	\$99,510
	Cost Estimators	205	0.3%	\$67,624	1,800	-0.4%	\$74,740
Doctoral/Prof.	Engineering Teachers, Postsecondary	50	1.6%	\$135,266	420	0.9%	\$106,910
		Projected Iowa Job Openings, Annual	Projected Annual Job Growth in Iowa	Median Salary in Iowa	Projected U.S. Job Openings, Annual	Projected Annual Growth Rate in U.S.	Median Salary in U.S.
Doctoral/Prof.	Philosophy and Religion Teachers, Postsecondary	30	0.9%	\$75,652	200	0.2%	\$79,930

U.S. Census Bureau American Community Survey (ACS) Iowa PUMS

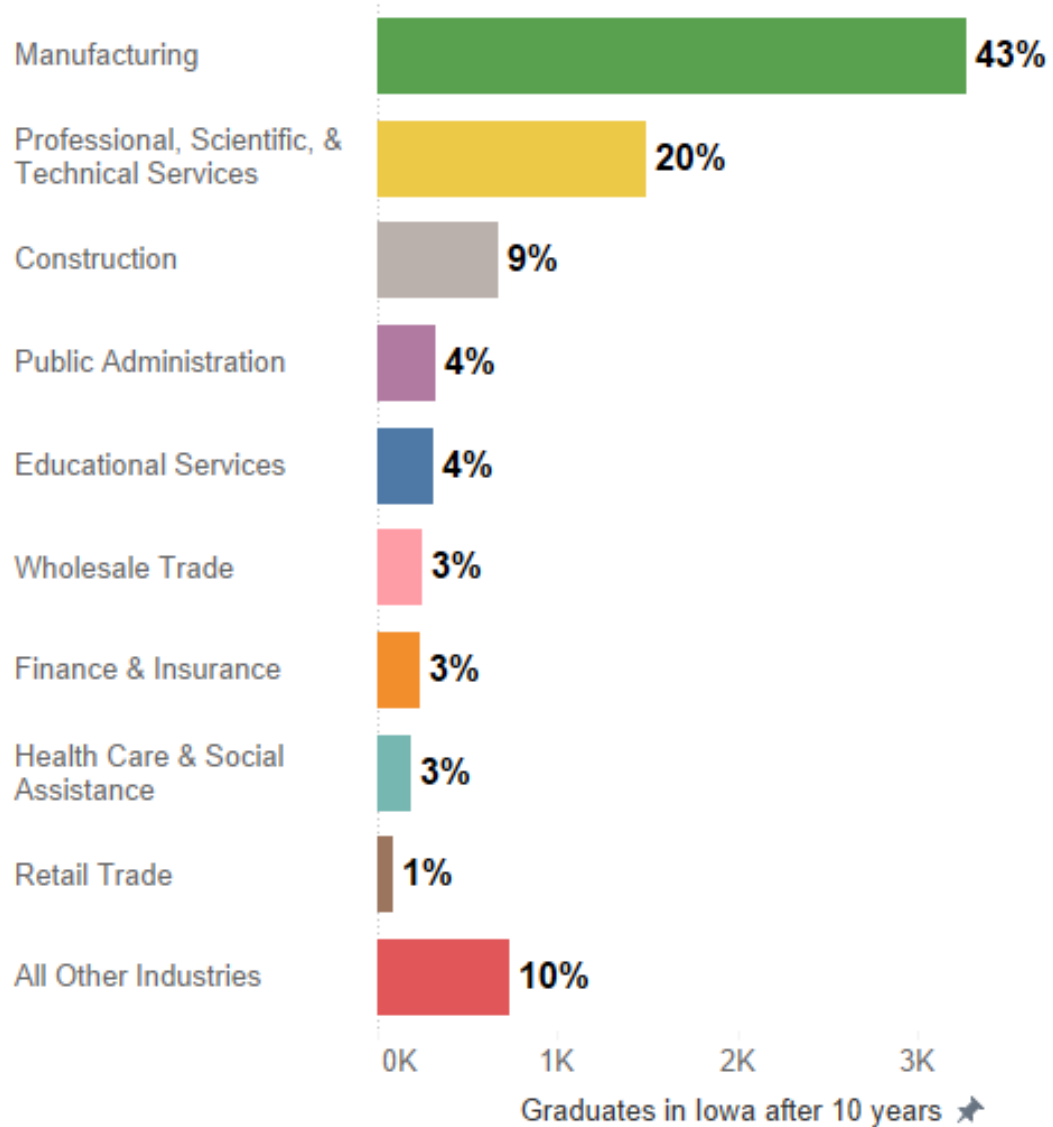
Occupations &
Industries for Iowans
with a bachelor's
degree in Philosophy
& Religious Studies

