

The image features a solid red background. In the top left corner, the word "RUTGERS" is written in a large, white, serif font. Below it, in a smaller, white, sans-serif font, are the words "THE STATE UNIVERSITY OF NEW JERSEY". A large, faint, circular seal of Rutgers University is centered in the background, featuring a sunburst design and the text "RUTGERS STATE UNIVERSITY" around the perimeter.

RUTGERS

THE STATE UNIVERSITY
OF NEW JERSEY

Rutgers Strategic Planning Fact book

March 6, 2013

About this information

Rutgers has undertaken a strategic planning process to set the university's course for the next 10-15 years.

- A Steering Committee was formed in early December, and the team has been engaging with members of the Rutgers community to gather perspectives on the university's future
- On March 6th, ~200 leaders from across the university community came together to learn about the Committee's work to date and to provide input on the strategic plan

These materials are intended to lay out a base of facts to allow the university community to be prepared for deeper conversations about Rutgers' aspirations and strategic plan

- These materials were prepared with assistance from The Boston Consulting Group (BCG), Rutgers' partner in this strategic planning process
- BCG has conducted almost 120 interviews and 13 focus groups and received more than 5,000 survey responses from Board members, students, faculty, and academic administrators/staff¹
- These slides were informed by these interactions with stakeholders, as well as through research and analysis and BCG's broader experience working in higher education

1. Student survey still open. Alumni survey has been released to 3,000 people

Contents

Key information shaping the strategic plan

- **Summary** 3
- Trends in higher education 8
- New Jersey landscape 24
- Assessment of Rutgers' current position 38

Summary: U.S. higher education trends (I/II)

Role of the university

Funding shift from public to private sources is raising the question of public vs. private good for higher education in US

- State appropriations per student are decreasing and tuition is increasing

Transparency and accountability in higher education is gaining attention on the national stage

- Obama announced the *College Scorecard* in his recent State of the Union address

NIH research funding is decreasing

More and more states are allocating funds based on outcomes they deem important

- Many states have implemented or are transitioning to performance-based funding (~5-25% of total funding), therefore graduation rates becoming increasingly important

Students and value proposition

Overall enrollment is growing, but beginning to slow down, and demographic shift is occurring

- Largest growth segments for the next generation of students is 30-34 year-olds, and Hispanic and African-American students
- For-profits are capturing largest share of growing older demographic

Value proposition has been questioned in recent years

- Increasing tuition and debt for students
- Alternatives to traditional degrees are increasingly being viewed as viable options by students: three year degrees; "\$10,000 degrees" (earning credits in high school); stackable degrees; industry accreditations

Summary: U.S. higher education trends (II/II)

Operating model and productivity

Technology is a major driving force impacting the traditional higher education model

- Demand for online courses and programs is increasing, driven in part by fast growing MOOC enrollments
- Traditional universities are beginning to offer online degrees – most prevalent online offerings are masters degrees in business and education

Faculty mix is shifting away from tenured professors to part-time and adjunct teachers

Revenues and costs

Revenue increases from tuition, federal funding and auxiliary services are partly offsetting declining state appropriations

Student aid has been increasing, driven by federal grants and loans, but sustainability is under question

- Several entities are exploring options to redesign federal aid to incentivize completion and not just focus on access

Expenditure mix has remained relatively unchanged over past decade

- Increases in faculty benefits and administrative costs

Summary: New Jersey landscape

New Jersey is one of the nation's most populous and prosperous states

- 11th most populous state and number two in median household income
- Large presence of Fortune 500 companies with headquarters in the state

New Jersey produces some of the nation's highest-performing K-12 students but many of the best and brightest leave the state for college

- New Jersey students among the best in the nation in standardized test scores and SAT scores
- Test scores of New Jersey college students do not reflect the test scores of high school students in the state
- New Jersey has a net loss of ~30K college freshmen each year – highest in the U.S.
- Many high-caliber New Jersey students leave the state to study at higher ranked universities, especially in New York and Pennsylvania

Overall quality of New Jersey higher education system lags other states

- Fewer highly-ranked universities in New Jersey compared to states with comparable demographics
- New Jersey colleges have the lowest capacity to meet the state's student demand

State and local governments in New Jersey invest heavily in K-12 education, but less so in higher education

- New Jersey spends more on K-12 education than all other states
- States with comparable K-12 spending spend a proportionally higher amount on higher education

New Jersey invests less in higher education than other states

- New Jersey appropriation for higher education in line with other states on a per-student basis, but proportionally lower given the state's prosperity
- Total state appropriation for higher ed in New Jersey relatively flat over the past five years
- For many years, New Jersey has underinvested in capital expenditures for higher education

Summary: Assessment of Rutgers' current position

Rutgers faces a wide gap in financial resources relative to peers

- Rutgers has historically raised much less money than peers
- Among public AAU universities, Rutgers ranks in the bottom quartile in total endowment, alumni annual giving, and annual fundraising
- Rutgers receives lower state appropriations relative to peers and is more dependent on revenues from tuition

Rutgers' mix of students is different than many peers on several dimensions

- Rutgers is less selective in admissions relative to peers and aspirants
- Rutgers attracts fewer out-of-state students
- Rutgers serves more diverse students, more under-represented minorities, and more students with financial need

Several specific academic programs are clearly excellent, but Rutgers lags aspirants in overall academic performance

- Rutgers lags aspirants on some student outcome measures
 - Freshman retention and 6-year graduation rates on par with peers, but lagging aspirants
- However, some evidence that Rutgers may exceed peers and aspirants in improving student performance
- Faculty receive fewer awards and less research funding than peers
- Publications and citations by Rutgers faculty are below peers

Contents

	<u>Page</u>
Key information shaping the strategic plan	
• Summary	3
• Trends in higher education	8
• New Jersey landscape	24
• Assessment of Rutgers' current position	38

Summary: U.S. higher education trends (I/II)

Role of the university

Funding shift from public to private sources is raising the question of public vs. private good for higher education in US

- State appropriations per student are decreasing and tuition is increasing

Transparency and accountability in higher education is gaining attention on the national stage

- Obama announced the *College Scorecard* in his recent State of the Union address

NIH research funding is decreasing

More and more states are allocating funds based on outcomes they deem important

- Many states have implemented or are transitioning to performance-based funding (~5-25% of total funding), therefore graduation rates becoming increasingly important

Students and value proposition

Overall enrollment is growing, but beginning to slow down, and demographic shift is occurring

- Largest growth segments for the next generation of students is 30-34 year-olds, and Hispanic and African-American students
- For-profits are capturing largest share of growing older demographic

Value proposition has been questioned in recent years

- Increasing tuition and debt for students
- Alternatives to traditional degrees are increasingly being viewed as viable options by students: three year degrees; "\$10,000 degrees" (earning credits in high school); stackable degrees; industry accreditations

Summary: U.S. higher education trends (II/II)

Operating model and productivity

Technology is a major driving force impacting the traditional higher education model

- Demand for online courses and programs is increasing, driven in part by fast growing MOOC enrollments
- Traditional universities are beginning to offer online degrees – most prevalent online offerings are masters degrees in business and education

Faculty mix is shifting away from tenured professors to part-time and adjunct teachers

Revenues and costs

Revenue increases from tuition, federal funding and auxiliary services are partly offsetting declining state appropriations

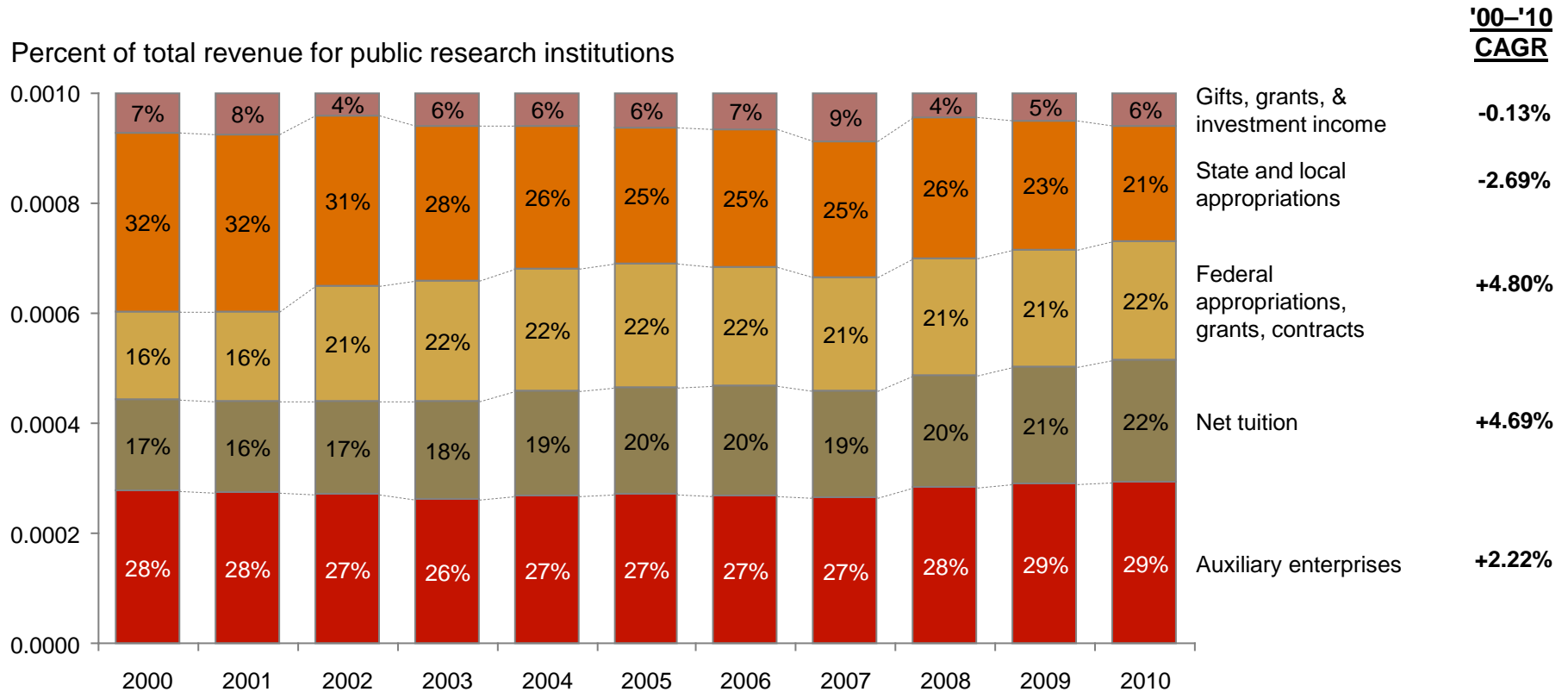
Student aid has been increasing, driven by federal grants and loans, but sustainability is under question

- Several entities are exploring options to redesign federal aid to incentivize completion and not just focus on access

Expenditure mix has remained relatively unchanged over past decade

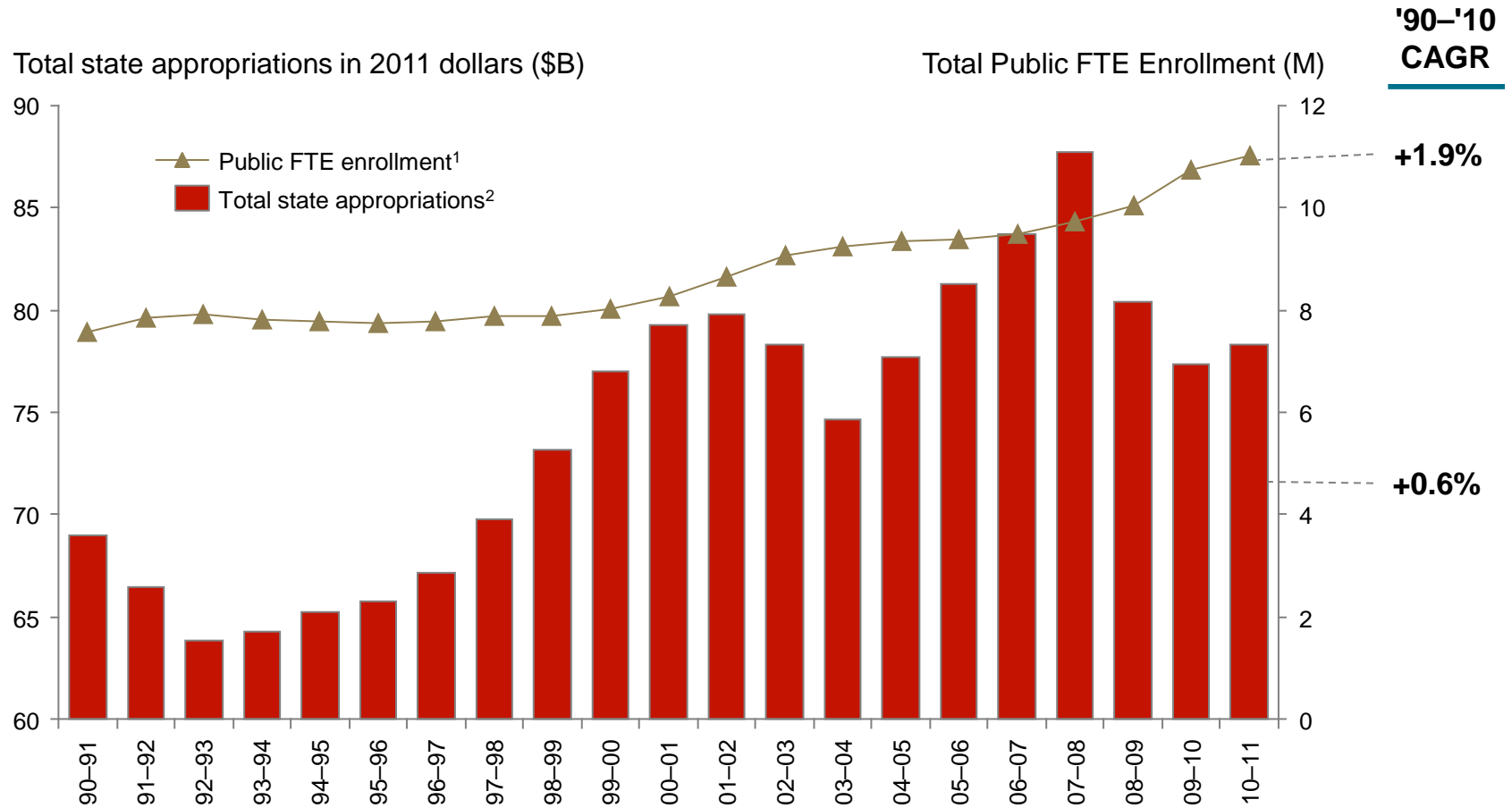
- Increases in faculty benefits and administrative costs

Increases from tuition, federal funding and auxiliary services offsetting declining state appropriations



Note: Data for Public research institutions. Auxiliary enterprises includes revenues generated or collected from auxiliary enterprise operations of the institution that furnish a service to students, faculty, or staff and that charge a fee related to the cost of the service. Federal appropriations includes revenue coming from federal appropriations, grants, and contracts (excluding Pell grants). Source: IPEDS Analytics: Delta Cost Project Database 1987-2010. BCG Analysis.

