Contemporary Performance Measurement at the State Level

WICHE Commission
Spokane, WA
May 20, 2013

NCHEMS
National Center for Higher Education Management Systems
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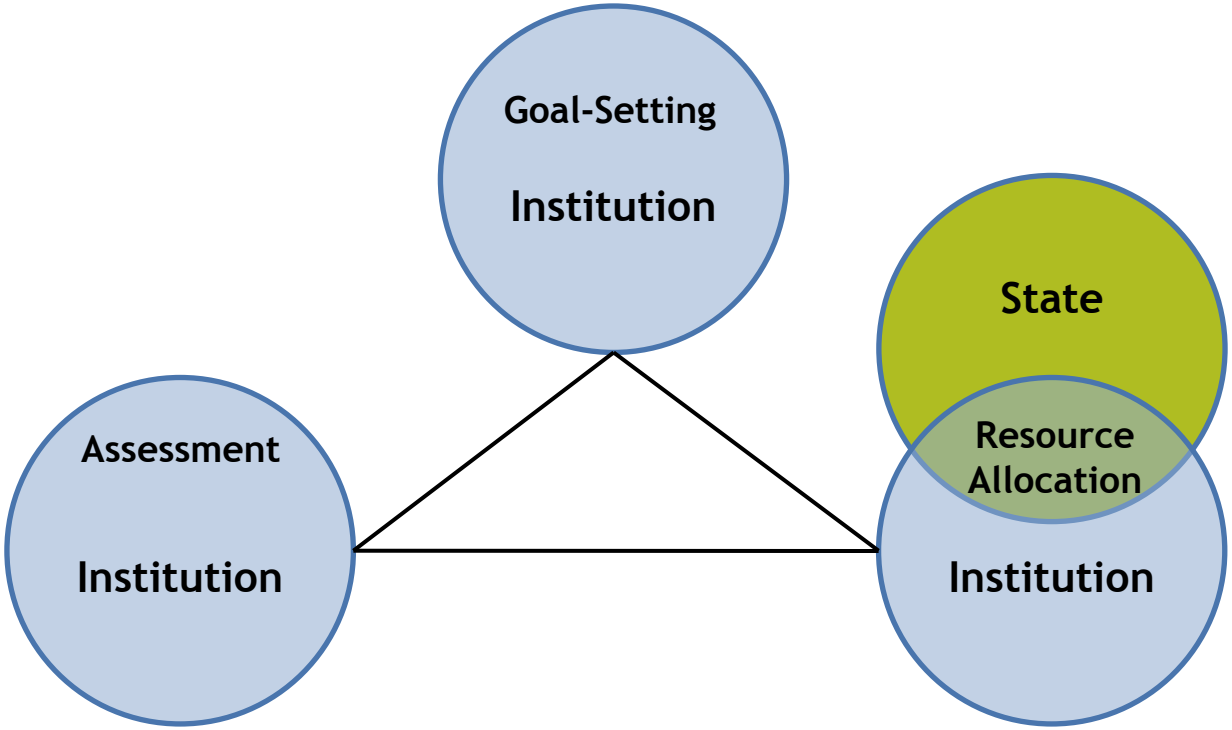
The Many Faces of Accountability

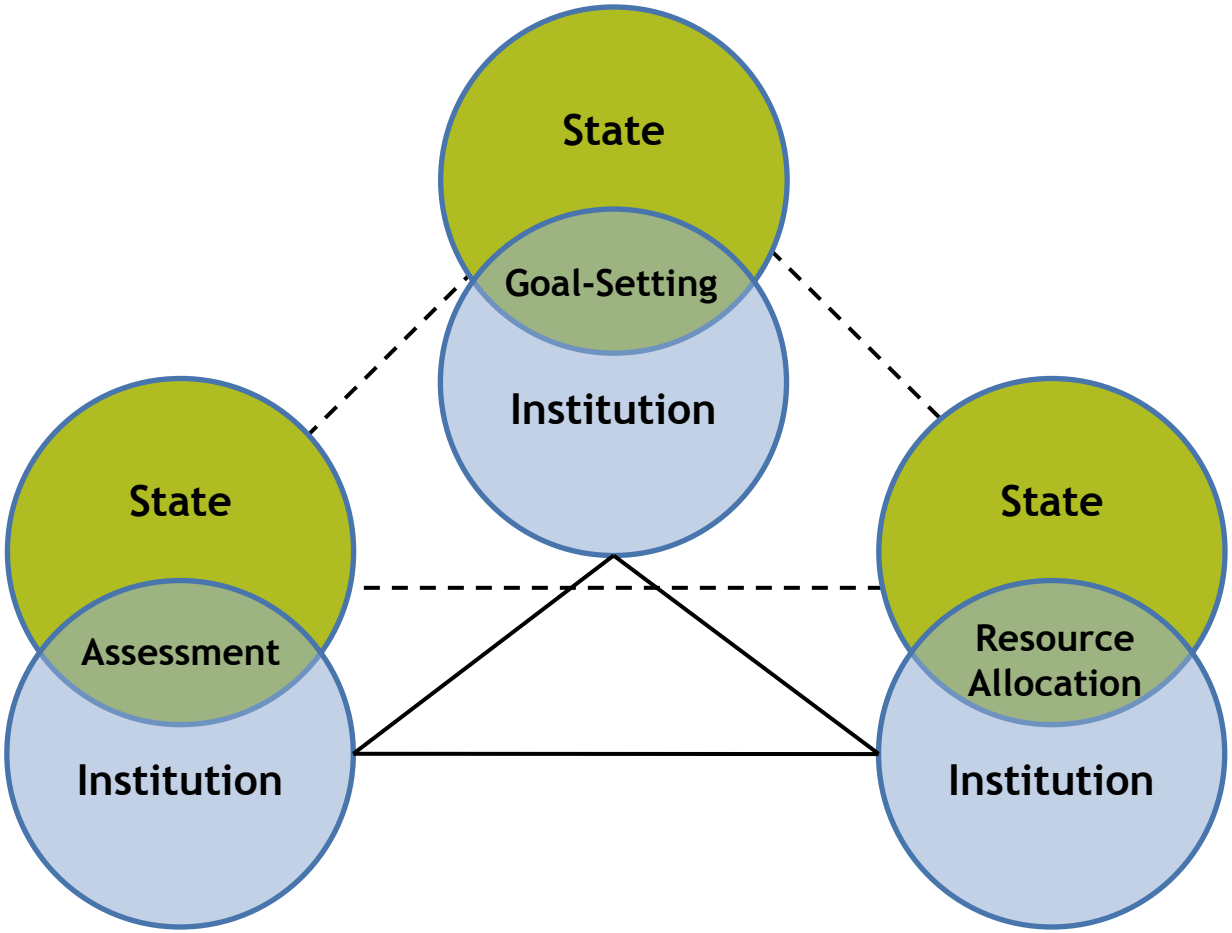
- State
  - Governor
  - Legislature
  - Coordinating Agency
- Systems
- Institutions

At each level there are different responsibilities.
As a result, measures of performance differ at leach level.

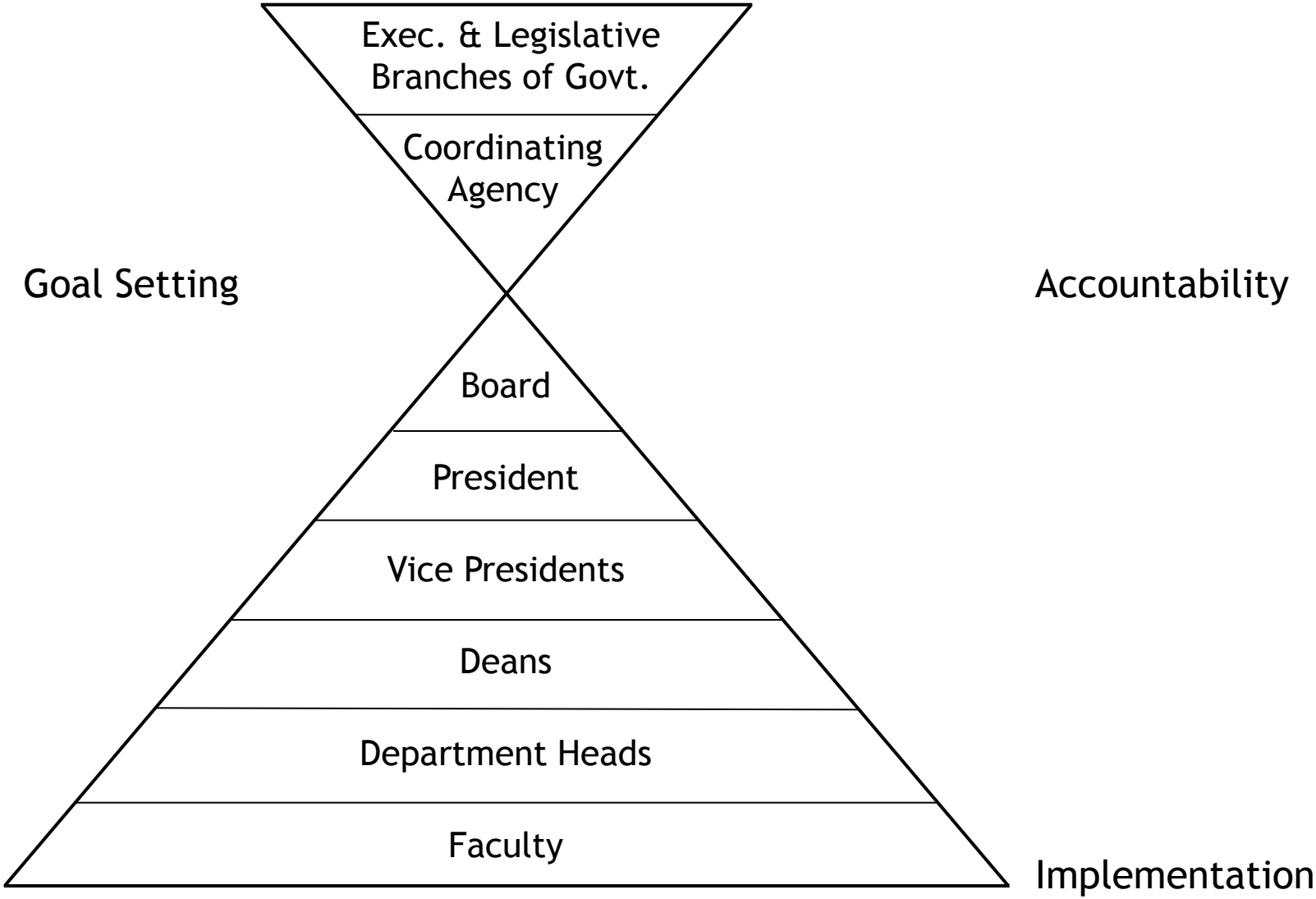
The Management Cycle of the Past



The Management Cycle Now



The Hierarchical Realities



The system [education] is *bottom heavy* and *loosely coupled*. It is bottom heavy because the closer we get to the bottom of the pyramid, the closer we get to the factors that have the greatest effect on the program's success or failure. The system is loosely coupled because the ability of one level to control the behavior of another is weak and largely negative…