Philosophy & Religious Studies

Occupation	Industry	
BUS-Compliance Officers	FIN-Securities, Commodities, Funds, Trusts	\$65,000
BUS-Human Resources Workers	FIN-Securities, Commodities, Funds, Trusts	\$80,000
BUS-Management Analysts	PRF-Management, Scientific, & Technical Consulting	\$160,000
CMM-Computer Systems Analysts	RET-Supermarkets & Other Grocery Stores	\$94,000
CMM-Network & Computer Systems Administrators	ADM-Justice, Public Order, & Safety Activities	\$111,000
CMM-Web Developers	INF-Periodical, Book, & Directory Publishers	\$160,000
CMS-Clergy	SRV-Religious Organizations	\$47,466
CMS-Directors, Religious Activities & Education	SRV-Religious Organizations	\$74,667
CMS-Other Community & Social Service Specialists	SCA-Individual & Family Services	\$40,000
CMS-Probation Officers & Correctional Treatment	ADM-Justice, Public Order, & Safety Activities	\$87,000
CMS-Religious Workers, All Other	SRV-Religious Organizations	\$5,000
CMS-Social & Human Service Assistants	SCA-Individual & Family Services	\$20,000
EDU-Archivists, Curators, & Museum Technicians	ENT-Museums, Art Galleries, Historical Sites, & Similar	\$45,000
EDU-Elementary & Middle School Teachers	EDU-Elementary & Secondary Schools	\$31,974
EDU-Other Teachers and Instructors	EDU-Elementary & Secondary Schools	\$95,000
EDU-Secondary School Teachers	EDU-Elementary & Secondary Schools	\$55,750
EDU-Special Education Teachers	EDU-Elementary & Secondary Schools	\$38,400
ENT-Editors	INF-Broadcasting (Except Internet)	\$123,000
FIN-Credit Counselors & Loan Officers	ADM-Administration of Economic Programs	\$67,000
FIN-Property Appraisers & Assessors	FIN-Real Estate Property Managers	\$120,000
LGL-Lawyers, & Judges & Magistrates	ADM-Justice, Public Order, & Safety Activities	\$65,000
	PRF-Legal Services	\$36,667
MED-Dietetic Technicians & Ophthalmic Technicians	MED-General Medical & Surgical Hospitals	\$27,000
MED-Pharmacists	MED-General Medical & Surgical Hospitals	\$16,000
MED-Physicians	MED-General Medical & Surgical Hospitals	\$263,000
	MED-Outpatient Care Centers	\$117,000