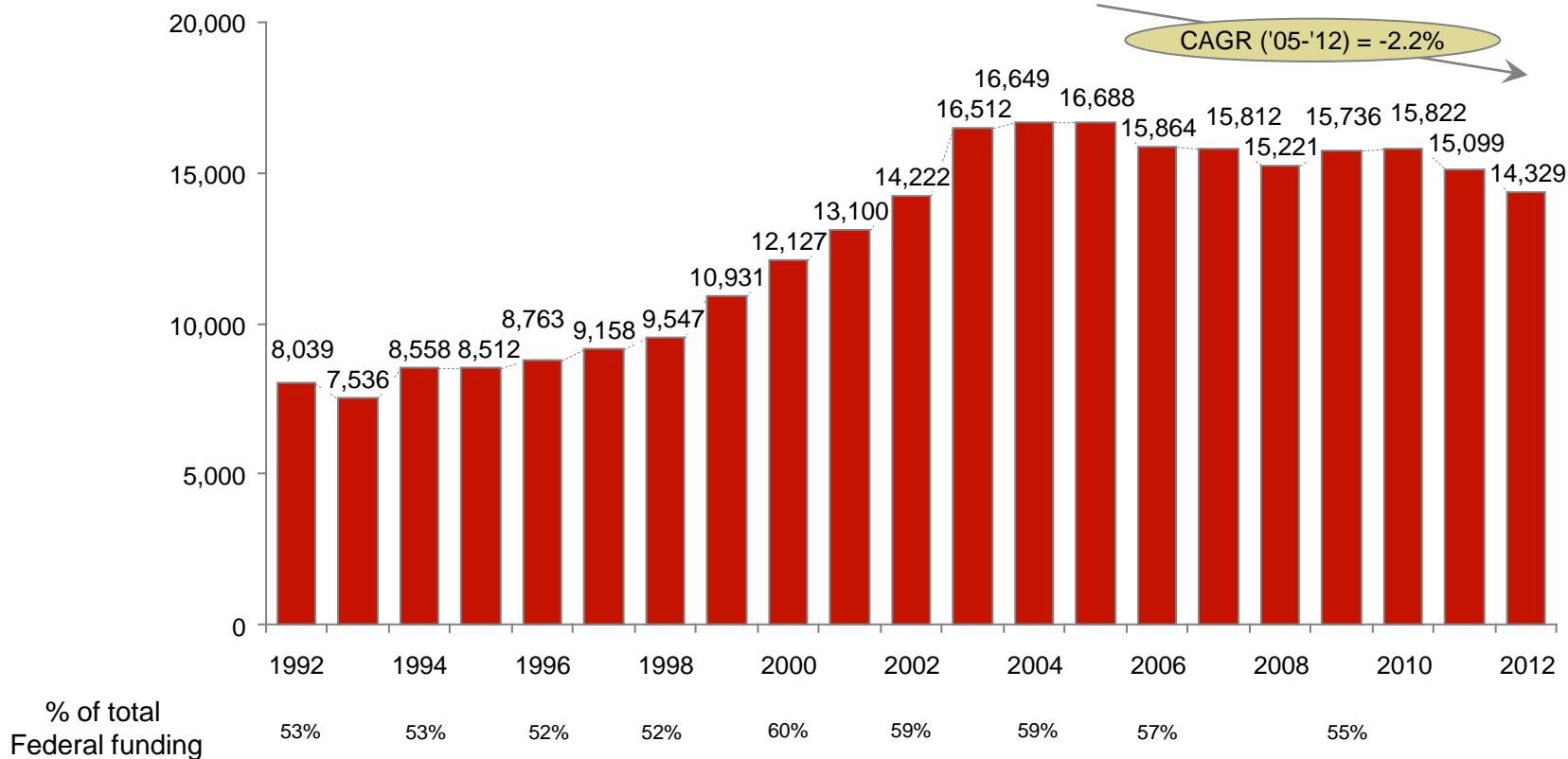
Enrollment in public institutions growing faster than state appropriations



1. Enrollment figures are fall FTE enrollments for public two-year and four-year institutions. 2. Appropriations reported here are for institutional operating expenses, not for capital expenditures. Funding includes both tax revenues and other state funds allocated to higher education but does not include Federal Stimulus Funds. Source: Illinois State University, Grapevine reports; NCES, Digest of Education Statistics 2011, Table 227. BCG Analysis.

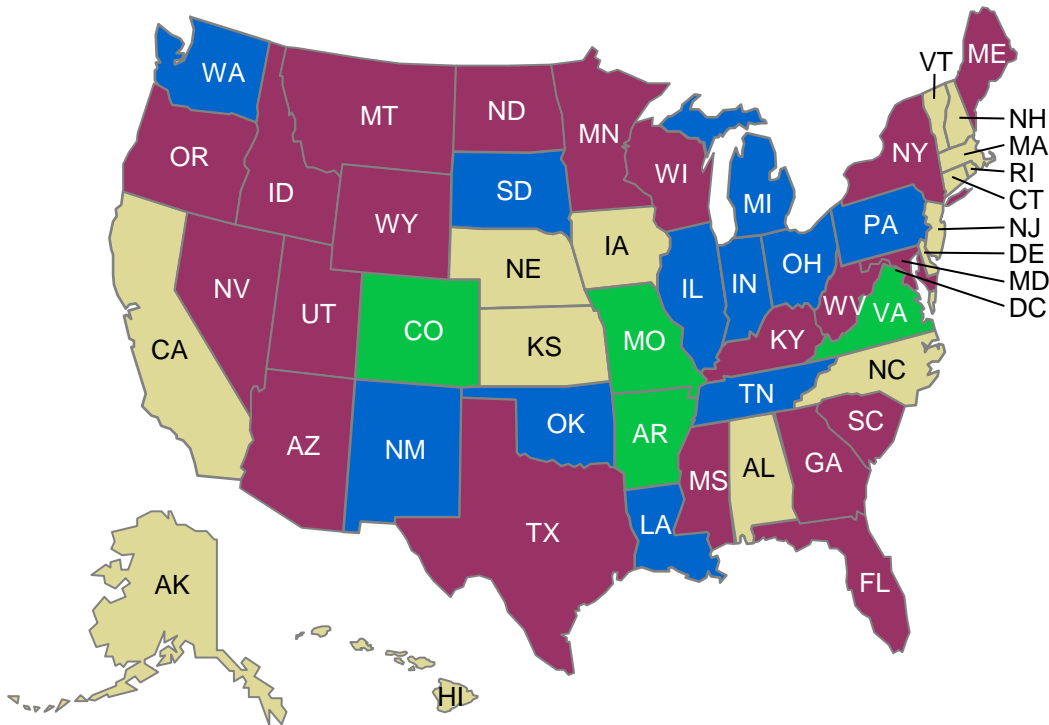
Funding from the largest federal funder of university R&D, the NIH, has been declining since its peak in 2005

Federal NIH funding for universities in constant 2005 \$m



Note: These data do not include projects funded by the American Recovery and Reinvestment Act of 2009. NIH includes funding to Domestic Higher Education Institutions
 Source: NIH, Research Portfolio Online Reporting Tools (RePORT). BCG Analysis.

While not new, more states are investigating performance-based funding



■ Performance funding in place
 ■ Transitioning to performance funding
■ Formal discussions on performance funding
 ■ No formal activity

15 states have implemented or are transitioning to performance-based funding

- Arkansas is beginning at 5% of higher education funding in 2013 but increasing it to 25 percent over 5 years
- Tennessee is the first state to base 100% of higher education funding on performance

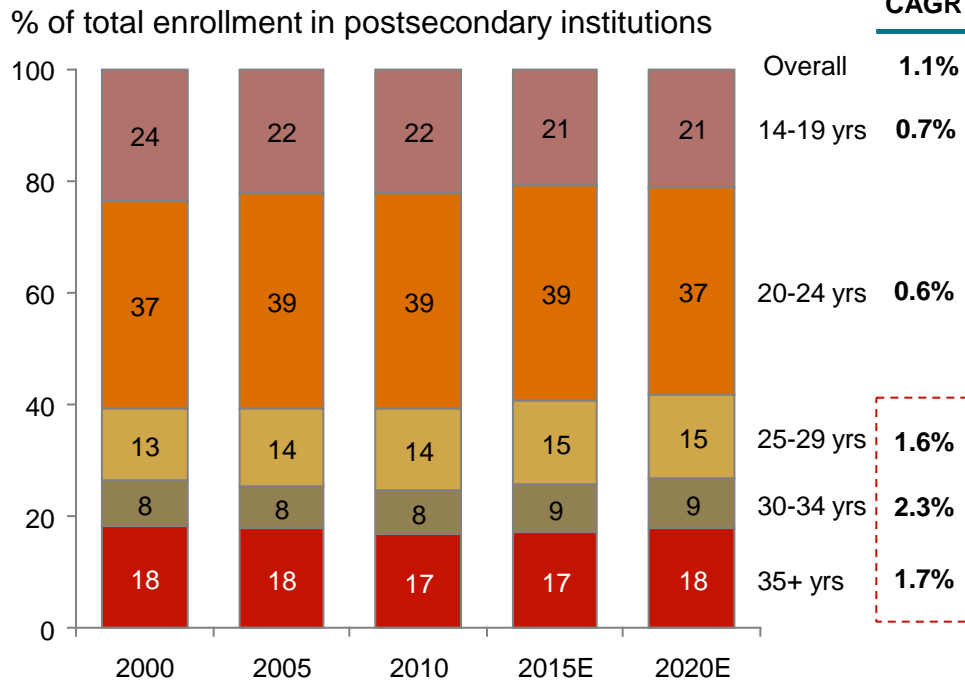
Use various performance indicators to determine funding for institutions. For example, Indiana uses three main metrics, such as:

- Improvement in degree attainment
 - Change in on-time attainment
 - Change in low-income students
- Improvement in credit hour completion
 - Completion of dual-credit hours and “early college” credit hours
- Total Improvement in research

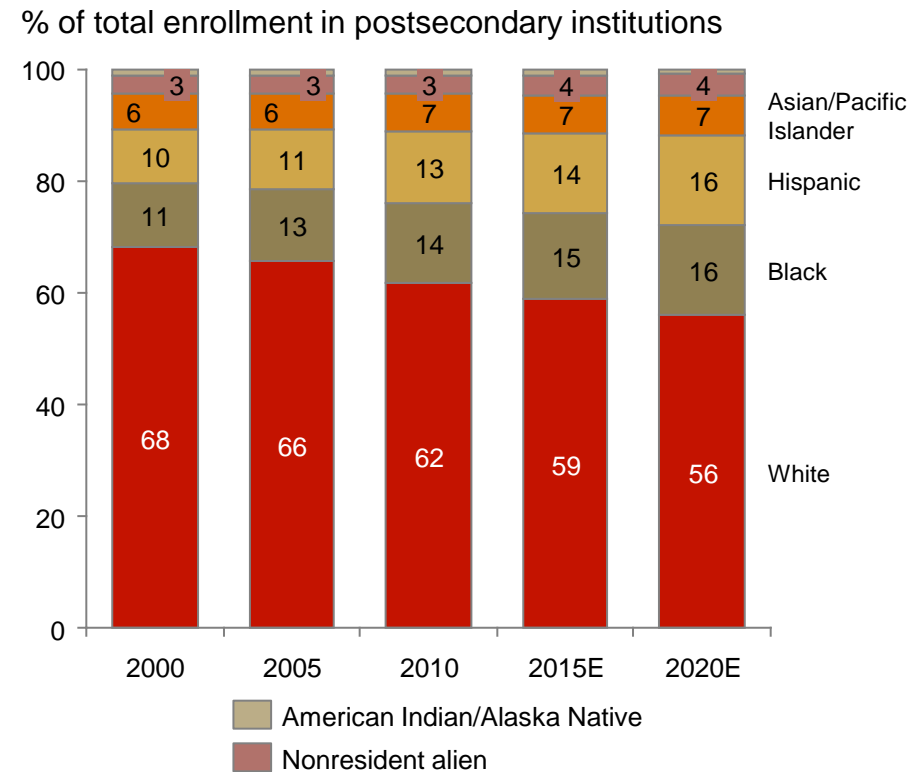
Performance based funding will likely only be between 5-25% of total funding in most states

Future growth in enrollments coming from older and non-Caucasian students

Adult student group expected to grow faster than traditional college age groups



Shift in racial demographics driven by Black and Hispanic student groups



Note: Race categories exclude persons of Hispanic ethnicity. Enrollment data in the "race/ethnicity unknown" (all years) and "two or more races" (2008 and 2009 only) categories of IPEDS "Fall Enrollment Survey" have been prorated to the other racial/ethnic categories at the institutional level
 Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, "Fall Enrollment Survey" (IPEDS-EF:95-99), and Spring 2001 through Spring 2010; Enrollment in Degree-Granting Institutions Model, 1980-2009; and U.S. Department of Commerce, Census Bureau, Current Population Reports, "Social and Economic Characteristics of Students." BCG Analysis.