The skillful use of delegated control is central to making implementation work in bottom-heavy, loosely controlled systems. *When it becomes necessary to rely mainly on hierarchical control, regulation, and compliance to achieve results, the game is essentially lost.*

Richard F. Elmore, *Complexity and Control: What Legislators and Administrators Can Do About Implementing Public Policy*

Typical State-Level Goals

- Increase the education attainment levels of the state's adult population/workforce
- Reduce the education attainment gaps between majority and minority population
- Create a seamless system of education – remove barriers to student movement across boundaries
  - Between secondary and postsecondary
  - Between sectors of postsecondary
- Contribute to workforce and workplace development
- Maintain affordability of a college education for residents of the state
- Create a system of postsecondary education that is highly productive/efficient

At the State-Level, the Responsibilities are Primarily:

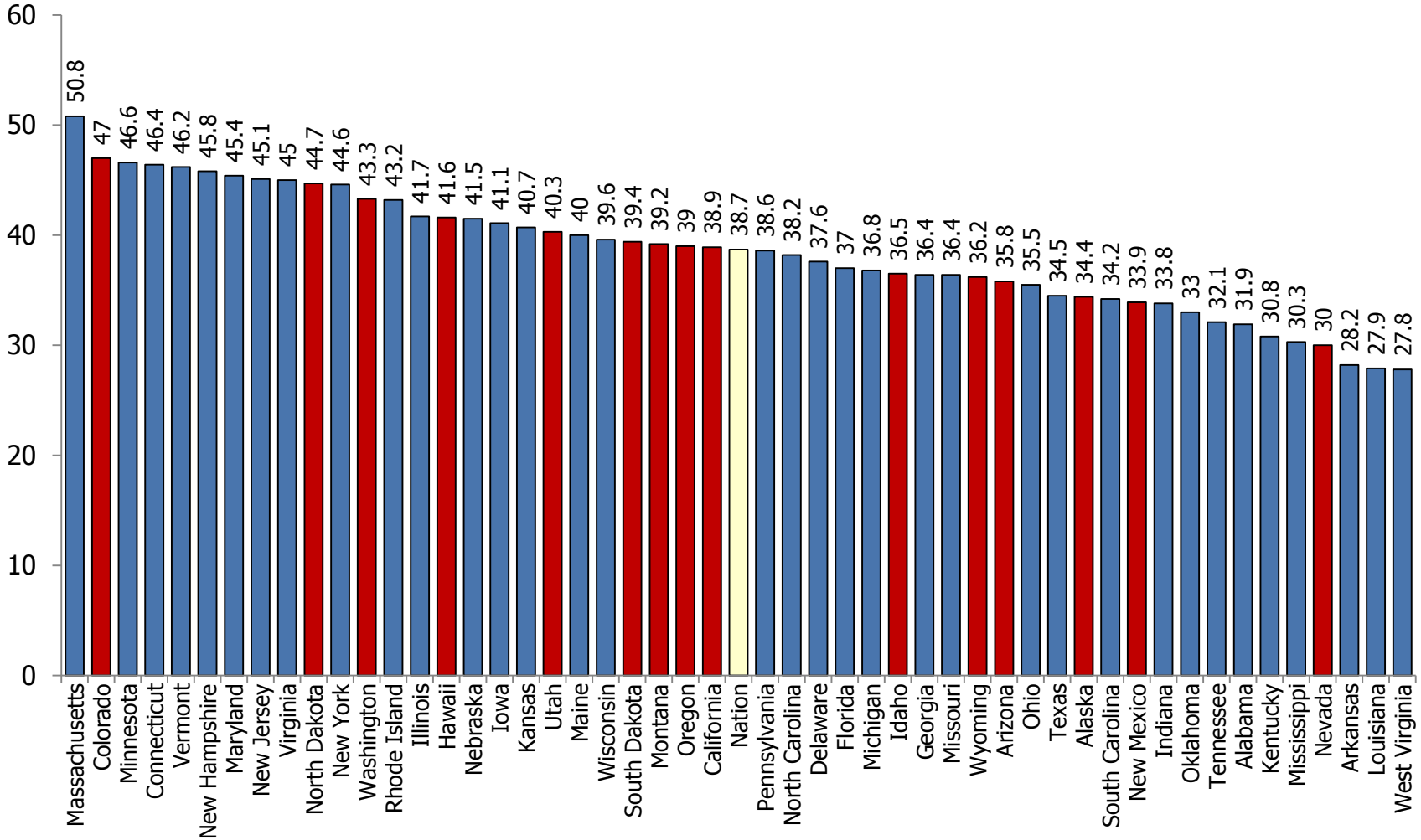
- Setting statewide goals and establishing expectations for sectors/institutions
- Aligning allocation of resources with these goals
- Monitoring progress/ensuring accountability

Comparing WICHE States with Nations and Other States in the Percentage of Young Adult Degree Attainment (Ages 25-34)

U.S. States	%	OECD Country
	↑	Korea (65.0)
	60	
	58	
	56	Japan, Canada
Massachusetts	54	
North Dakota	52	
Minnesota • New York	50	
New Jersey	48	Ireland
New Hampshire		Norway
Connecticut • Iowa	46	New Zealand, United Kingdom
Virginia • Illinois • Maryland • South Dakota		
Pennsylvania • Nebraska • Colorado • Vermont	44	Australia, Luxembourg, Israel, Belgium
Rhode Island • Kansas		France
Montana • Wisconsin	42	UNITED STATES, Sweden
• Washington		Netherlands, Switzerland
Missouri • Hawaii	40	
Wyoming •Maine • Delaware • Utah		Finland, Spain, Chile
Ohio • California • Oregon	38	Estonia, Denmark
Michigan • North Carolina		Poland
Indiana • Florida • South Carolina	36	Iceland
Georgia		
Alaska • Kentucky • Tennessee	34	
Arizona• Mississippi •Texas		
Alabama • Idaho	32	
Louisiana		Slovenia, Greece
Oklahoma• Arkansas • West Virginia	30	
Nevada	28	
New Mexico		
	26	Germany, Hungary
		Portugal
	24	Slovak Rep
		Czech Rep
	22	Mexico
		Austria, Italy
	20	
		Turkey (17.4)

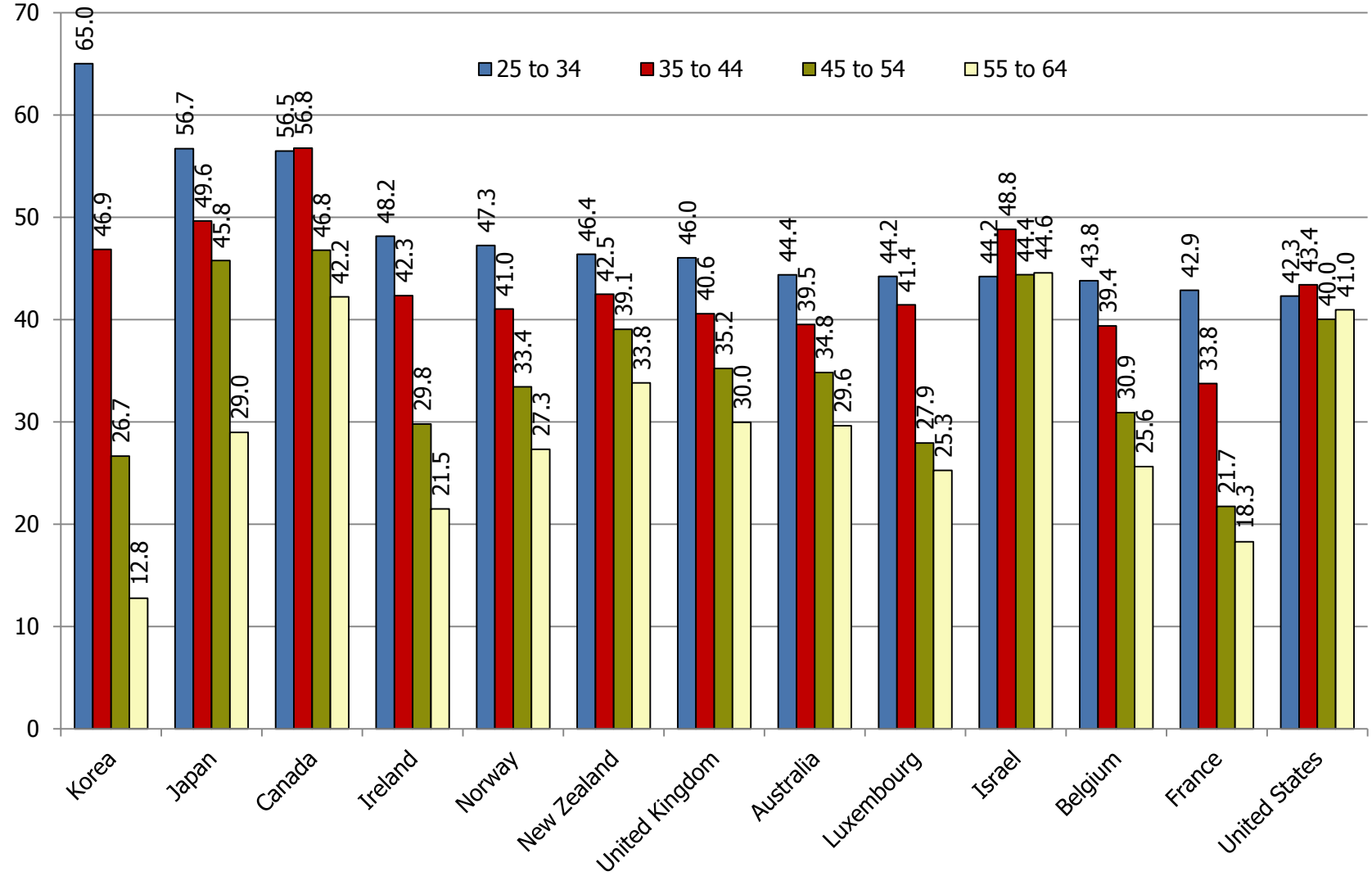
Source: 2012 OECD Education at a Glance; 2010 American Community Survey