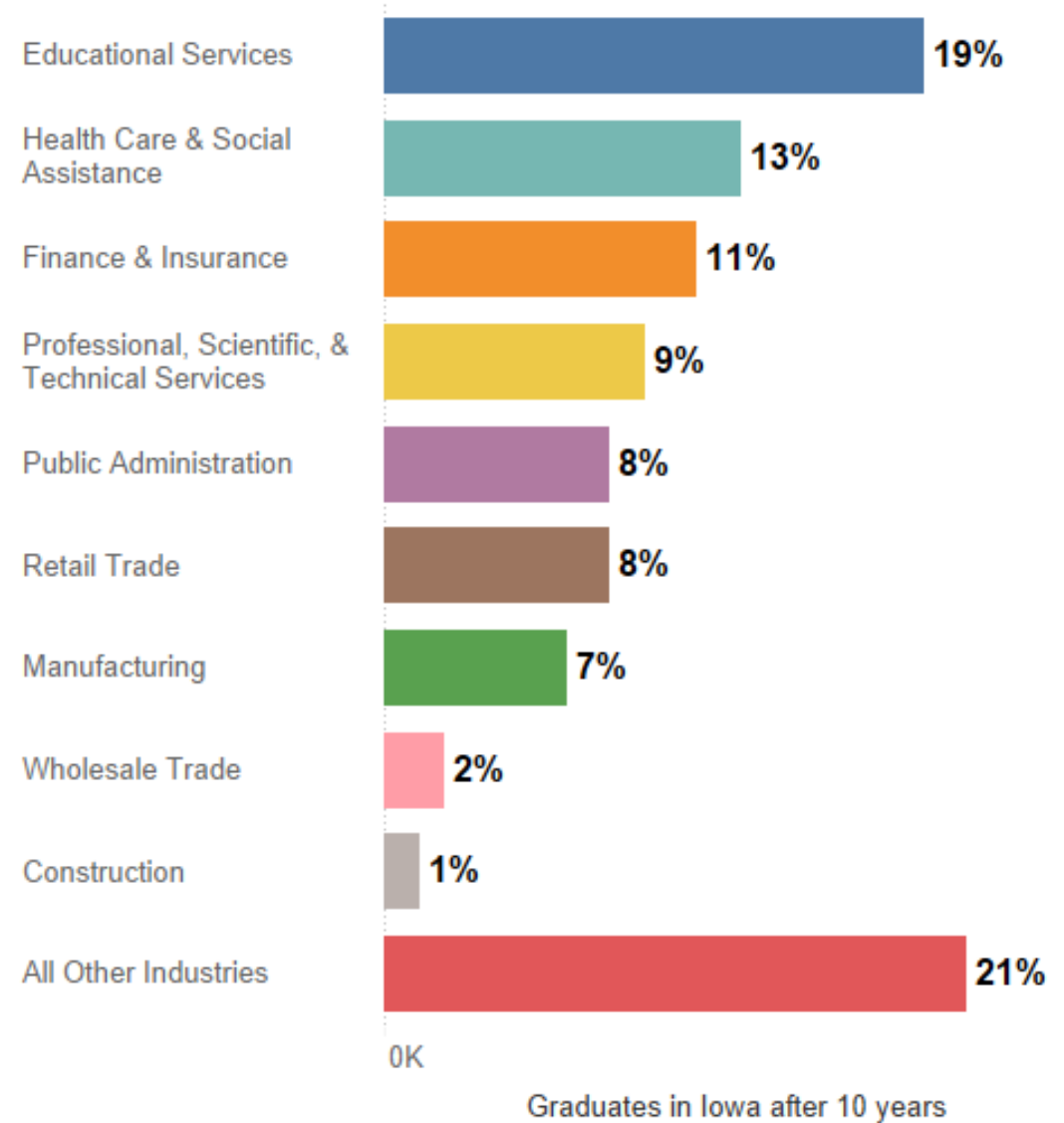
Iowa Industries Employing Graduates in Engineering

Graduate Counts



Iowa Industries Employing Graduates in Philosophy & Religious Studies

Graduate Counts



ROI: Georgetown Center for Education & the Workplace

10-year ROI = year 6 earnings + year 7 earnings + year 8 earnings + year 9 earnings +
year 10 earnings – average net price x 5

		Georgetown ROI 5 years after degree	Georgetown ROI 10 years after degree	Georgetown ROI 15 years after degree
Mechanical Engineering	Iowa State University	\$331,208	\$864,719	\$1,517,134
	University of Iowa	\$315,709	\$840,641	\$1,473,481
Philosophy	Iowa State University	\$127,083	\$433,970	\$826,641
	University of Iowa	\$117,866	\$433,368	\$836,028
	University of Northern Iowa	\$130,614	\$388,999	\$708,459

U. of Texas System: Minimum Economic Return

		Median Income Hs Graduate	Annual Loan Payment	Minimum Economic Return Threshold	Earnings 1 Year after Degree	Earnings 5 Years after Degree	Years after degree to reach Minimum Economic Return
Mechanical Engineering	Iowa State University	32,041	\$10,173	\$42,214	\$70,593	\$92,434	1
	University of Iowa	32,041	\$11,714	\$43,755	\$69,416	\$92,038	1
		Median Income Hs Graduate	Annual Loan Payment	Minimum Economic Return Threshold	Earnings 1 Year after Degree	Earnings 5 Years after Degree	Years after degree to reach Minimum Economic Return
Philosophy	Iowa State University	32,041	\$10,126	\$42,167	\$30,153	\$51,084	4
	University of Iowa	32,041	\$11,741	\$43,782	\$29,757	\$52,642	4
	University of Northern Iowa	32,041	\$8,914	\$40,955	\$34,661	\$44,348	4