For-profits capturing largest share of older students

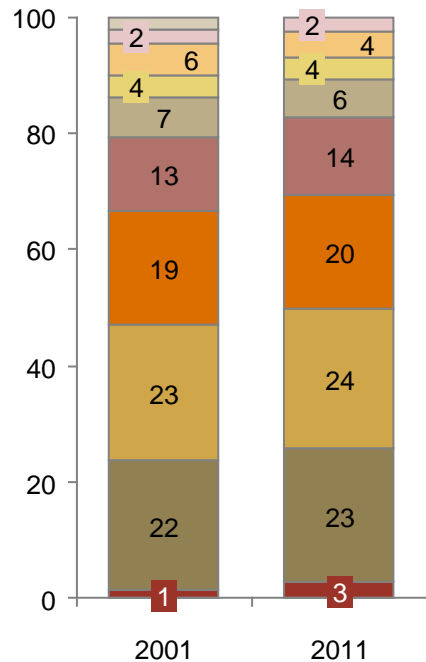
4-year public

2-year public

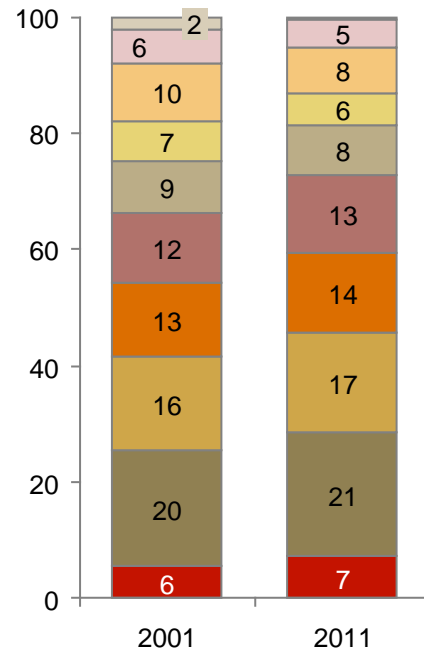
Non-profit private

For-profit private

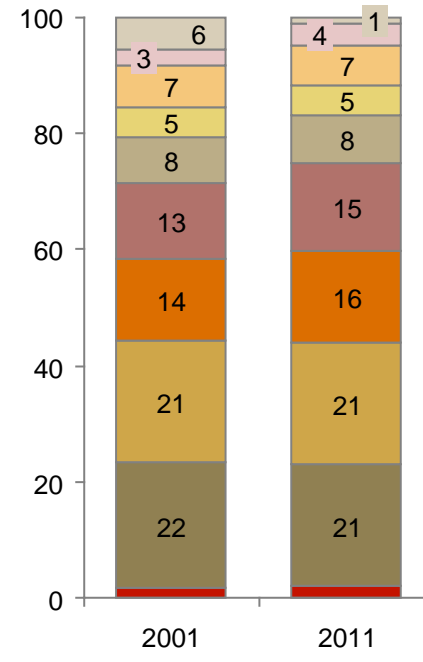
Enrollment by age group (%)



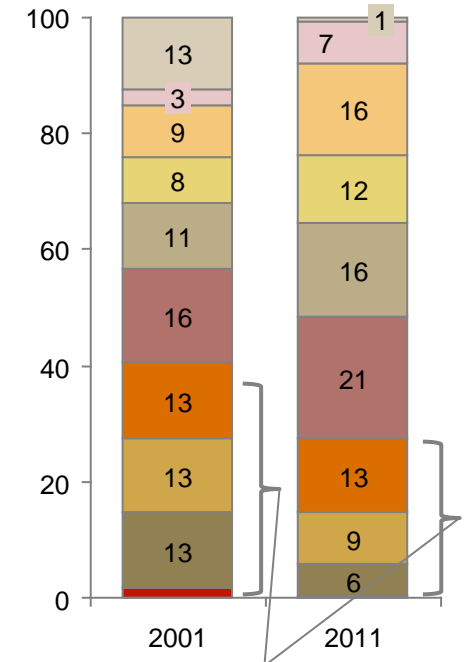
Enrollment by age group (%)



Enrollment by age group (%)



Enrollment by age group (%)



Unknown
 40-49
 30-34
 22-24
 18-19
 50+
 35-39
 25-29
 20-21
 Under 18

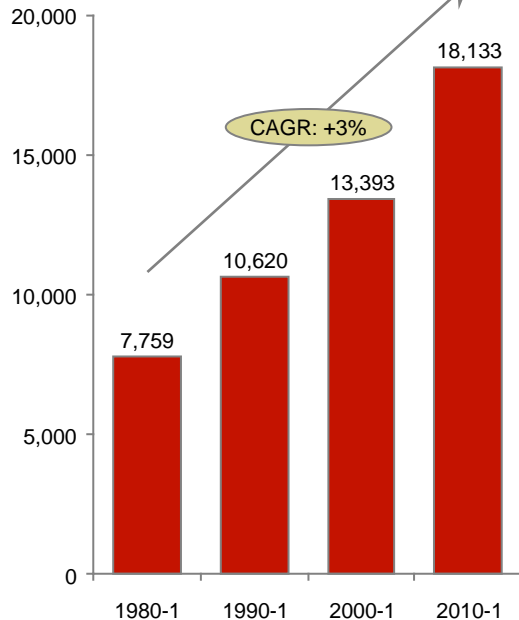
Note: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs.
 Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System. BCG Analysis.
 Draft: advisory, consultative & deliberative material for discussion purposes only

Value proposition has been questioned in recent years

Increasing tuition

US higher education tuition ¹

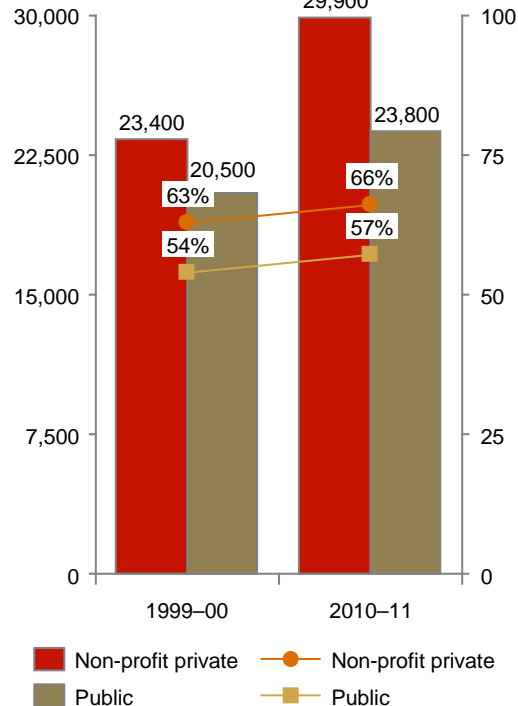
Constant 2009–2010 dollars (\$)



Increasing indebtedness

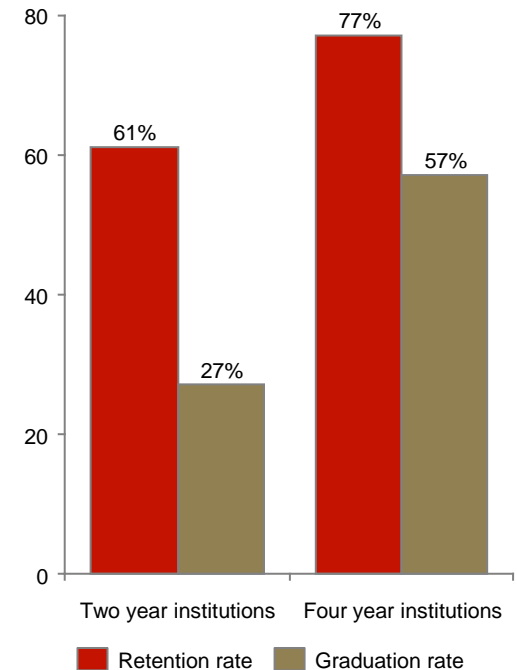
US average debt/borrower ²

Constant 2011 dollars (\$) Borrowing (%)



Outcomes

US higher education retention and graduation rates (%)³



1. Includes private for-profit, private non-profit and public total tuition, room and board rates charged for full-time undergraduate students in degree-granting four year and 2 two year programs

2. Average total debt levels of bachelor's degree recipients, private non-profit and public four year colleges and universities, in 2011 dollars from The College Board

3. Fall 2009 data from NCES report published in Chris Kirkham, "For-Profit Colleges Spend Much Less On Educating Students Than Public Universities,"

The Huffington Post May 25, 2012. BCG Analysis.

Three year degrees emerging as an alternative choice to traditional degrees



- One of the largest 3-yr programs in the nation
- Launched in fall 2009;
 - Started with 18 but up to 87 students in fall 2011
- Students complete 120 credits in three years,
 - 18 credits each semester
 - 4 credits in a short January Term.
- Available in more than 20 majors



- Called "UNCG in 3", the program was launched in fall 2010
- Open to students in 17 departments
- Students must enter the program with 12 hours of college credit gained in high school
- Administrators believe the program will grow in the future
 - Large numbers of students below the poverty level who could benefit from forgoing 4th year



- Launched in fall 2010 in economics, sociology and music
- No admission process – academic advisors present the option and students can decide whether to pursue
- Geared to students who have amassed considerable AP or IB credits in high school

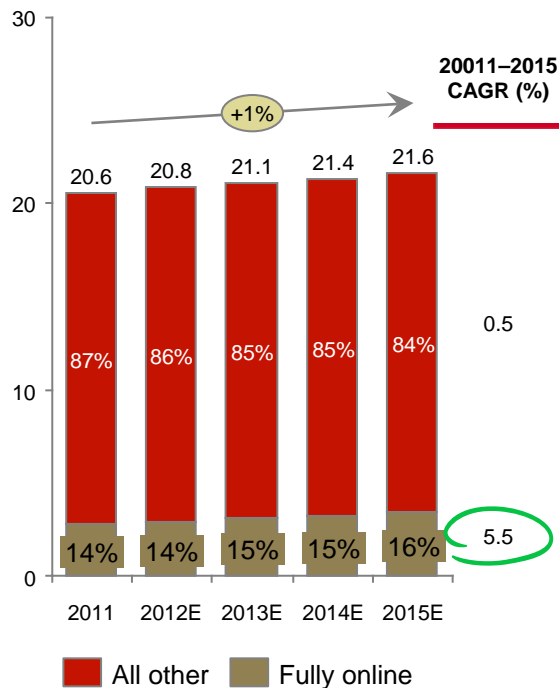


- "Global Scholars Program" launched in fall 2011
- Only for students interested in School of International Service
 - 3-year B.A. program with the option of enrolling in 4-year BA/MA
- Intense academic program that focuses on undergraduate research, collaborative work, global study and shared learning

Increasing demand for online programs and courses, but still small proportion of total

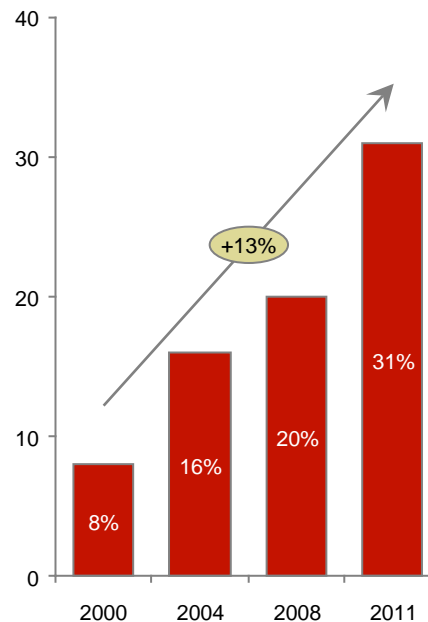
Growing enrollments in online courses

Enrollment in degree-granting postsecondary (M)¹



~31% of undergraduates took at least one online course in 2011 vs. 8% in 2000

Undergrads enrolled in at least one online course (%)²



Traditional universities increasingly embracing online and blended models²

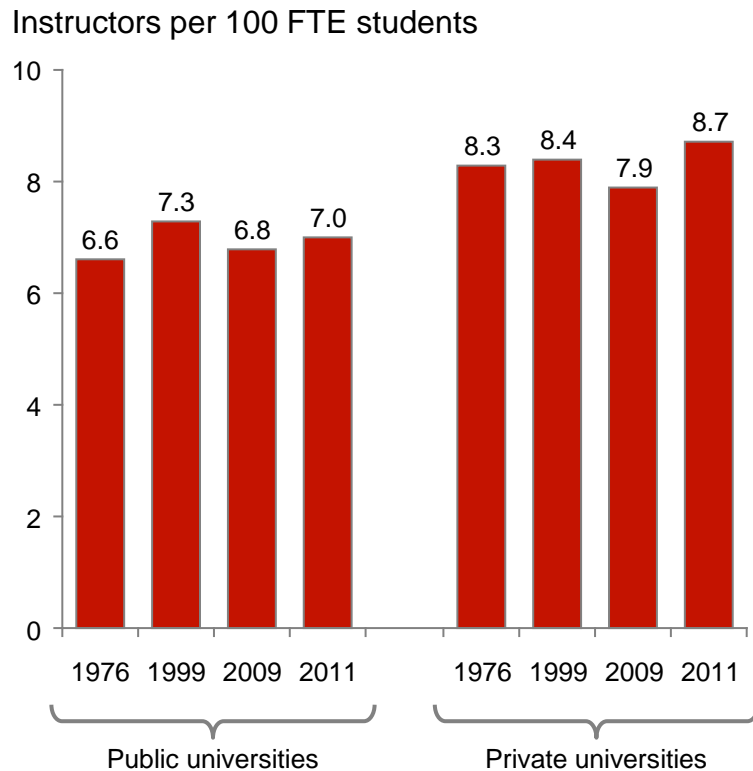
Examples:

- University system of Maryland requires undergrads to complete 12 credits in alternative-learning modes, including online learning
- Texas university system proposed similar requirement with 10% of credits to be earned in alternative-learning modes
- Minnesota State Colleges and Universities system proposing that 25% of all student credits be earned online by 2015

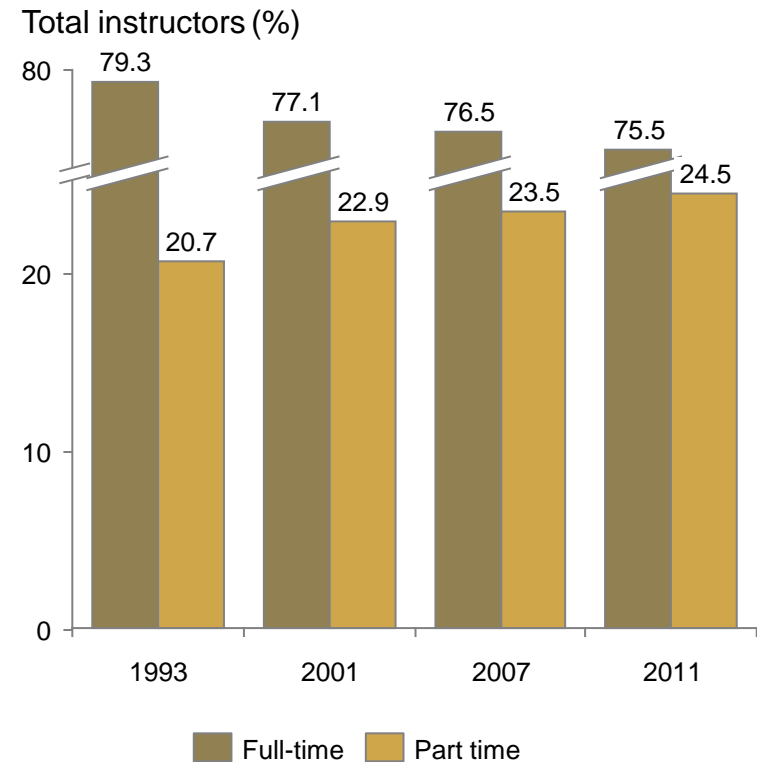
1. Online enrollment indicates a course where most or all of the content is delivered online, typically without face to face meetings. Fully online programs are those where a student is enrolled in a distance education degree program versus simply in a distance education course. From BMO Capital Markets "Education and Training 2012" and Eduventures 2. National Center for Education Statistics for 2000–2008, data Sloan Consortium for 2011 data. BCG Analysis.

The ratio of instructors to students has remained steady, but the mix has shifted away from tenured professors

Total number of instructors per student steady over the past ~30 years

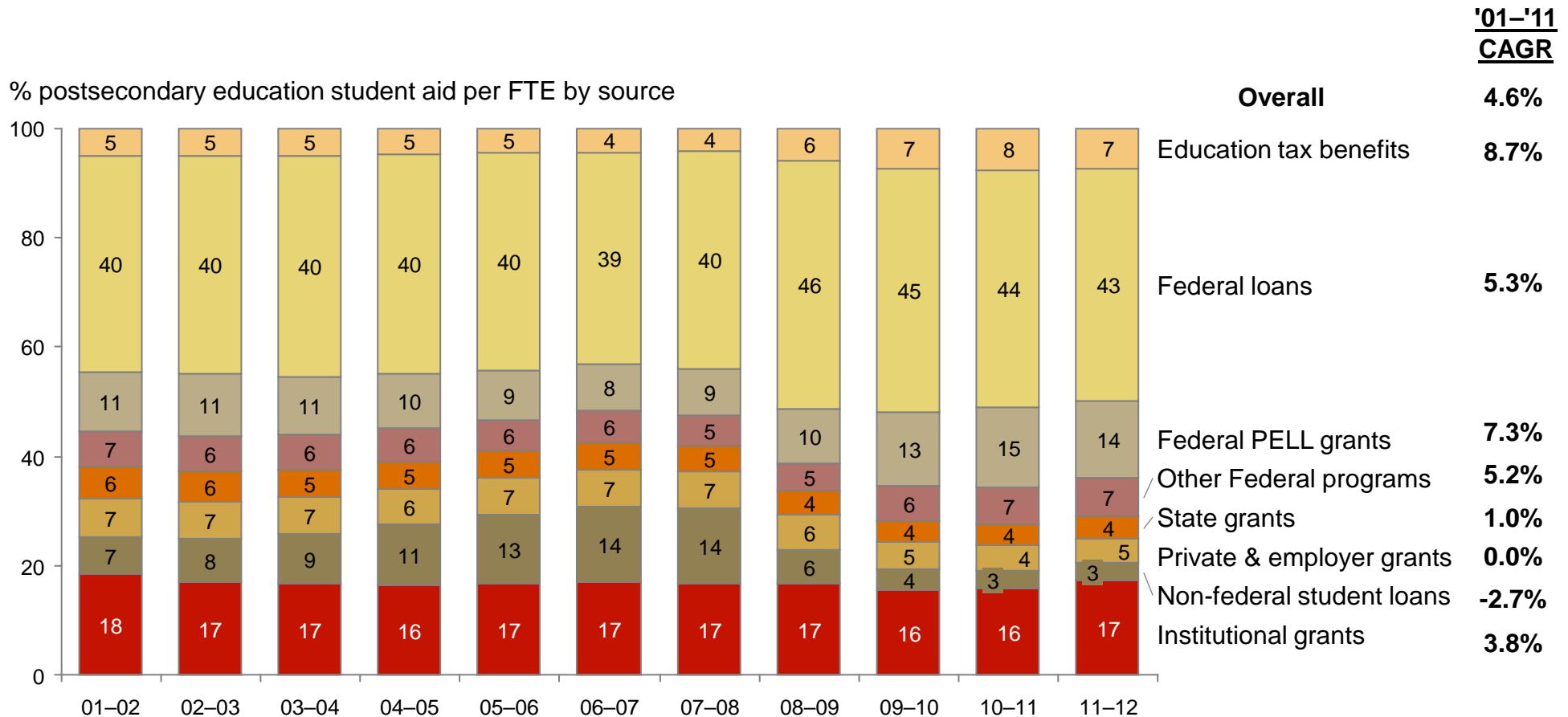


Shift of faculty from full-time tenured/tenure track to part-time professors among AAU public universities



Source: NCES, IPEDS Data Center; "Trends in Higher Education," The College Board, Figure 26A. BCG Analysis.

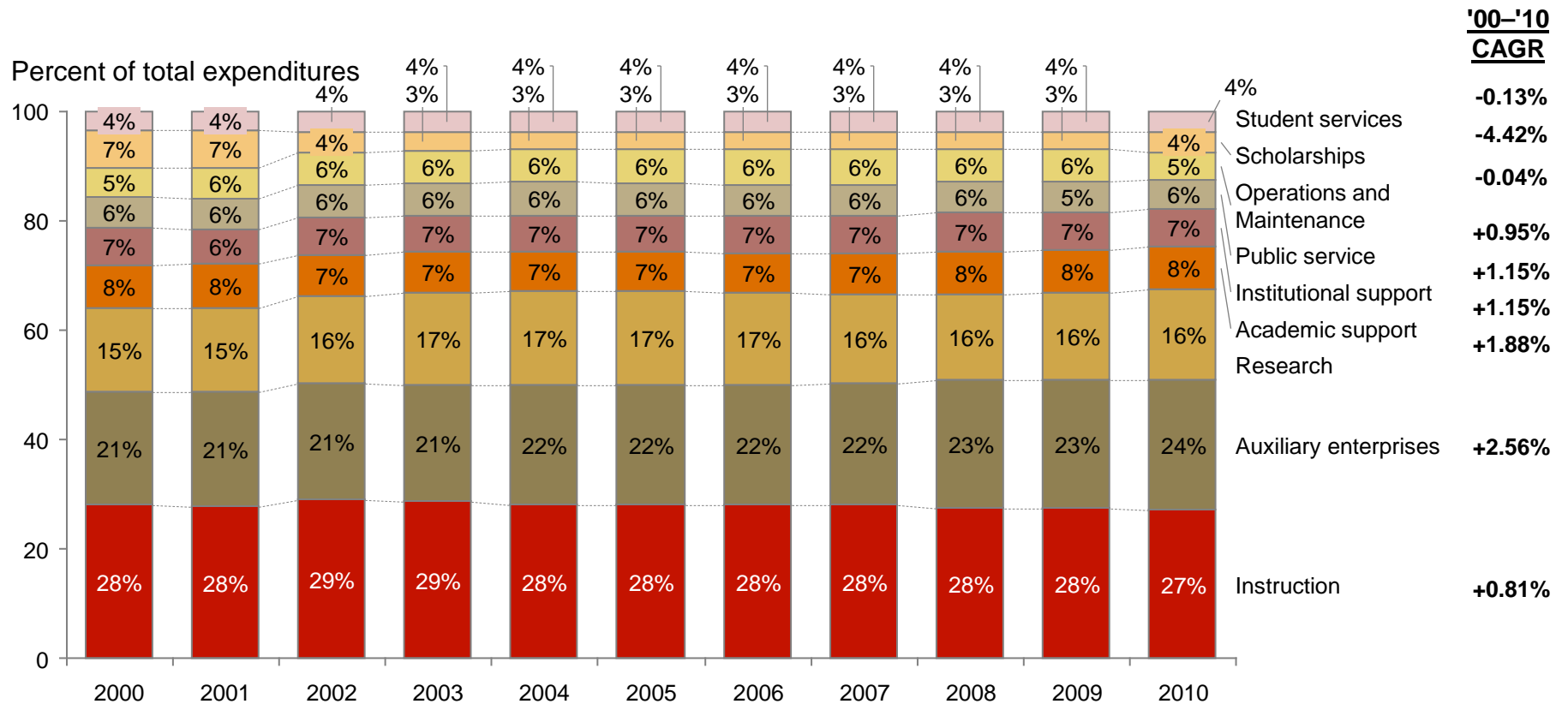
Student aid has been increasing in the past decade, mainly driven by growth in federal loans and PELL grants



Source: "Trends in Student Aid," College Board, 2012. BCG Analysis.

Draft: advisory, consultative & deliberative material for discussion purposes only

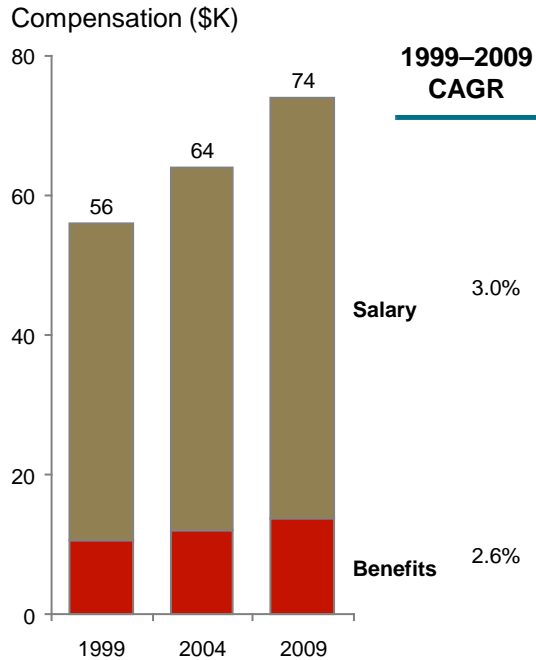
Expenditures mix relatively constant over last decade



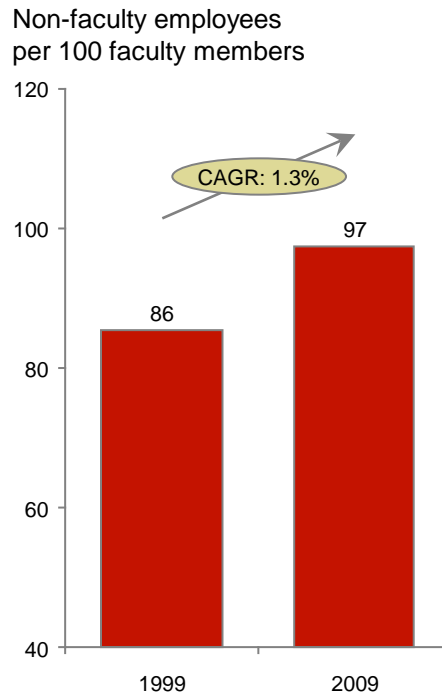
Note: Data for Public research institutions. Scholarships and fellowships net of allowances includes institutional spending on scholarships and fellowships net of allowances. Does not include federal aid, tuition waivers, or tuition discounts (which since 1998 have been reported as waivers). It is a residual measure that captures any remaining aid after it is applied to tuition and auxiliaries. Student services includes noninstructional, student-related activities, including admissions, registrar services, career counseling, financial aid administration, student organizations, and intramural athletics. Academic support includes research and public service, including libraries, academic computing, museums, dean's offices, and central personnel for curriculum and course development. Auxiliary enterprises includes dorms, bookstores, and meal services. Public service includes costs associated with conferences, reference bureaus, public broadcasting. Source: IPEDS Analytics: Delta Cost Project Database 1987-2010. BCG Analysis.