Percent of 25-64 Year Olds with College Degrees – Associate and Higher, 2011



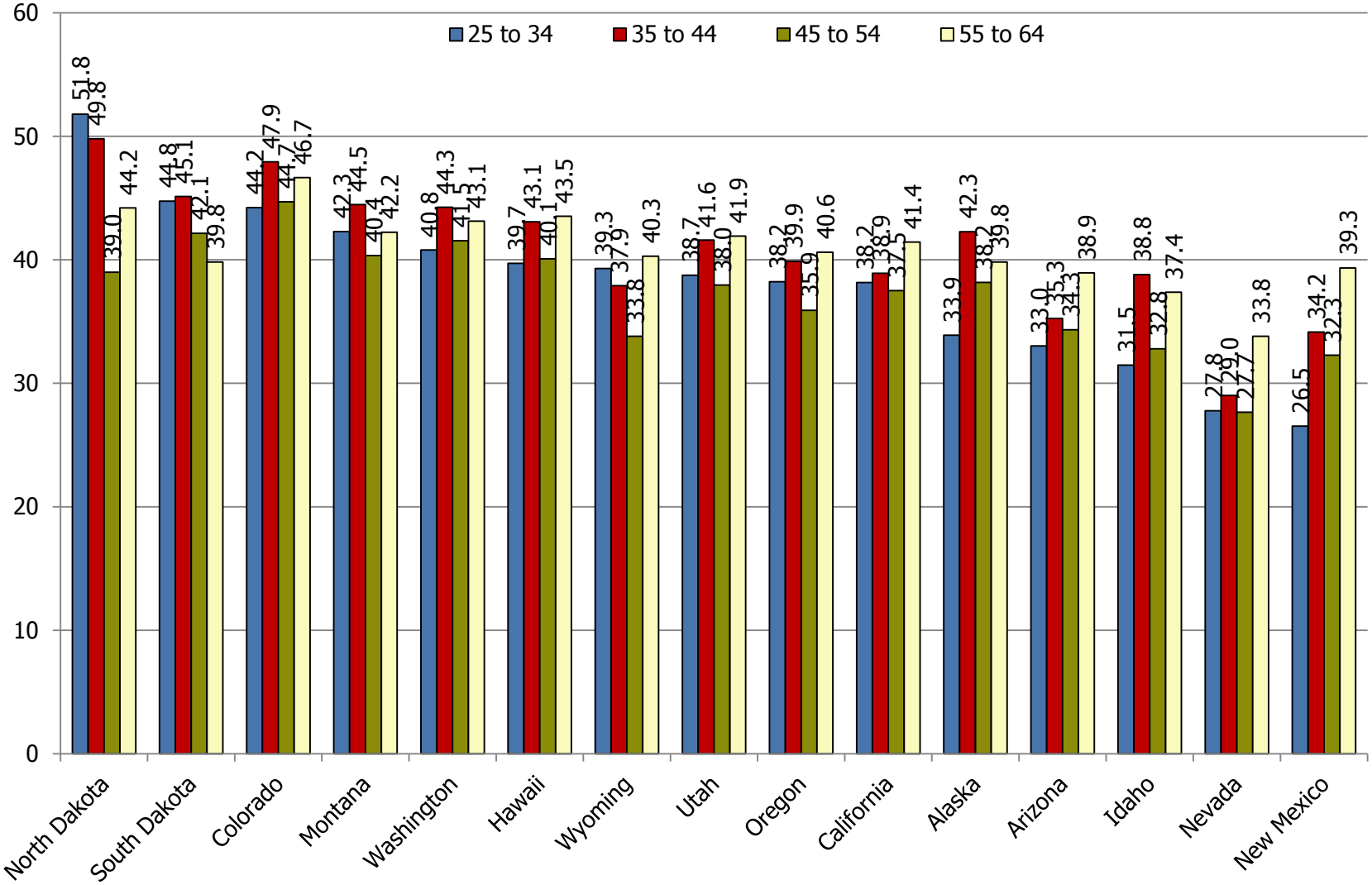
Source: U.S. Census Bureau, 2011 American Community Survey

Percent of Adults with an Associate Degree or Higher by Age Group – U.S. & Leading OECD Countries, 2010



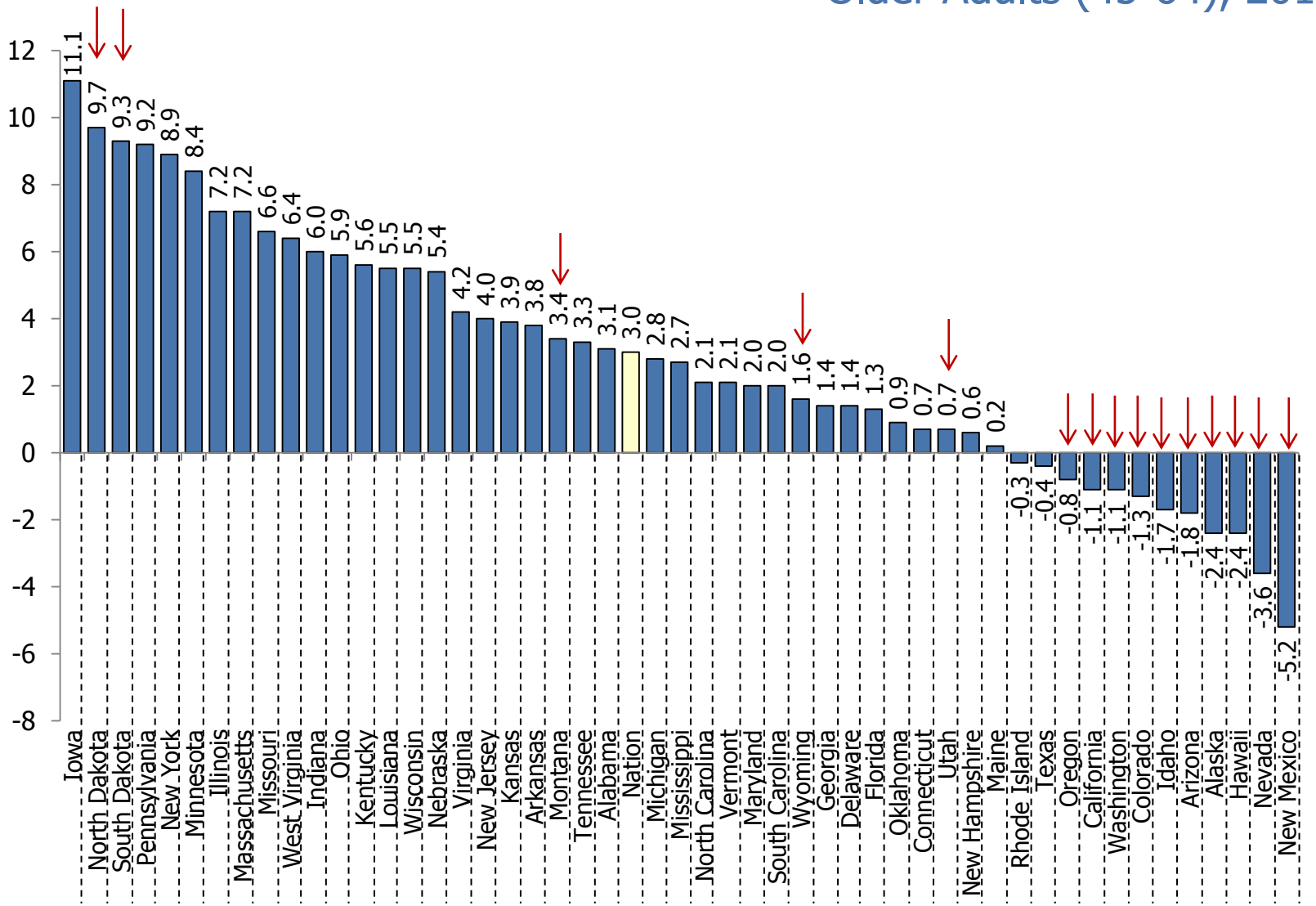
Source: OECD, Education at a Glance 2012, U.S. Census Bureau, 2010 American Community Survey One-Year Public Use Microdata Sample File

Percent of Adults with an Associate Degree or Higher by Age Group – WICHE States, 2010



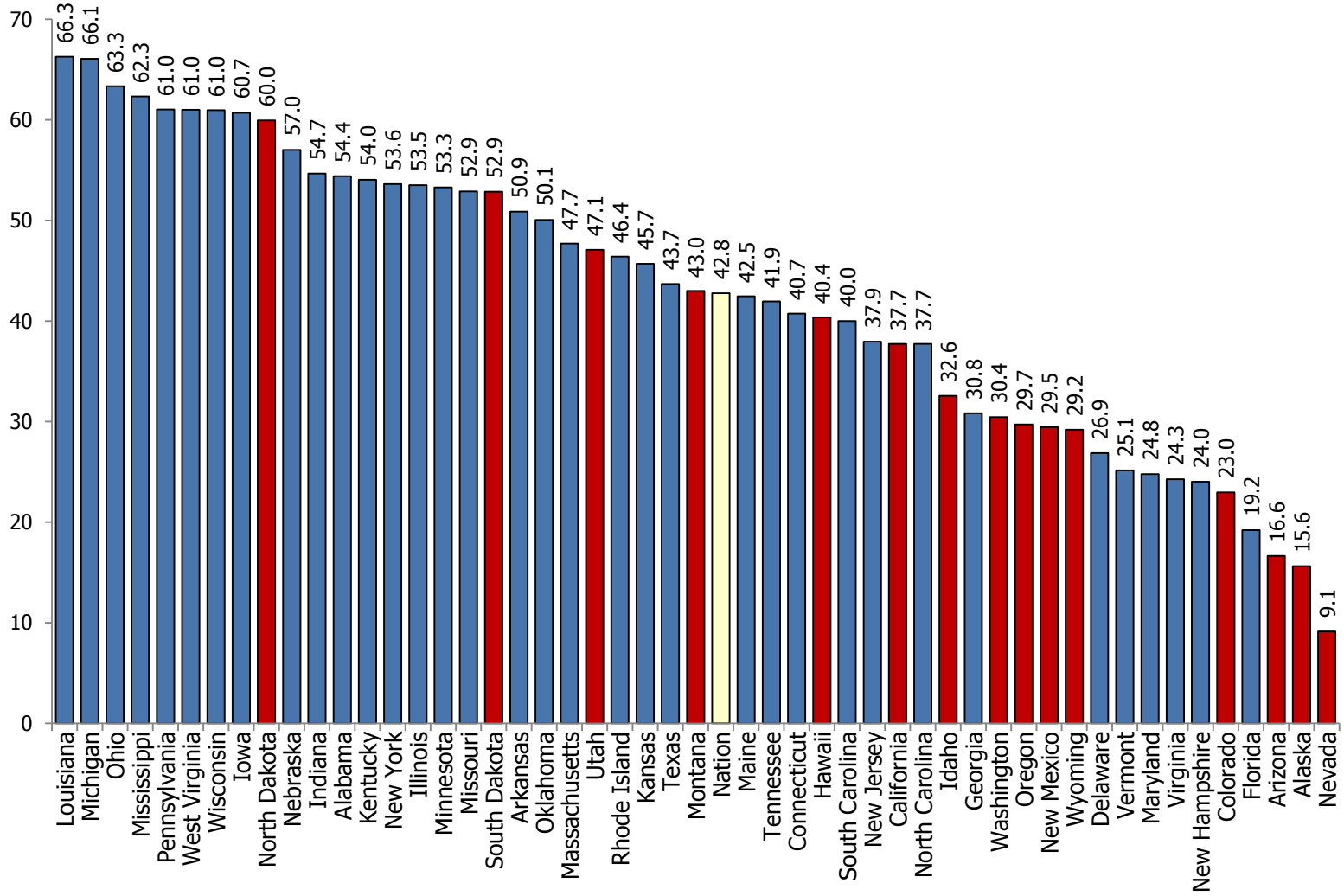
Source:, U.S. Census Bureau, 2010 American Community Survey One-Year Public Use Microdata Sample File