Wages and Outcomes

[Wages and Outcomes - Regents 101 Video Series](#)



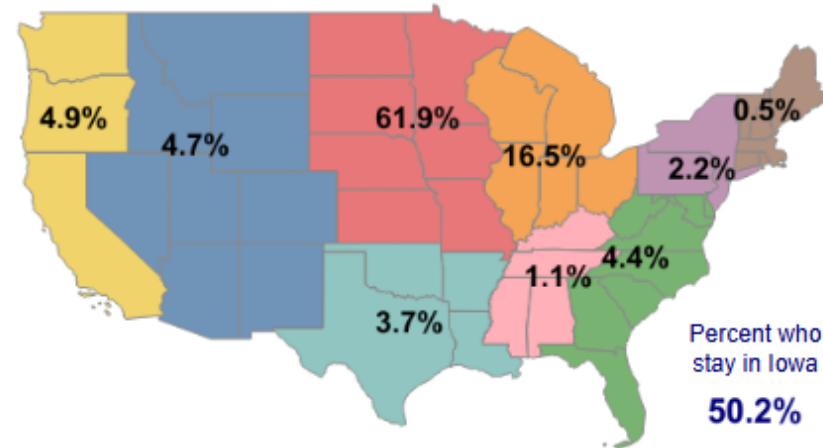
Field of Bachelor's Degree

All Instructional Programs

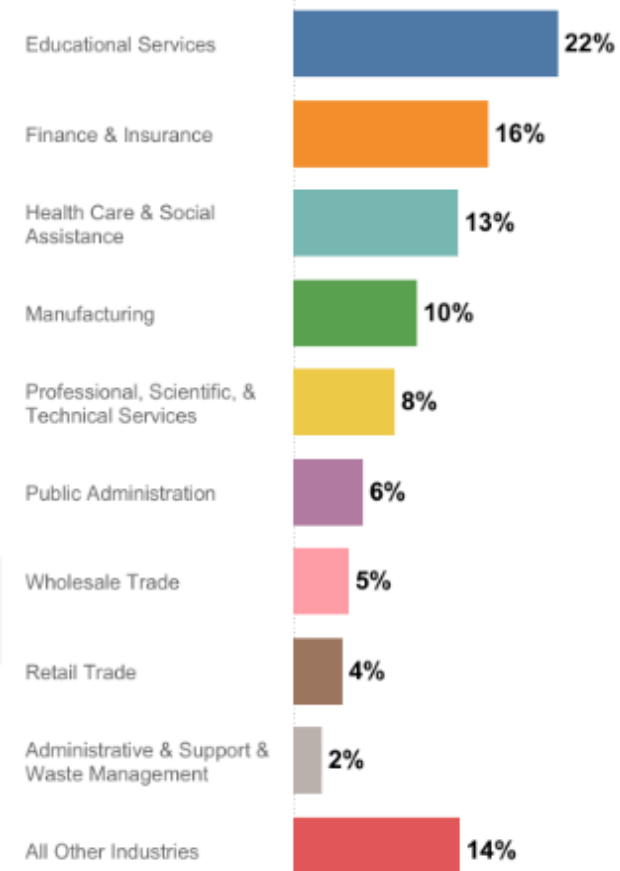
Wages, Industry, and Geography

by Field of Bachelor's Degree for 2001-2021 Regent University Graduates

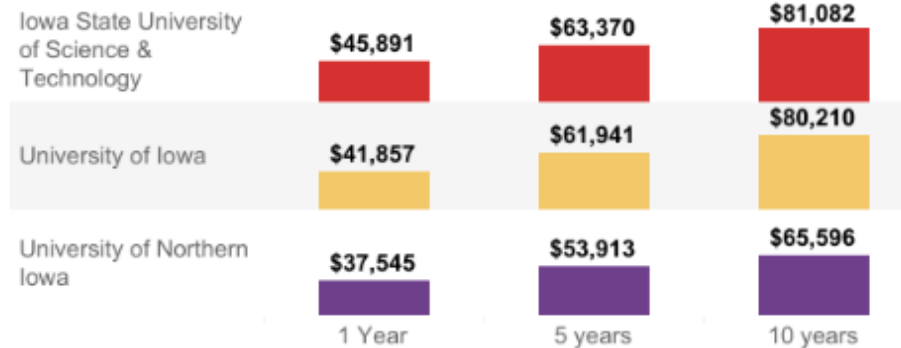
Where **All Instructional Programs**
bachelor's degree recipients are employed after 10 years



Iowa industry sectors employing
bachelor's degree recipients in
All Instructional Programs
10 years after graduation
% by industry sector



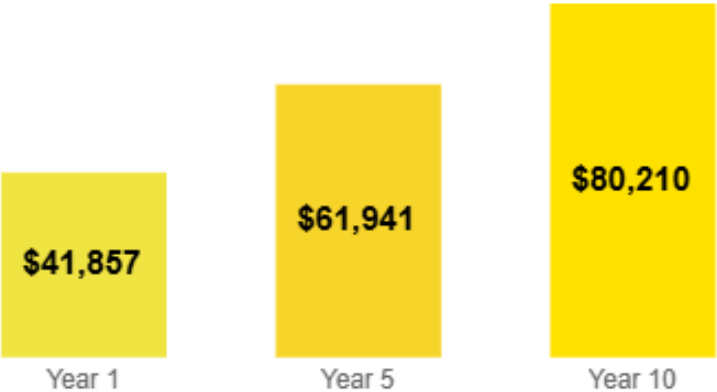
Median wages for a bachelor's degree in
All Instructional Programs