Faculty compensation and administrative costs increasing

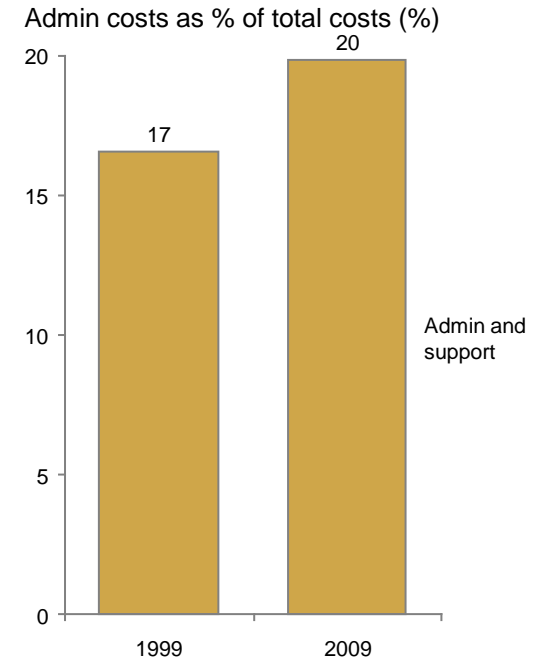
Increase in faculty compensation



More staff hired to support faculty



Higher proportion of costs spent for admin



Note: Average total compensation is the sum of salary (which excludes outside income) and fringe benefits (which includes benefits such as retirement plans, medical/dental plans, group life insurance, or other benefits). Salaries reflect an average of all faculty on 9- and 10-month contracts.

Source: "Not What It Used To Be," The Economist, December 1, 2012; U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Winter 2011-12, Human Resource component, Salaries section; Winter 2011-12 and Spring 2012, Finance component. BCG Analysis.

Draft: advisory, consultative & deliberative material for discussion purposes only

Contents

	<u>Page</u>
Key information shaping the strategic plan	
• Summary	3
• Trends in higher education	8
• New Jersey landscape	24
• Assessment of Rutgers' current position	38

Summary: New Jersey landscape

New Jersey is one of the nation's most populous and prosperous states

- 11th most populous state and number two in median household income
- Large presence of Fortune 500 companies with headquarters in the state

New Jersey produces some of the nation's highest-performing K-12 students but many of the best and brightest leave the state for college

- New Jersey students among the best in the nation in standardized test scores and SAT scores
- Test scores of New Jersey college students do not reflect the test scores of high school students in the state
- New Jersey has a net loss of ~30K college freshmen each year – highest in the U.S.
- Many high-caliber New Jersey students leave the state to study at higher ranked universities, especially in New York and Pennsylvania

Overall quality of New Jersey higher education system lags other states

- Fewer highly-ranked universities in New Jersey compared to states with comparable demographics
- New Jersey colleges have the lowest capacity to meet the state's student demand

State and local governments in New Jersey invest heavily in K-12 education, but less so in higher education

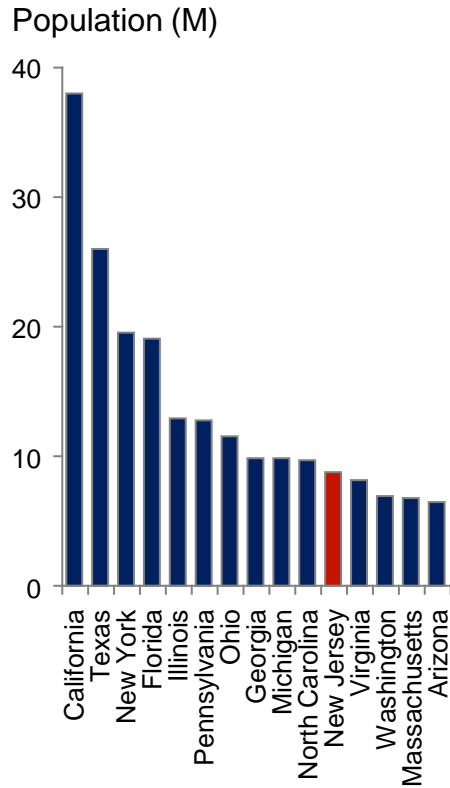
- New Jersey spends more on K-12 education than all other states
- States with comparable K-12 spending spend a proportionally higher amount on higher education

New Jersey invests less in higher education than other states

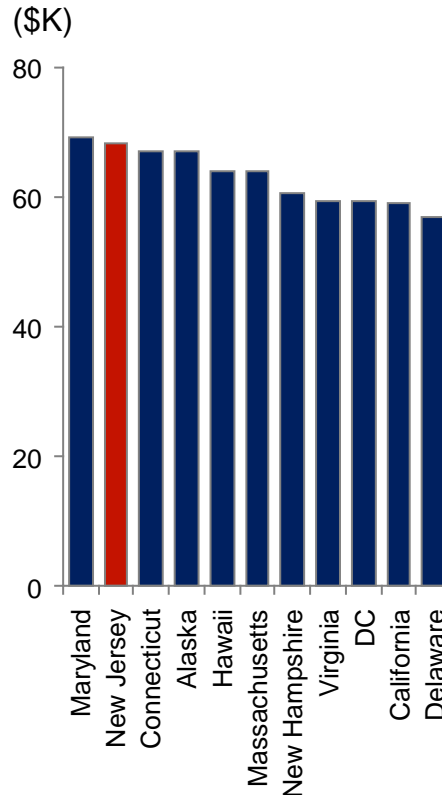
- New Jersey appropriation for higher education in line with other states on a per-student basis, but proportionally lower given the state's prosperity
- Total state appropriation for higher ed in New Jersey relatively flat over the past five years
- For many years, New Jersey has underinvested in capital expenditures for higher education

New Jersey is one of the most populous and prosperous state in the nation

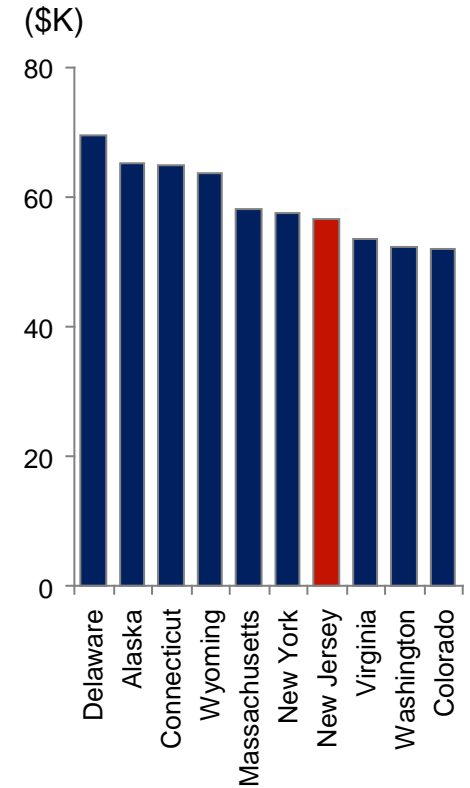
Most populous states



States with highest median household income



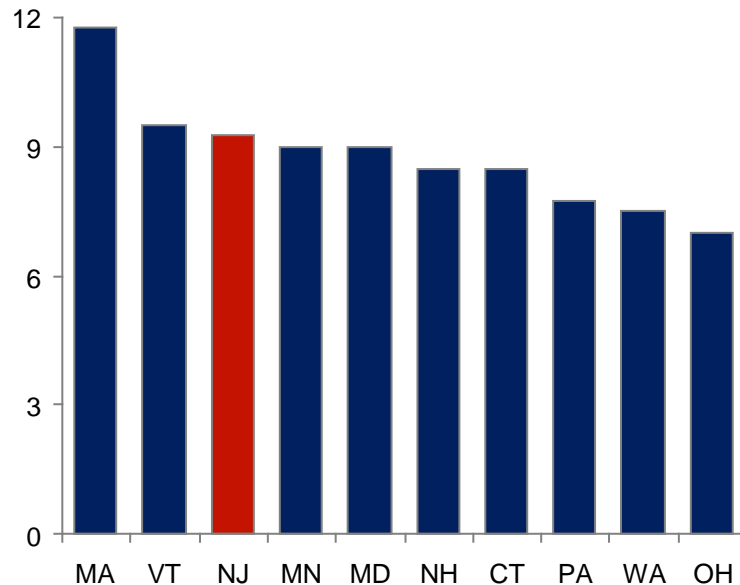
States with highest GDP per capita



New Jersey produces some of the highest-performing K-12 students in the nation

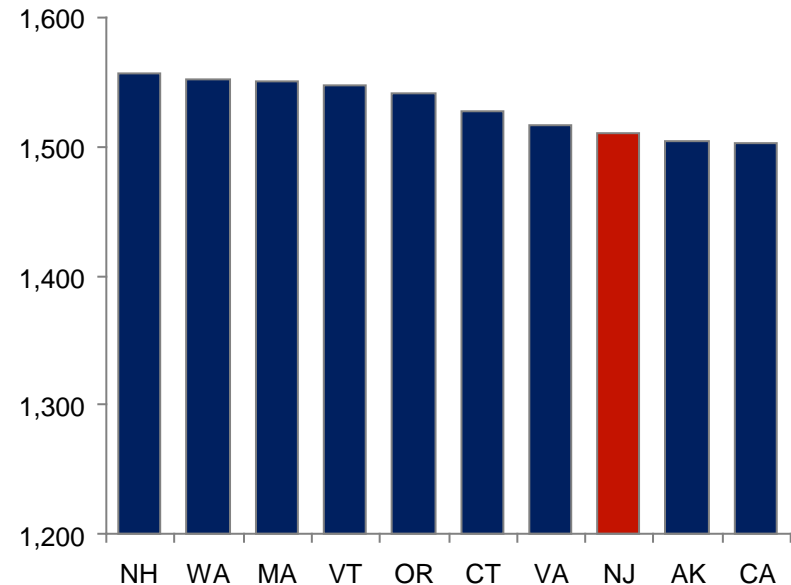
NJ students among best in nation in 4th/8th grade standardized test scores

Students achieving advanced level¹ (%)



New Jersey among top-10 states in mean SAT score

Avg. combined SAT score



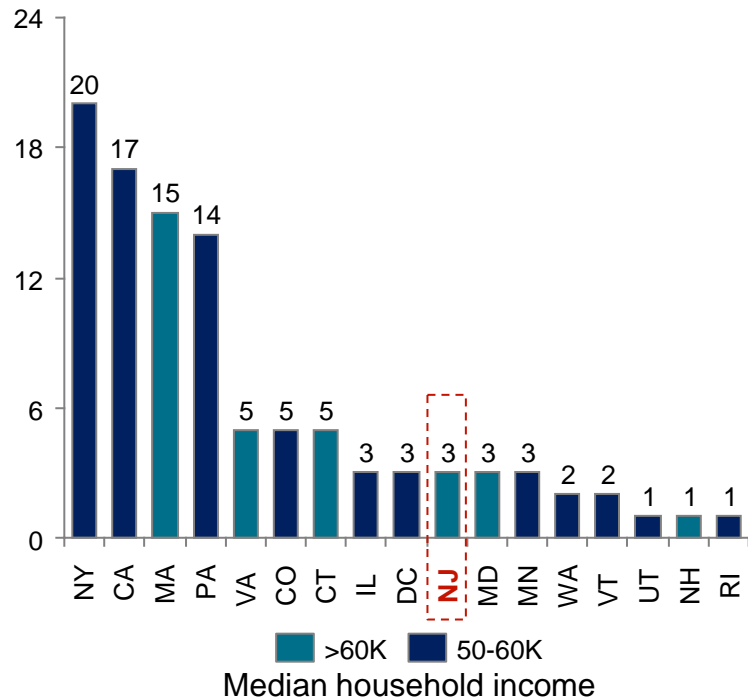
Pool of qualified graduates, with state's size and wealth, could fuel a high-performing higher education system

1. Average percent of students achieving "Advanced Level" on the National Assessment of Educational Progress, 2009. Average of 4th and 8th grade reading and math scores. Methodology measured the percent of students who scored at an advanced level or higher for 4th grade math, 8th grade math, 4th grade reading, and 8th grade reading. Source: US Department of Education. The College Board. NAEP. BCG Analysis.