Difference in College Attainment between Young Adults (25-34) and Older Adults (45-64), 2011



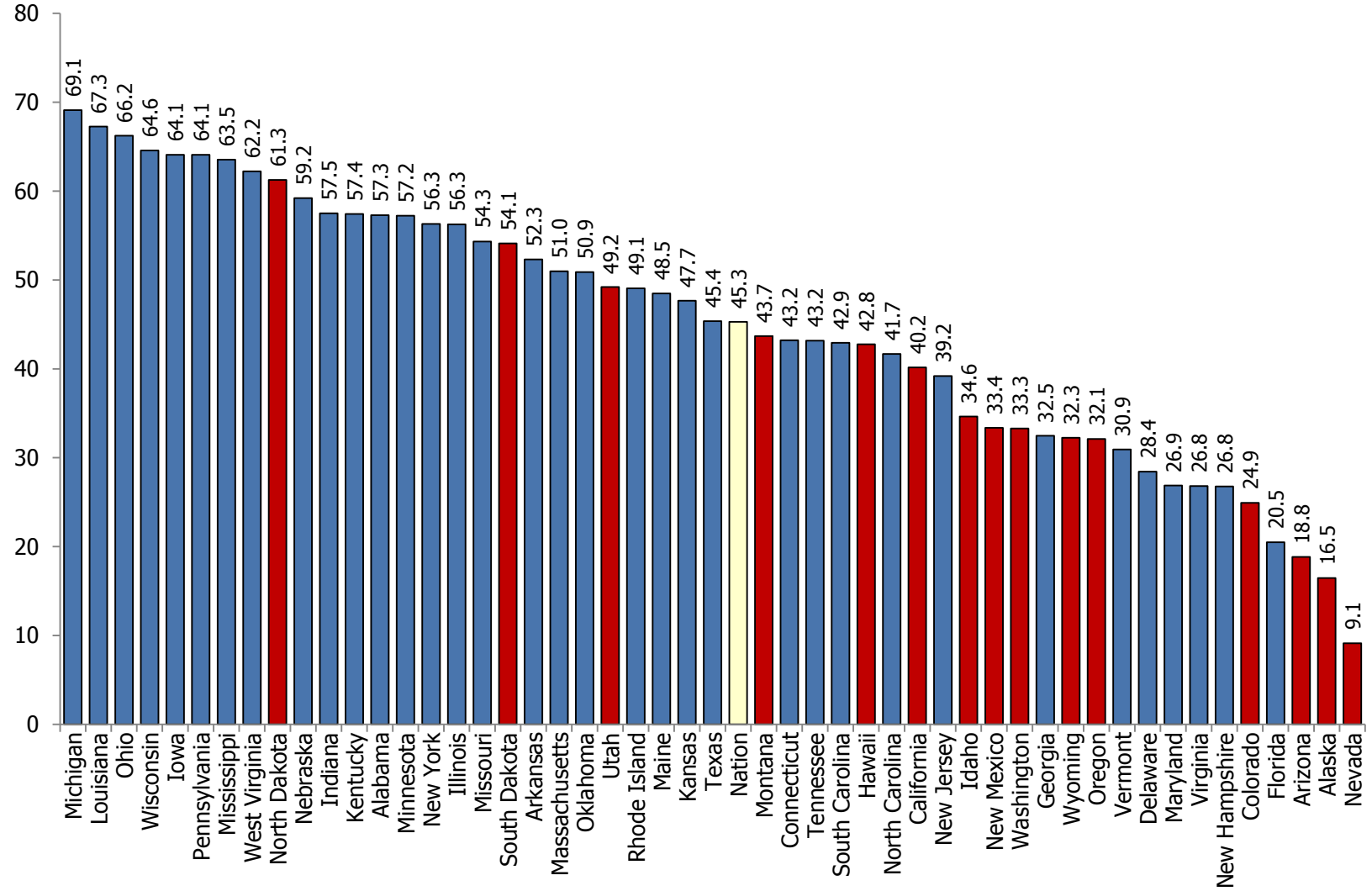
Source: U.S. Census Bureau, 2011 American Community Survey

Percent of Residents Aged 25-64 with a Bachelor's Degree or Higher Born In-State, 2010



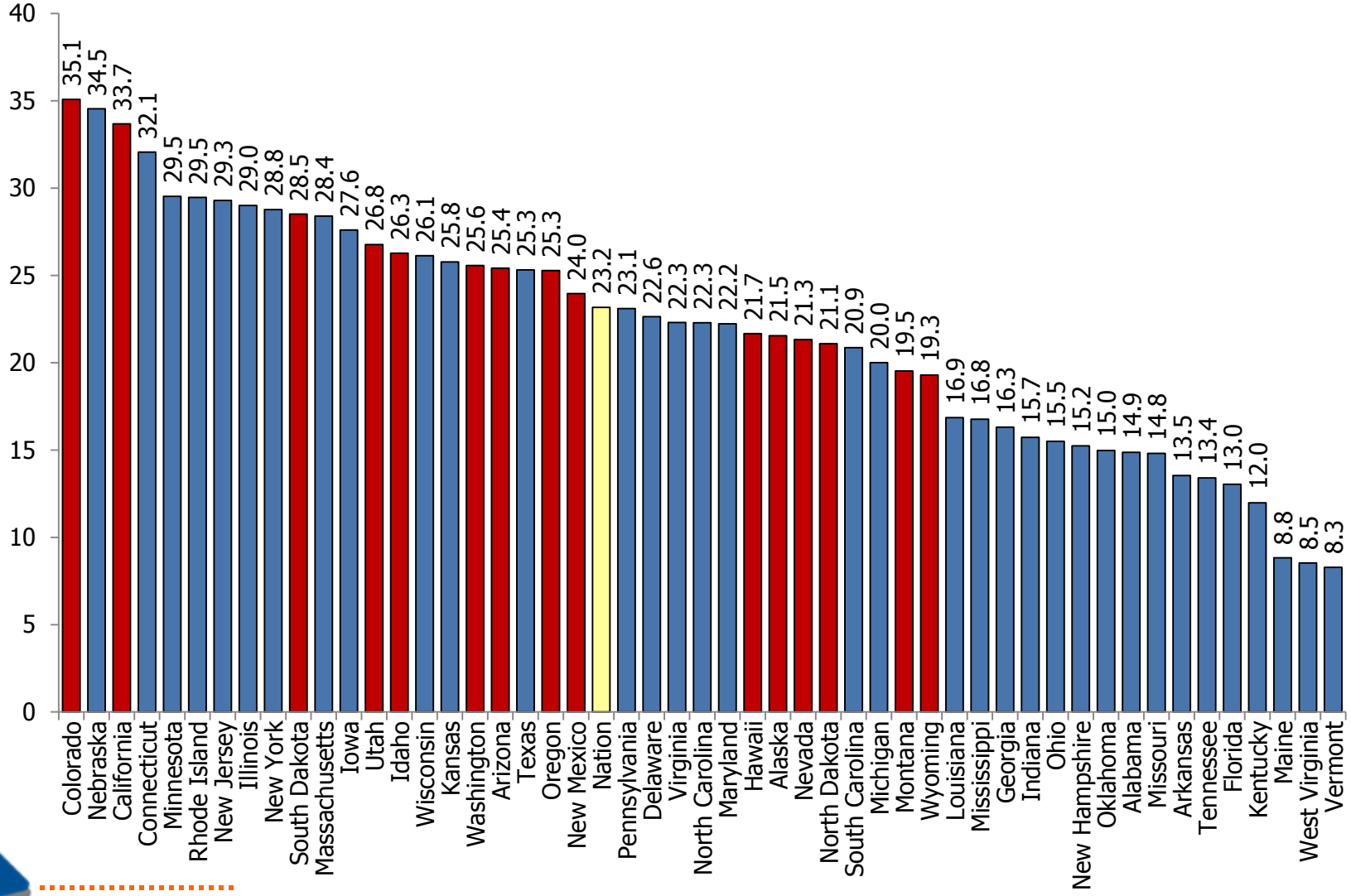
Source: U.S. Census Bureau, 2010 American Community Survey (ACS) Public Use Microdata Sample (PUMS) File.