Source: U.S. Census Bureau, PSEO January 2025 update. Median wages (2022 dollars) are impacted by the geographic location of employment, the type of industries where employed, and the different majors within each academic field category.

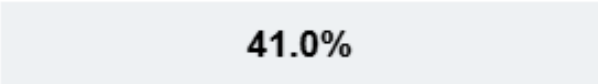
IOWA
University of Iowa
All Instructional Programs

Median Income by Year after Graduation



Wages are impacted by many factors including job geographic location and industry.

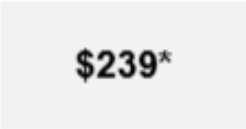
Percent of Graduates with Federal Loan Debt



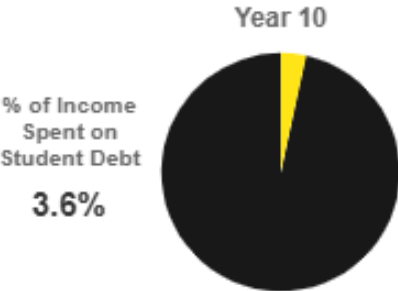
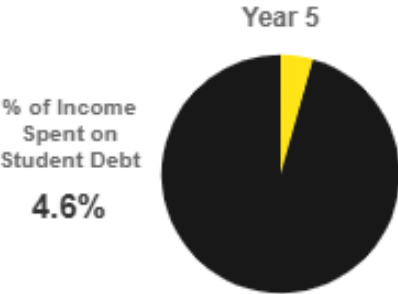
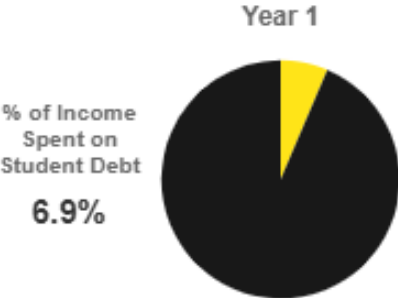
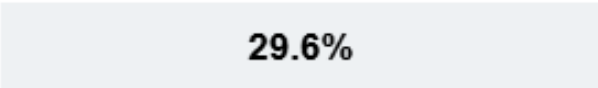
Federal Student
Loan Debt upon
Graduation



Typical Monthly
Federal Student
Loan Payment



Percent Earning a Master's or Doctoral Degree within 10 years of the Bachelor's Degree



Census

CS

NSC

CS



Questions?