Fewer top institutions are located in NJ relative to comparable states

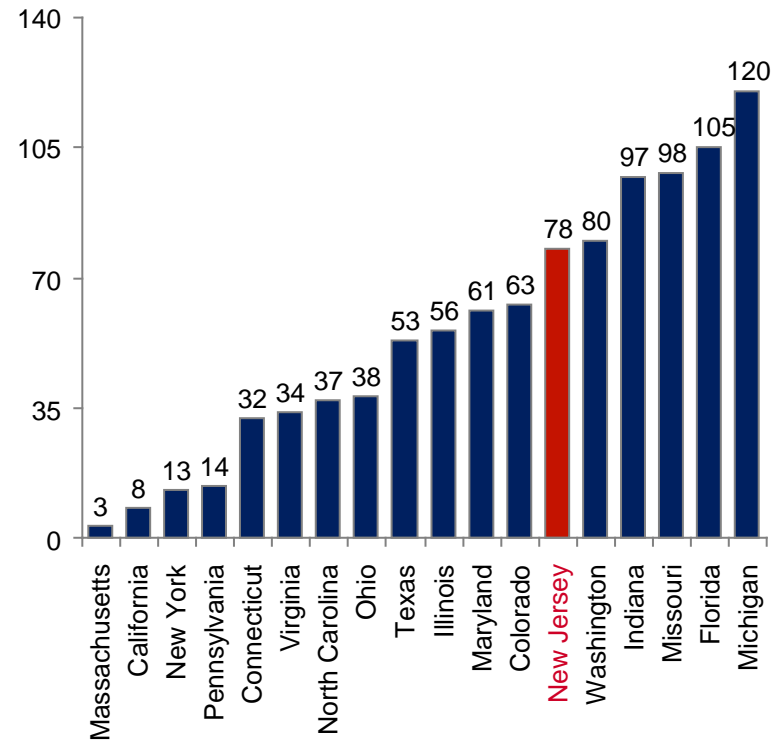
Fewer top institutions are located in NJ relative to comparable states

of Top 150 colleges and universities in each state¹



On average, New Jersey's institutions are ranked lower compared to other states

Mean ranking of top 5 colleges and universities in each state



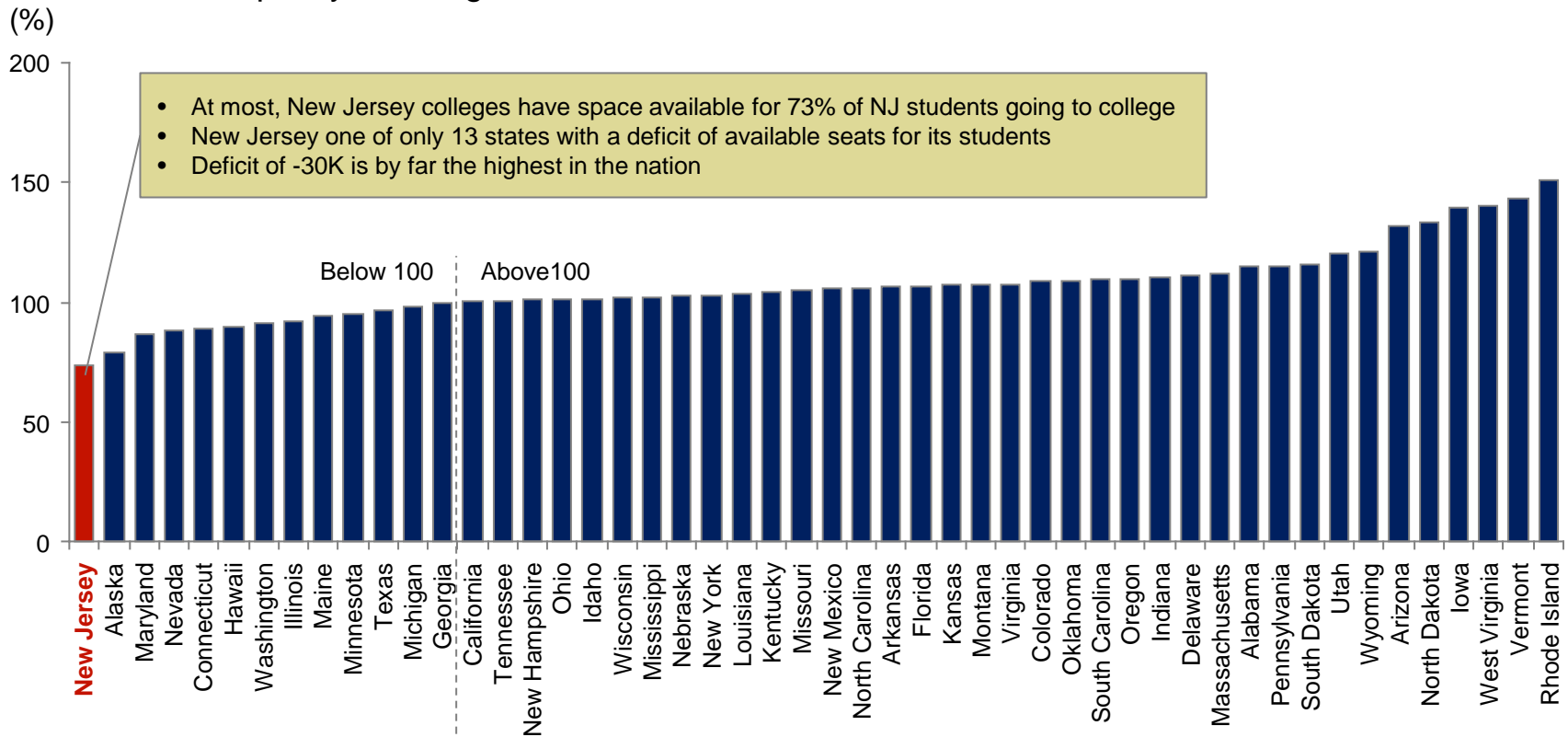
1. "Top 150" includes the top 100 national research universities and top 50 liberal arts colleges

Note: Includes all states who have at least 5 schools among the Top 200 national research universities and top 50 liberal arts colleges. Took mean ranking of the top 5 schools from each state ranked among these top 250 colleges and universities

Source: US News & World Report 2013 annual undergraduate rankings of colleges. BCG Analysis.

NJ colleges have the lowest capacity to meet its student demand

Capacity of colleges in each state relative to demand from students in that state¹



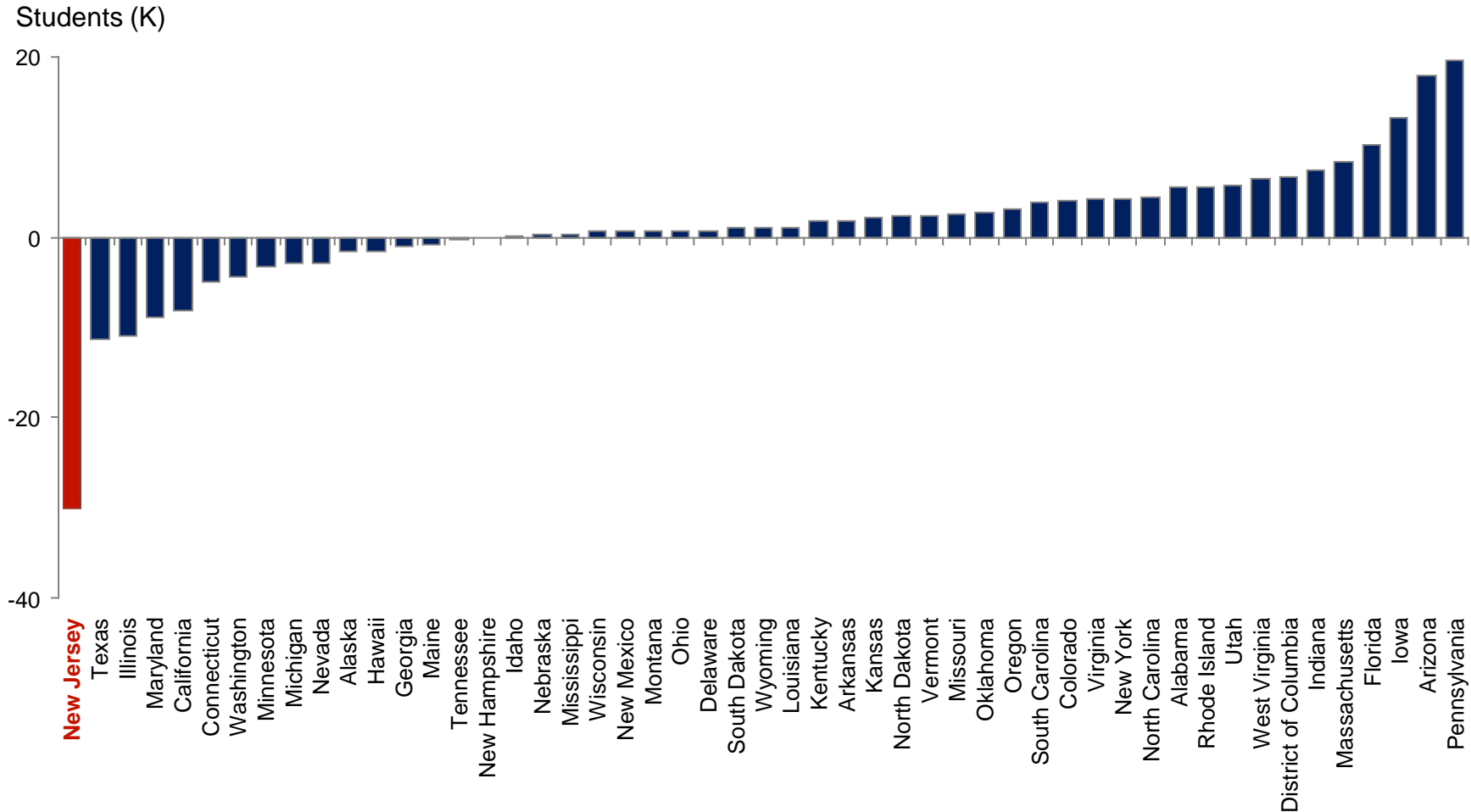
1. Information specific to Fall 2010

Source: National Center for Education Statistics: Enrollment in Postsecondary Institutions, Fall 2010 (<http://nces.ed.gov/pubs2012/2012280.pdf>). BCG Analysis

Draft: advisory, consultative & deliberative material for discussion purposes only

NJ has a net loss of ~30K college freshmen each year—highest in the nation...

Net migration of college freshmen in/out of each state¹



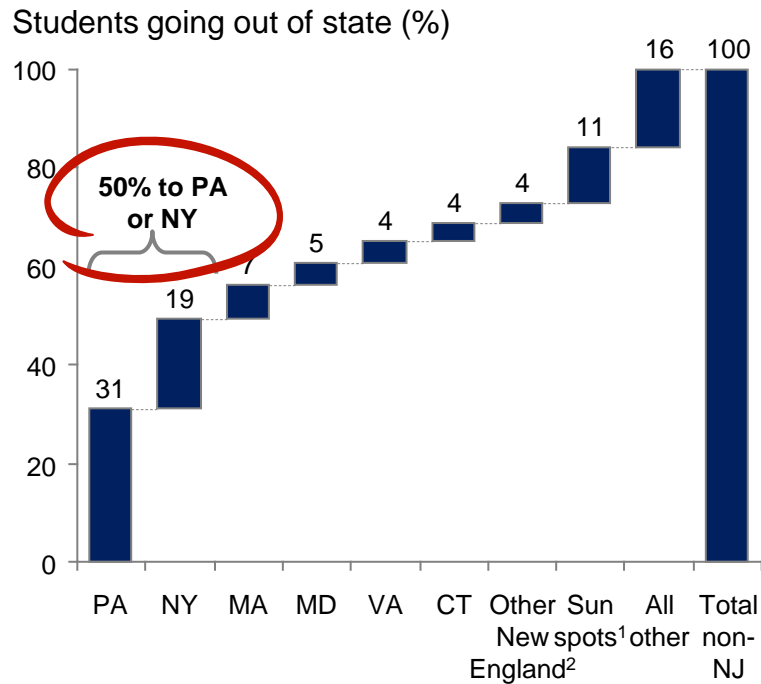
1. Information specific to Fall 2010

Source: National Center for Education Statistics: Enrollment in Postsecondary Institutions, Fall 2010 (<http://nces.ed.gov/pubs2012/2012280.pdf>). BCG Analysis

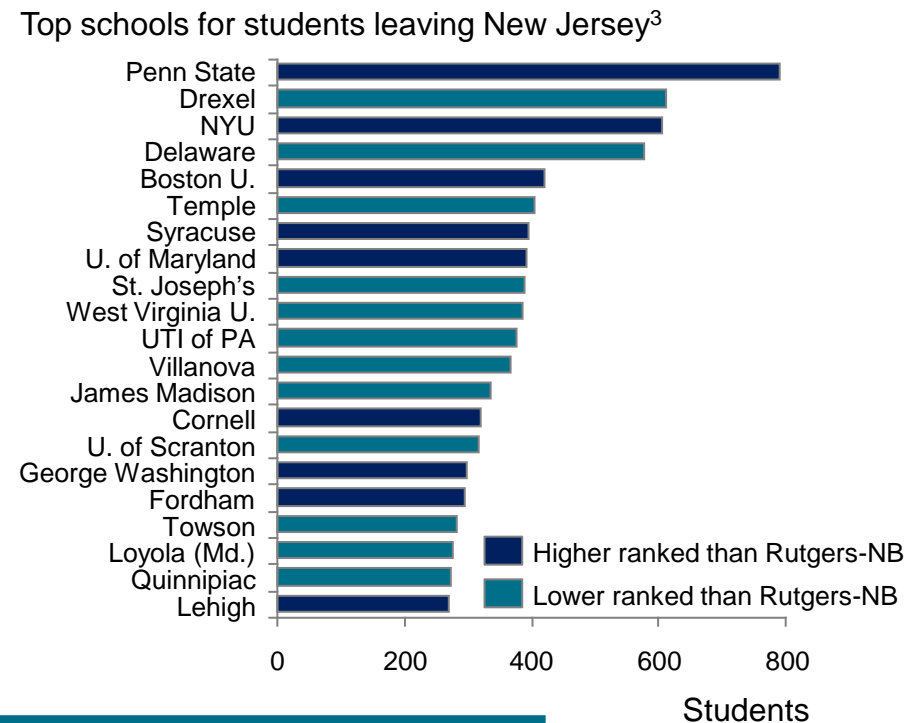
Draft: advisory, consultative & deliberative material for discussion purposes only