Percent of Residents Aged 25-64 with an Associates Degree or Higher Born In-State, 2010



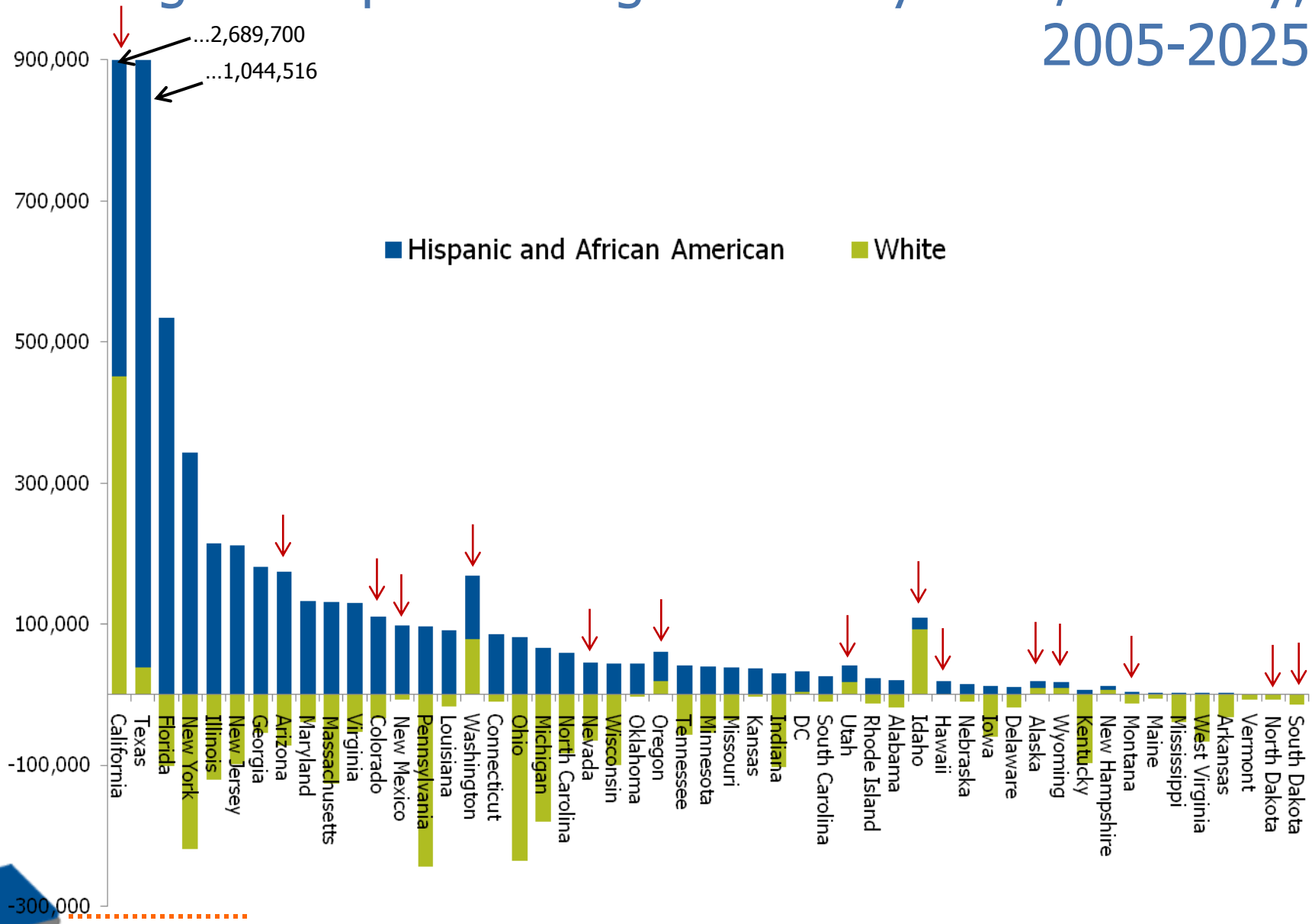
Source: U.S. Census Bureau, 2010 American Community Survey (ACS) Public Use Microdata Sample (PUMS) File.

Difference in College Attainment Between Whites and Minorities (Blacks, Hispanics, Native Americans) (2008-10)



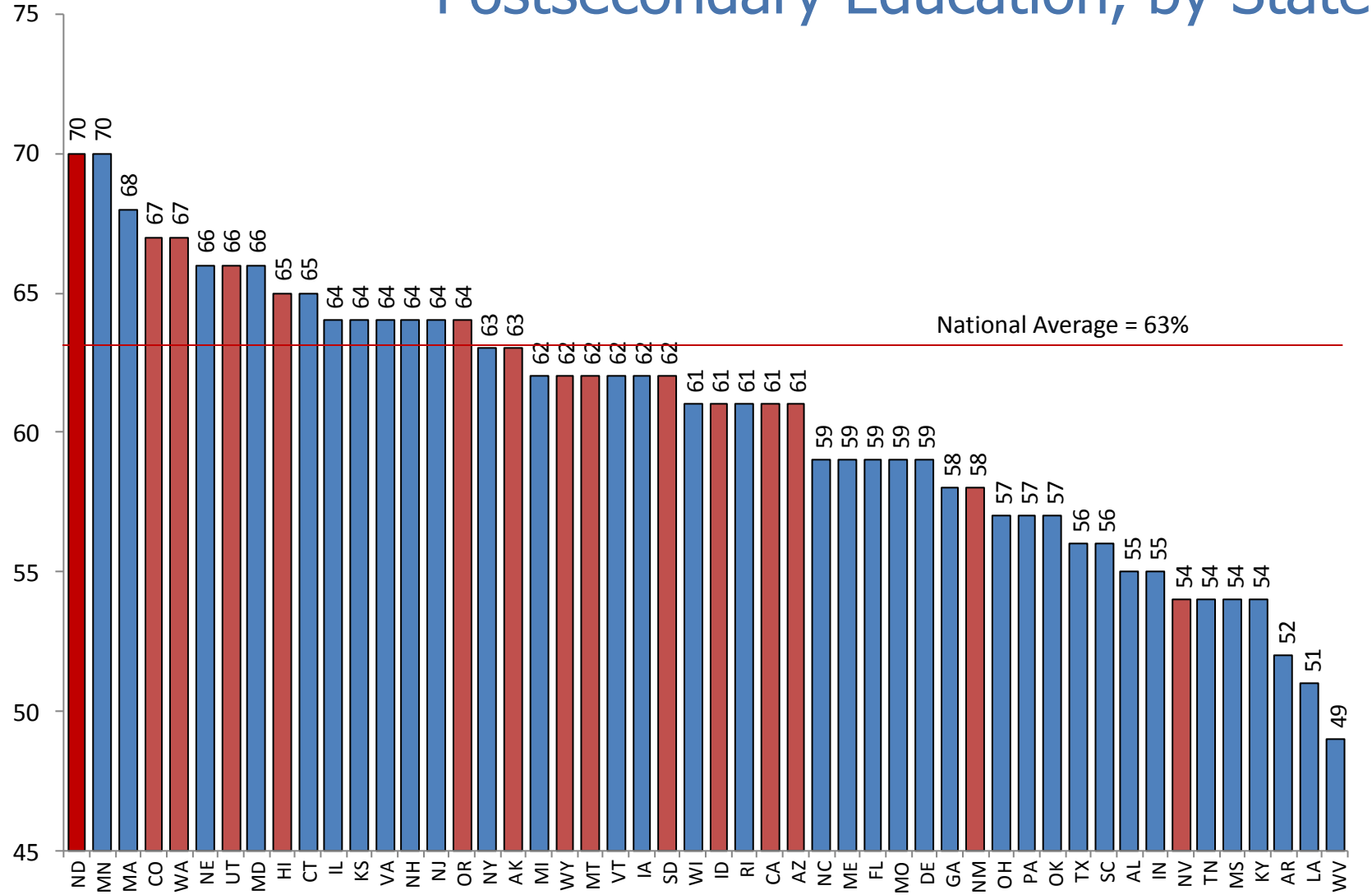
Source: U.S. Census Bureau, 2008-10 American Community Survey

Change in Population Age 25-44 By Race/Ethnicity, 2005-2025



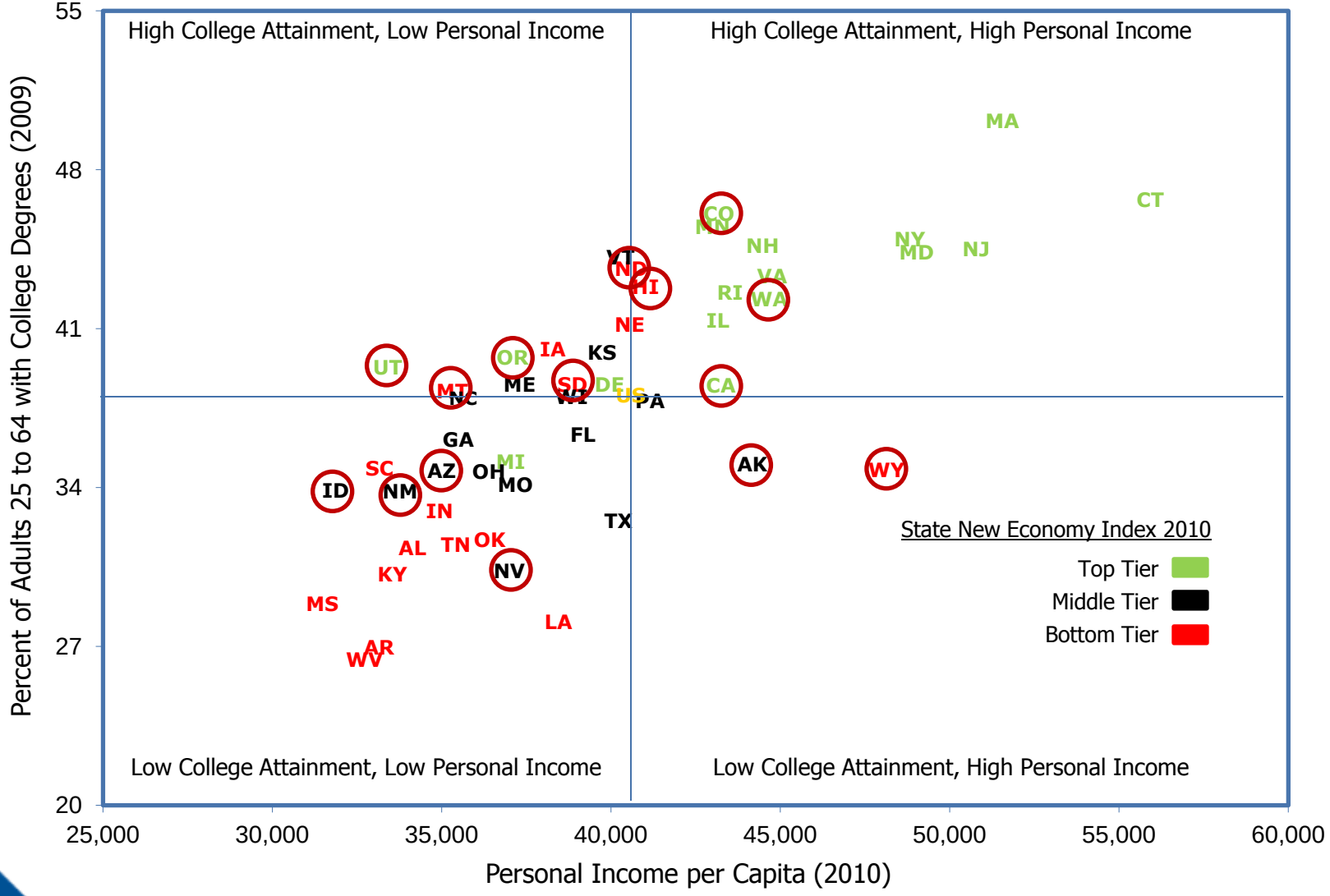
Source: U.S. Census Bureau

Percentage of Jobs in 2018 that Will Require a Postsecondary Education, by State



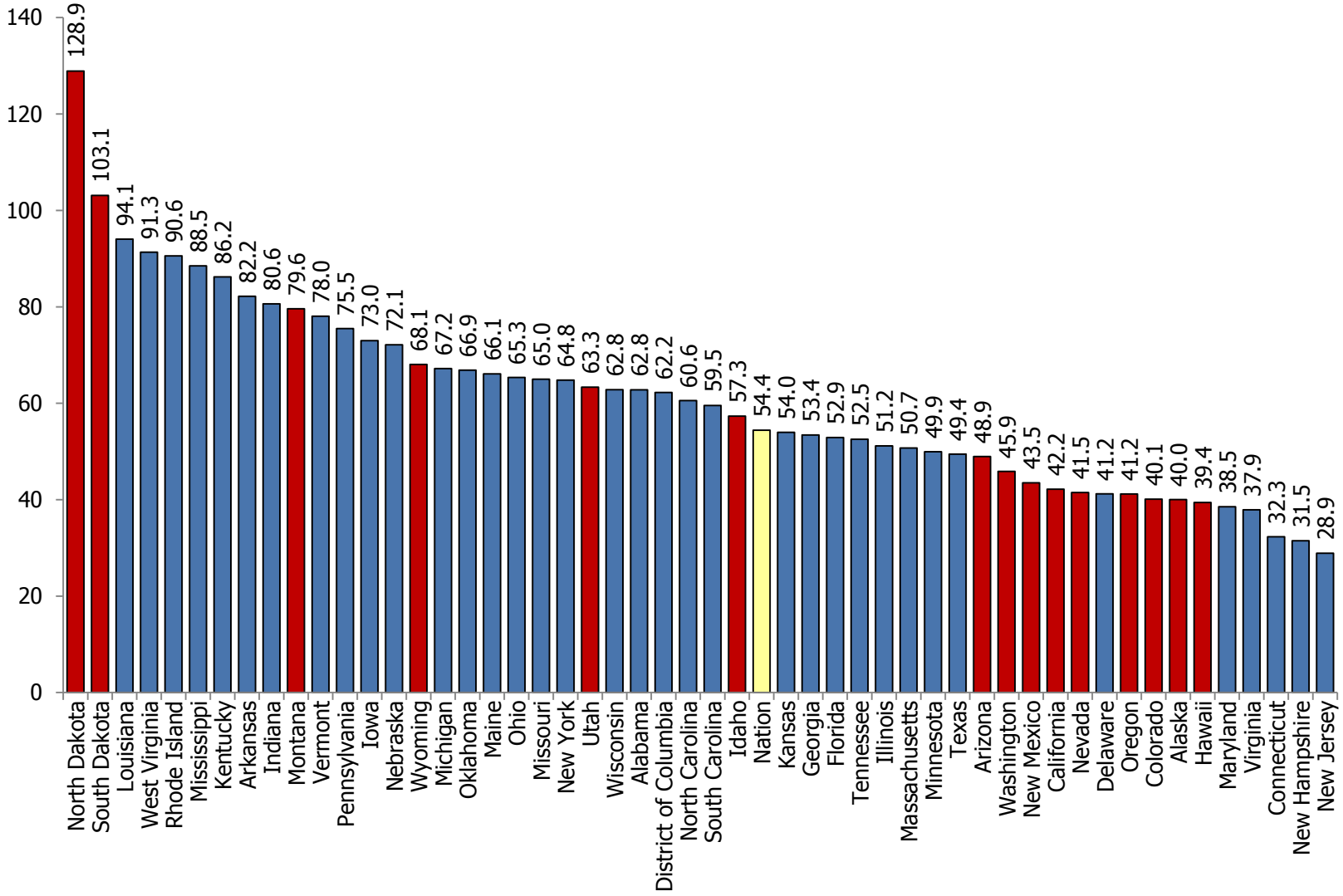
Source: Georgetown University Center on Education and the Workforce, Projections of Jobs and Education Requirements through 2018; June 2010

The Relationship Between Educational Attainment, Personal Income, and the State New Economy Index (2010)



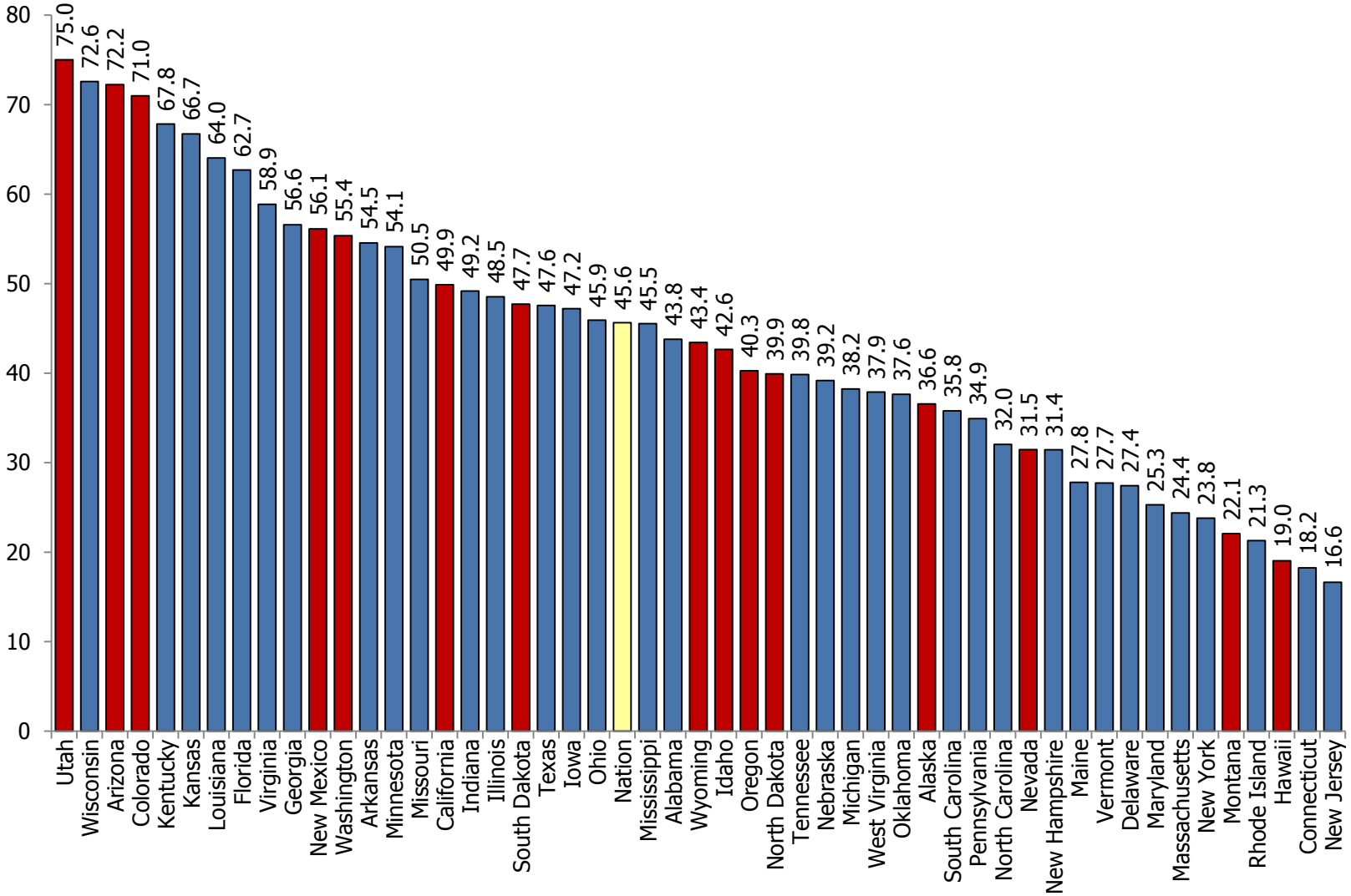
Source: U.S. Census Bureau, 2010 American Community Survey; Bureau of Economic Analysis; Kauffman Foundation

Undergraduate STEM Credentials Awarded per 1,000 STEM Employees, 2008-10



Source: U.S. Census Bureau, 2008-10 American Community Survey Three-Year Public Use Microdata Sample File.
NCES, IPEDS 2009-10 Completions File; c2010_a Final Release Data File.
Note: Awards for Arizona, Colorado, Iowa, and West Virginia reduced to reflect private for-profit production primarily serving out-of-state students online.

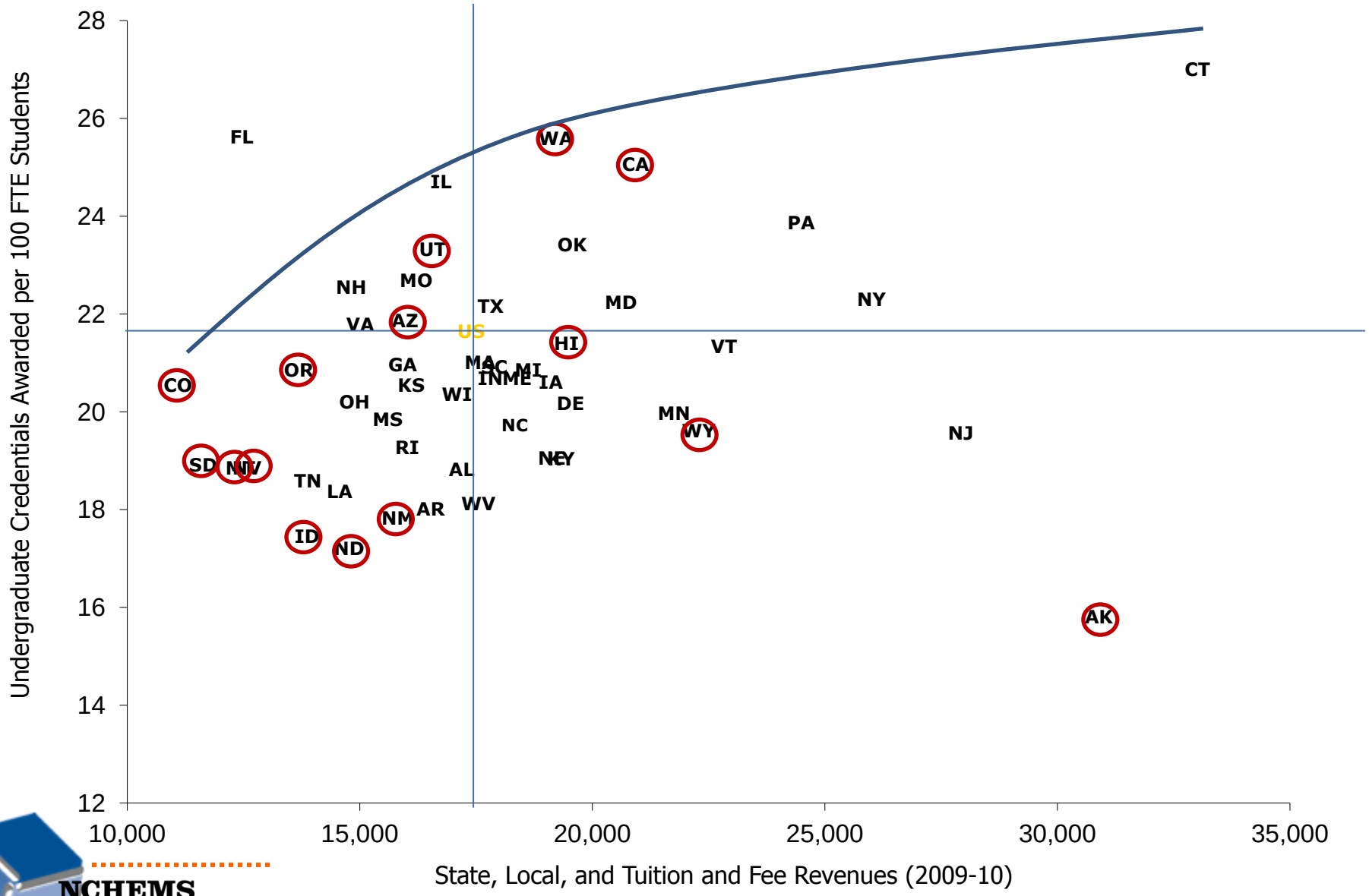
Undergraduate Health Credentials Awarded per 1,000 Health Employees, 2008-10