...With many high-caliber students leaving New Jersey for schools in Pennsylvania and New York

Half the students leaving NJ go to schools in PA or NY



With many students going to schools ranked lower than Rutgers⁵



~30% of NJ students who leave NJ attend one of the top 60 universities or top 50 liberal arts colleges⁴

1. Includes FL, CA, AZ, NC, SC, GA 2. includes ME, NH, VT, RI 3. Top schools for 2010 4. Students attended either a top-60 national universities or top-50 liberal arts college, as defined by US News and World Report 5. "Lower-ranked schools" are either ranked lower than Rutgers-New Brunswick in the US News rankings (# 68) among national universities or are identified as a "regional university"

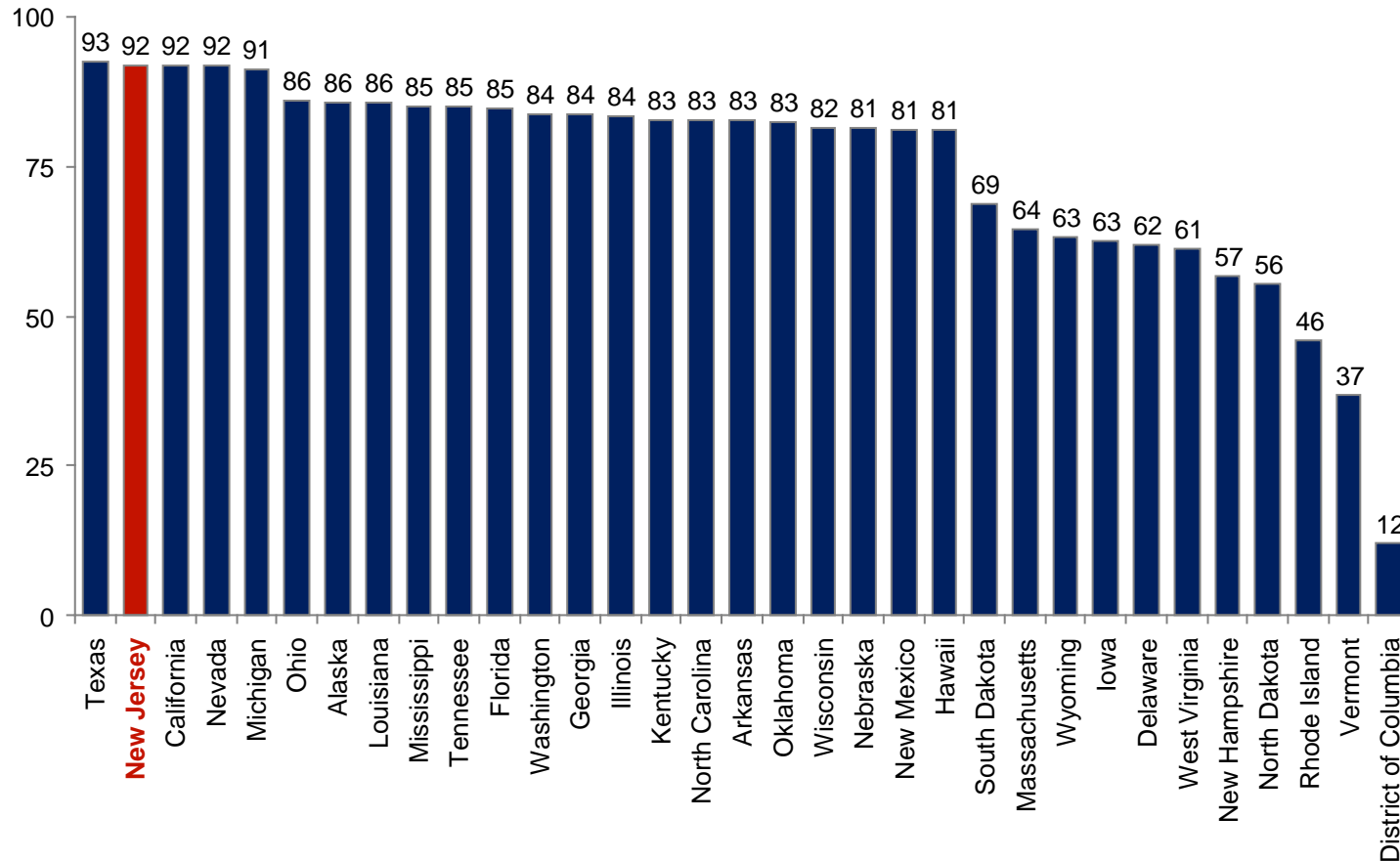
Source: National Student Clearinghouse. US News and World Report. BCG analysis.

Draft: advisory, consultative & deliberative material for discussion purposes only

New Jersey schools have the second highest percentage of in-state students

Spaces in each state's schools occupied by in-state residents

Seats occupied by in-state residents¹ (%)

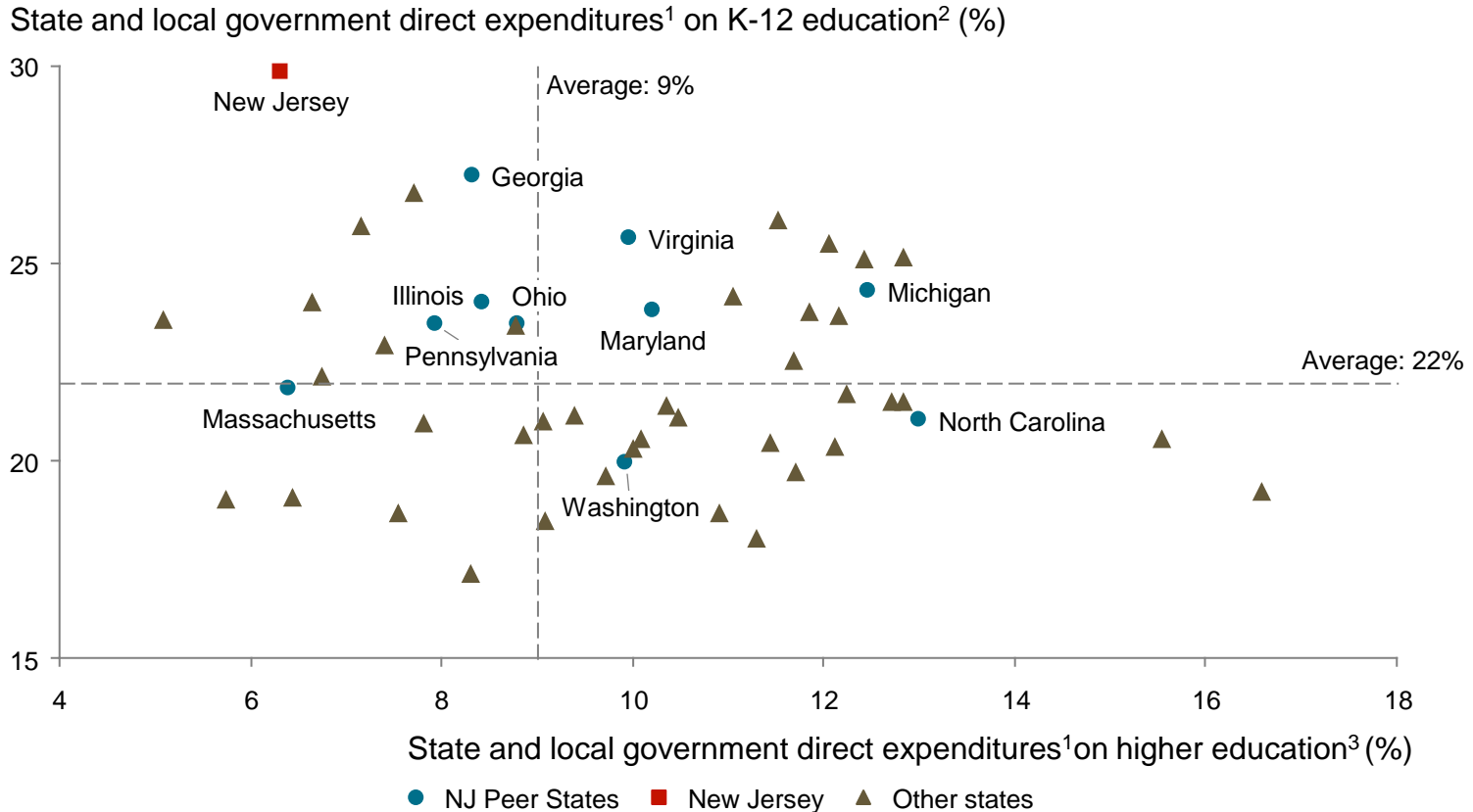


1. Information specific to Fall 2010

Source: National Center for Education Statistics: Enrollment in Postsecondary Institutions, Fall 2010 (<http://nces.ed.gov/pubs2012/2012280.pdf>). BCG Analysis

Draft: advisory, consultative & deliberative material for discussion purposes only

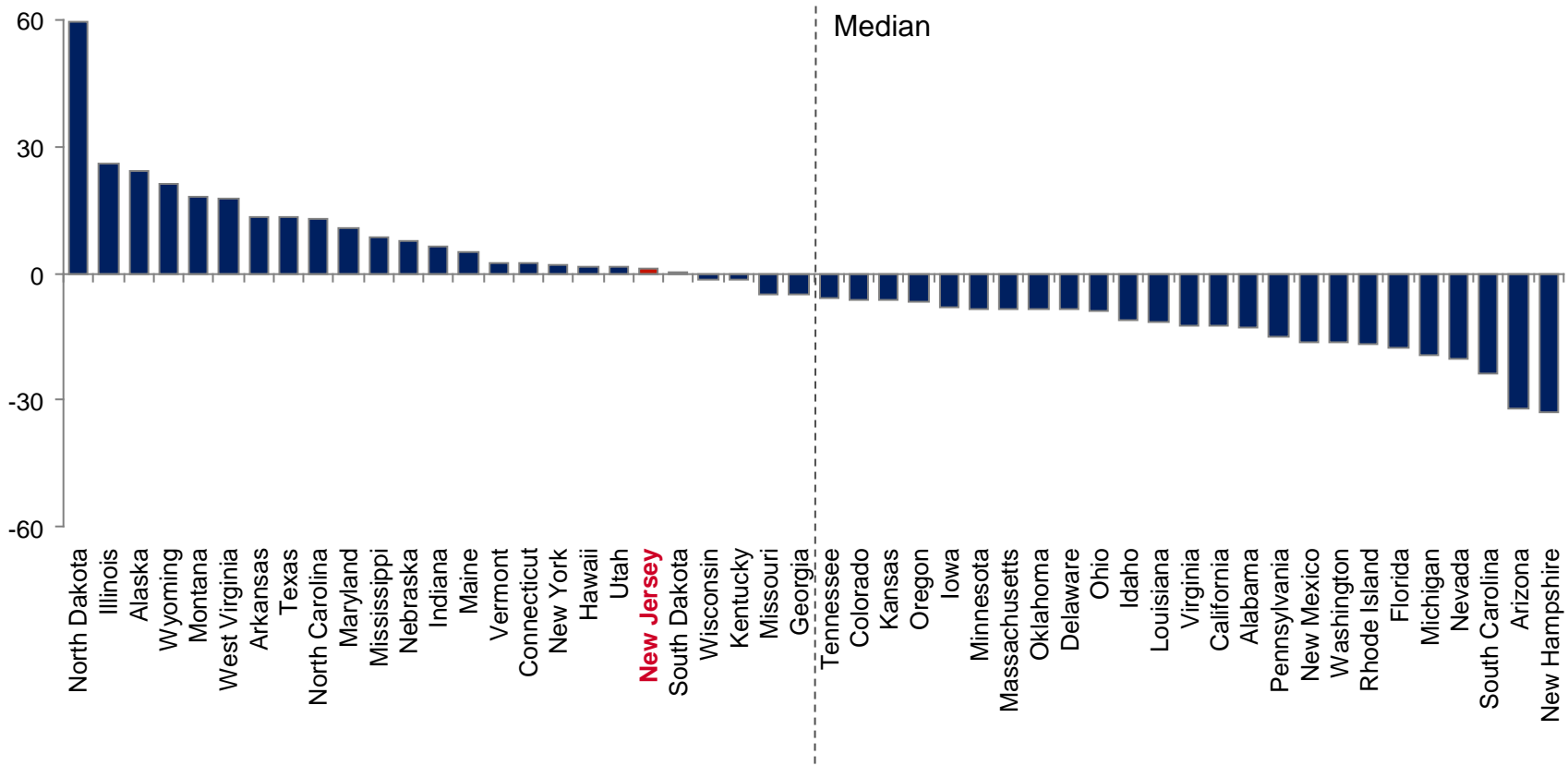
New Jersey is spending more in K-12 than all other states, but less in higher education



1. Direct expenditures relate to external payments of a government and excludes amounts transferred to funds or agencies of the same government. In this analysis, all capital expenditures have been excluded 2. Covers fiscal operating support given to degree-granting institutions operated by state or local governments that provide academic training beyond the high school (grade 12) level, other than for auxiliary enterprises of the state or local institution 3. The operation and maintenance of public schools and facilities for elementary and secondary education (kindergarten through high school), vocational-technical education, and other educational institutions except those for higher education. Covers operations by independent governments (school districts) as well as those operated as integral agencies of state, county, municipal, or township governments. Also covers financial support of public elementary and secondary schools 4. Similar in terms of GDP. States include: Georgia, Illinois, Maryland, Massachusetts, Michigan, North Carolina, Ohio, Pennsylvania, Virginia and Washington Source: US Department of Commerce. BCG Analysis.