Source: U.S. Census Bureau, 2008-10 American Community Survey Three-Year Public Use Microdata Sample File.
NCES, IPEDS 2009-10 Completions File; c2010_a Final Release Data File.

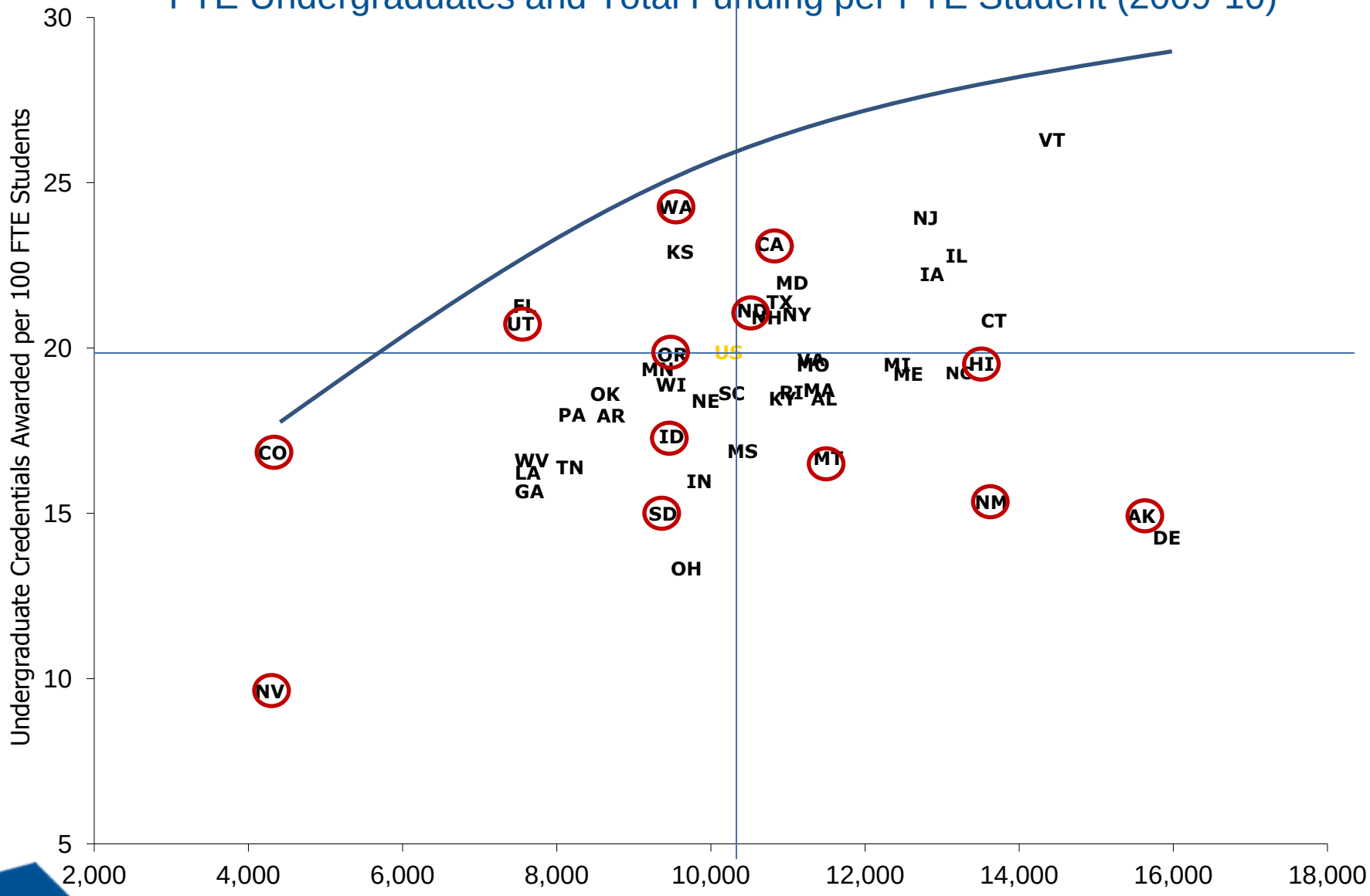
Note: Awards for Arizona, Colorado, Iowa, and West Virginia reduced to reflect private for-profit production primarily serving out-of-state students online.

Public Research Institutions: Undergraduate Credentials per 100 FTE Undergraduates and Total Funding per FTE Student (2009-10)



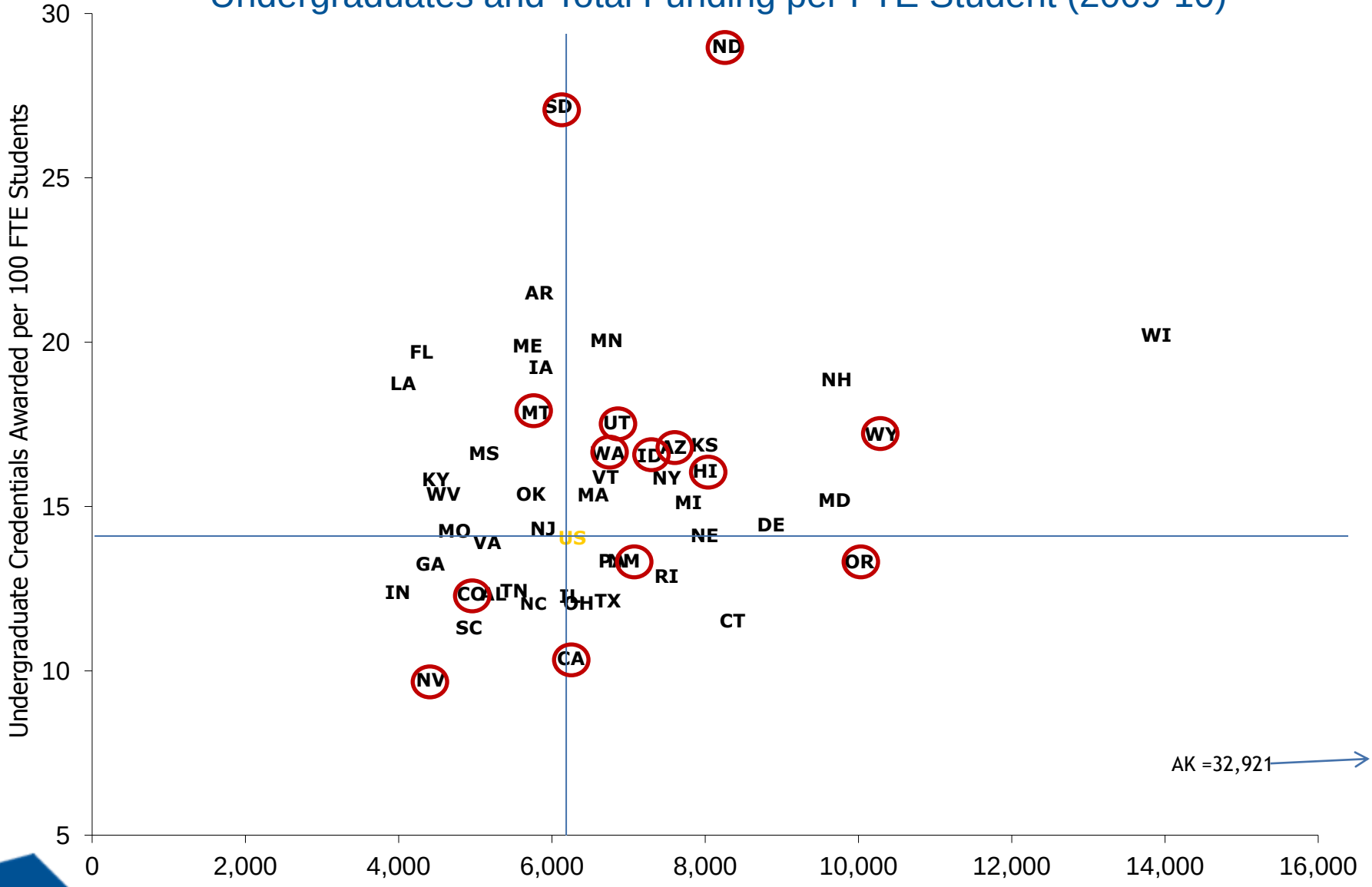
Sources: NCES, IPEDS Completions, Finance, and Enrollments Surveys.

Public Bachelors and Masters Institutions: Undergraduate Credentials per 100 FTE Undergraduates and Total Funding per FTE Student (2009-10)



Sources: NCES, IPEDS Completions, Finance, and Enrollments Surveys.

Public Two-Year Institutions: Undergraduate Credentials per 100 FTE Undergraduates and Total Funding per FTE Student (2009-10)



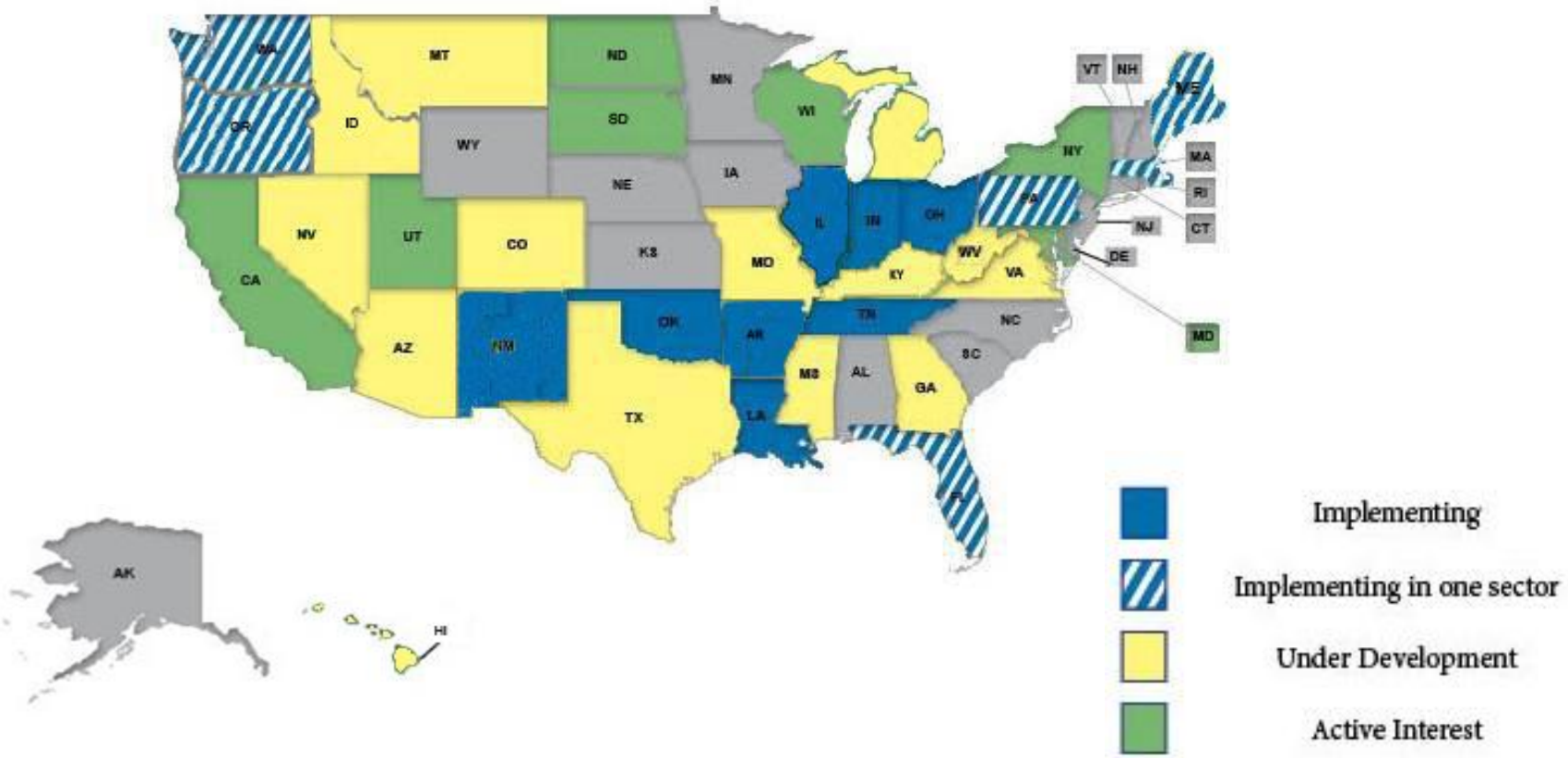
Sources: NCES, IPEDS Completions, Finance, and Enrollments Surveys.

Metrics that Reflect a Seamless System

- Proportion of students entering college who require remediation
- Proportion of graduating students who take fewer than 60/120 credits from colleges and universities
- Accumulated credit hours at graduation
  - Transfer students compared to native freshmen

Increasingly, state-level performance metrics are being incorporated into outcomes-based resource allocation models.

Outcomes-Based Funding 3.0: State Activity



Systems – Must Monitor a Longer List of Performance Measures

- They must monitor
  - Institutions' contribution to achievement of state goals
  - And, in addition, institutional
    - Effectiveness
    - Efficiency
    - Sustainability

System/Board Oversight of Institutional Effectiveness

- Each institution's contributions to state goals
- Progress toward achieving unique institutional goals
- Some key diagnostics
  - 1st year retention
  - Years to graduation
  - Comparisons – majority versus minority populations

System/Board Oversight of Institutional Efficiency

- Institutional performance on state-level metrics
- Credits to degree
  - "Native" students
  - Transfers
- Expenditures per FTE student
  - Trends
  - Comparisons with similar institutions

  (Note: judge efficiency in context of effectiveness)

System/Board Oversight of Institutional Sustainability

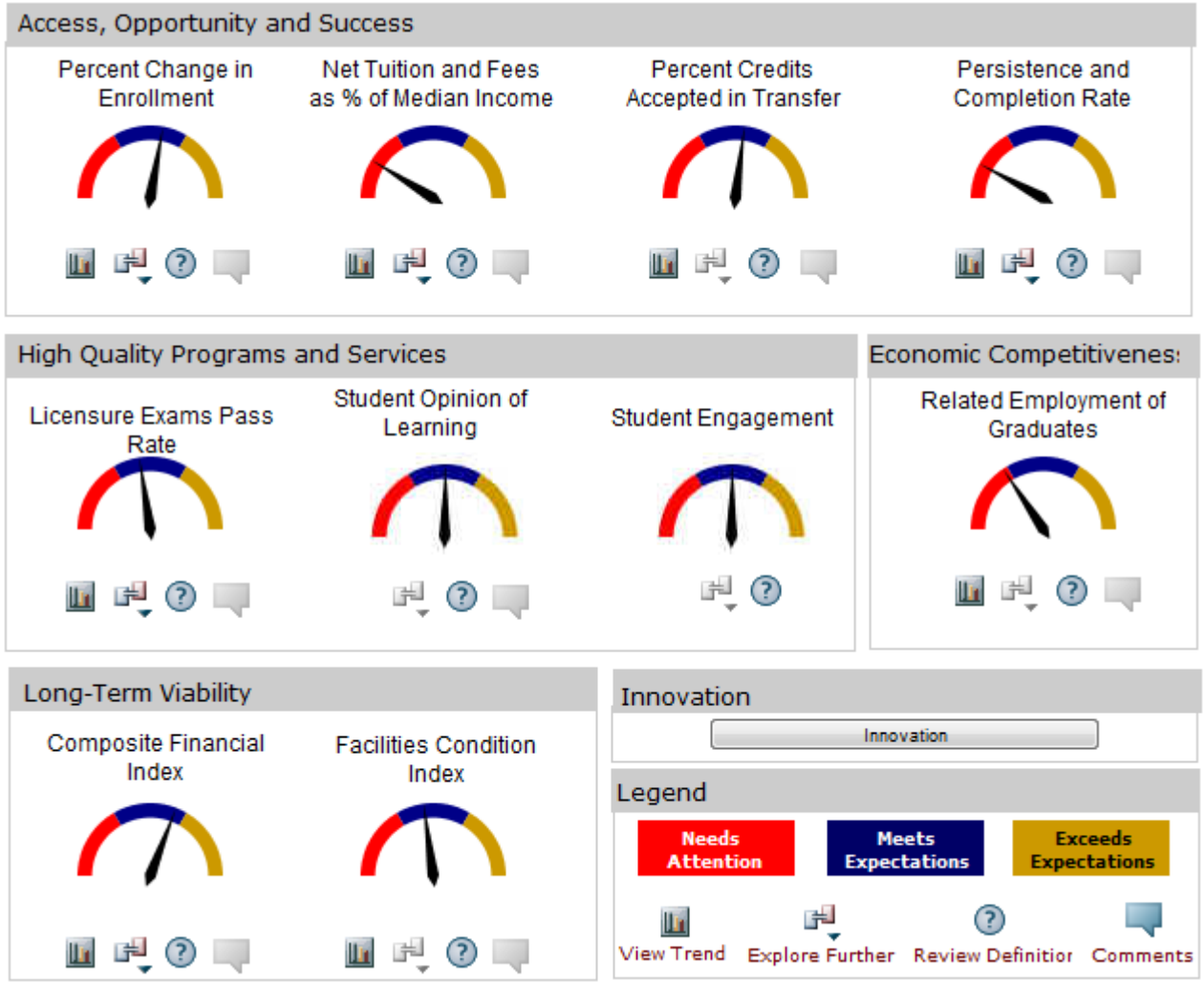
- Trends in operating revenue versus operating expenditure
- Maintenance of institutional assets/capacity – trends
  - FTE students per FTE full-time faculty
  - Annual investment in plant renewal and renovation as a percent of replacement value of plant (level of deferred maintenance)
  - Years to replace technology at annual rate of investment
  - In essence – what's happening to the balance sheet

Accountability Dashboard - MnSCU

Definitions

Term	Description
Composite Financial Index	The Composite Financial Index (CFI) offers insights regarding finaNCIAL STRENGTHS AND WEAKNESSES. The composite is calculated from 4 component measures: return on net assets, operating margin, primary reserve, and viability. (See also the definitions of these components). The calculation of CFI from these compoents involves certain ""strength factors"" and ""weighting factors"" applied to the 4 components.
Operating Margin	Operating margin is one of 4 component measures in the Composite Financial Index. The ratio numerator is ""Income (Loss) Before Other Revenues, Expenses, Gains, or Losses"" from the Statements of Revenues, Expenses and Changes in Net Assets"". The denominator is 1) the total of all operating revenues plus 2) all non-operating revenue from the Statements of Revenues, Expenses and Changes in Net Assets.
Primary Reserve Ratio	Primary reserve ratio is one of 4 components in the Composite Financial Index. The ratio numerator is ""Expendable Net Assets"" computed from the Net Assets section of the Statement of Net Assets as 1) ""Total Net Assets"" less 2) ""Invested in capital assets, net of related debt."" The denominator is computed from data on the Statement of Revenues, Expenses, and Changes in Net Assets"" and includes 1) total operating expenses plus 2) interest expense.
Return on Net Assets	Return on net assets is one of 4 component measures in the Composite Financial Index. The ratio numerator is ""Change in net assets"" computed by taking the 'Change in net assets"" from the Statements of Revenues, Expenses and Changes in Net Assets. The denominator is ""Total net assets;"" use beginning net assets (i.e., prior year ending net assets).
Viability Ratio	Viability ratio is one of 4 component measures in the Composite Finacial Index. The ratio numerator is ""Expendable Net Assets,"" the exact same value used as the numerator for the Primary Reserve Ratio calculation. The denominator is ""Long-term Debt"" computed from the ""Statements of Net Assets"" by adding 1) the current and 2) the noncurrent portions of long-term debt.

Accountability Dashboard - MnSCU



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