Total state appropriation for higher ed in NJ relatively flat over the past five years

Change in total state appropriations for higher education between 2007 and 2012 (%)

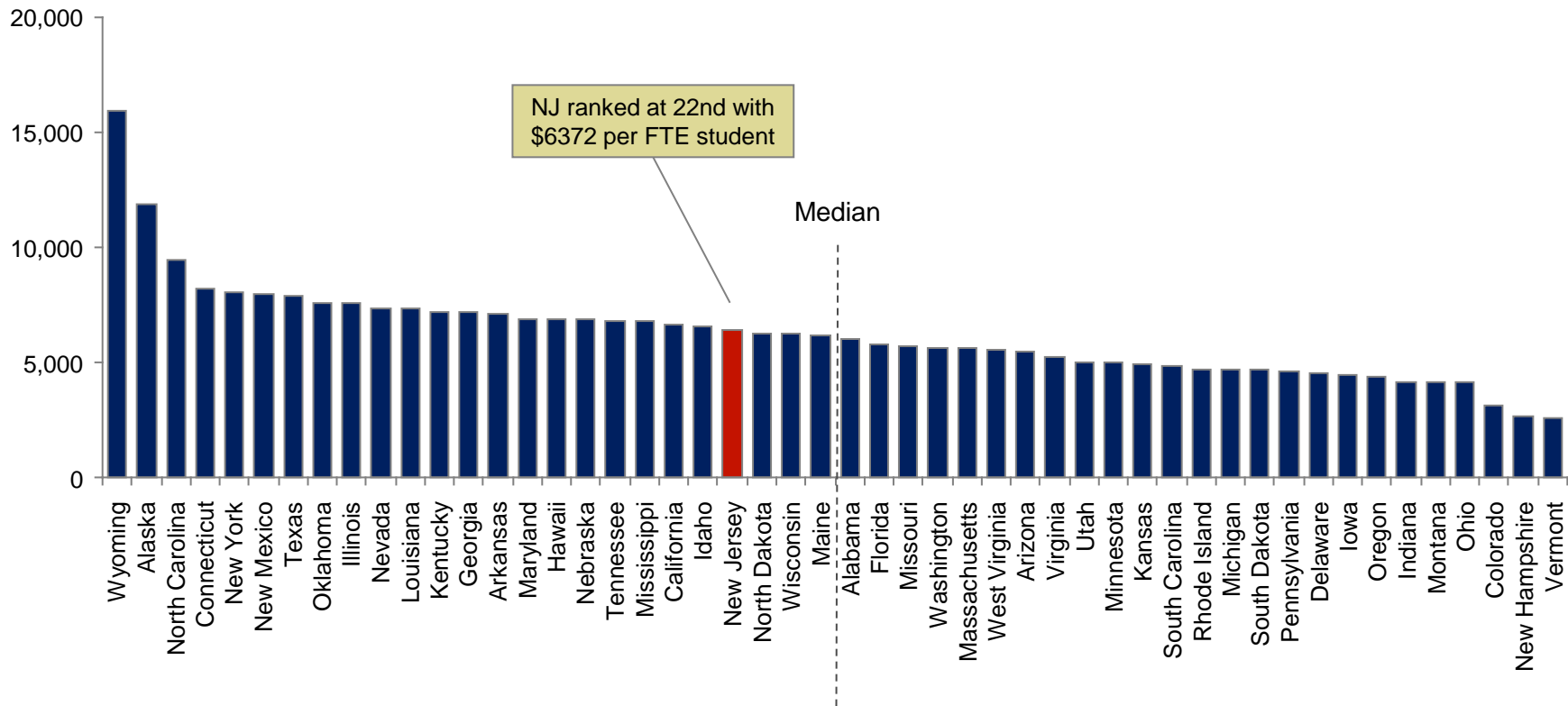


Note: State appropriations include state tax appropriations and other state funds allocated to higher education and exclude government services funds used for modernization, renovation, or repair

Source: Center for the Study of Education Policy, BCG Analysis.

NJ state appropriation for higher ed in line with other states on per student basis...

Amount of higher education appropriations per FTE student enrolled in public institution in 2011 (\$)



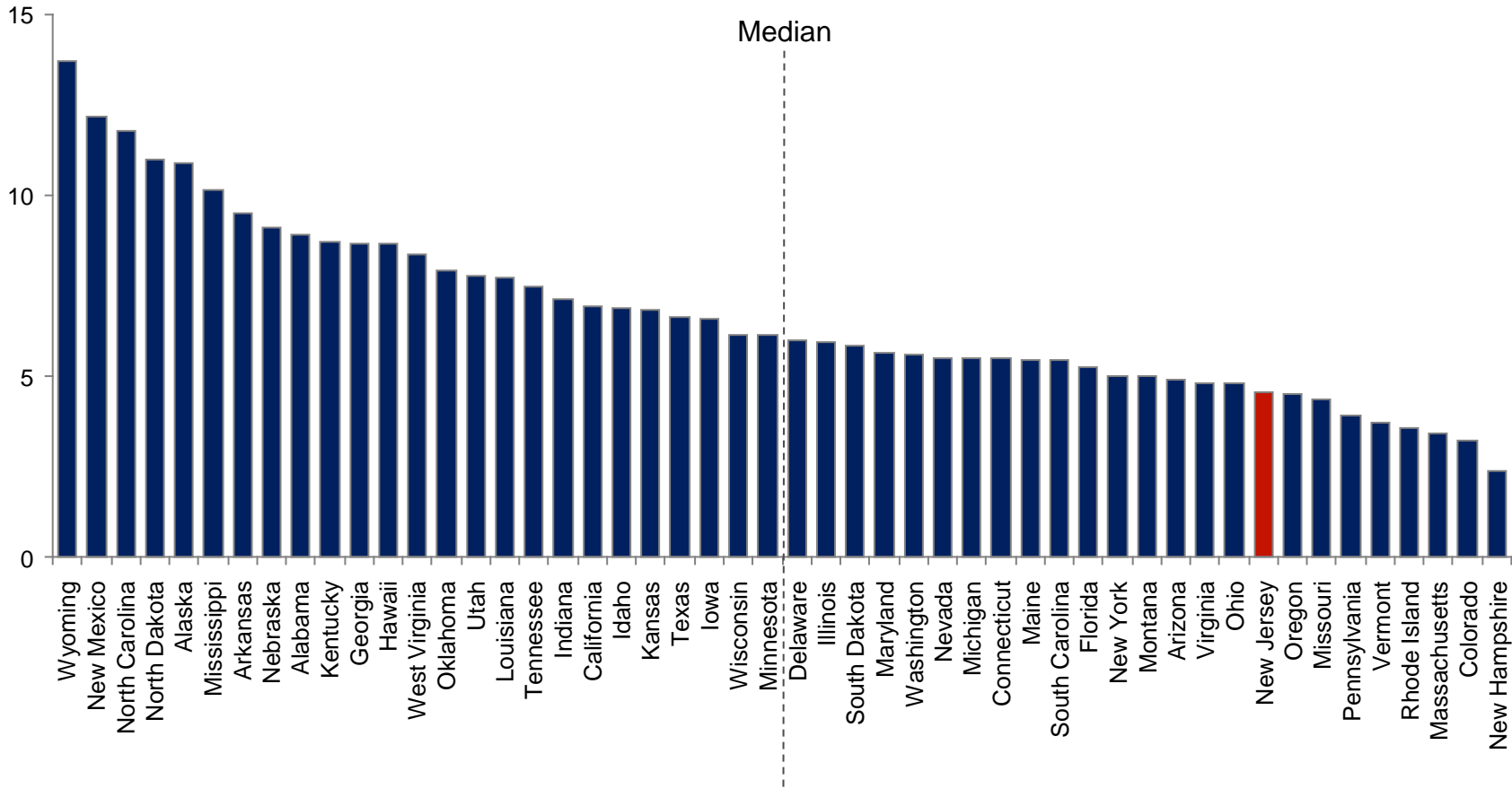
Note: Higher education appropriations include state and local support available for public higher education operating expenses including ARRA funds and excludes appropriations for independent institutions, financial aid for students attending independent institutions, research, hospitals, and medical education.

Source: State Higher Education Finance FY 2011, State Higher Education Executive Officers. BCG Analysis.

Draft: advisory, consultative & deliberative material for discussion purposes only

...but proportionally lower given the economic prosperity of the state

State appropriations per \$1,000 in personal income in 2011 (\$)



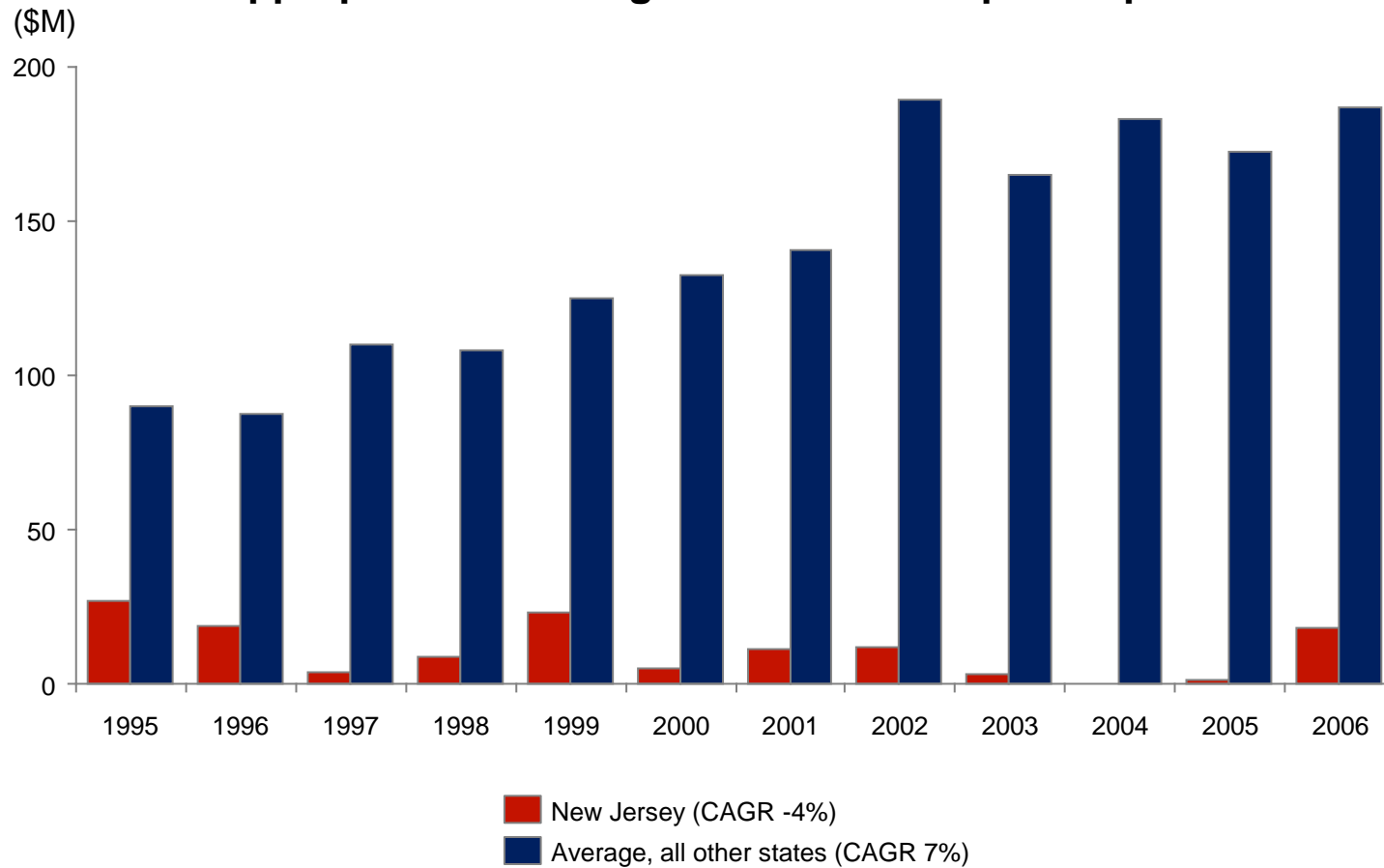
Note: State appropriations include state tax appropriations and other state funds allocated to higher education and exclude government services funds used for modernization, renovation, or repair.

Source: Center for the Study of Education Policy, BCG Analysis.

Draft: advisory, consultative & deliberative material for discussion purposes only

For many years, New Jersey has underinvested in capital expenditures for higher education

State appropriations for higher education capital expenditures



Contents

	<u>Page</u>
Key information shaping the strategic plan	
• Summary	3
• Trends in higher education	8
• New Jersey landscape	25
• Assessment of Rutgers' current position	38

Summary: Assessment of Rutgers' current position

Rutgers faces a wide gap in financial resources relative to peers

- Rutgers has historically raised much less money than peers
- Among public AAU universities, Rutgers ranks in the bottom quartile in total endowment, alumni annual giving, and annual fundraising
- Rutgers receives lower state appropriations relative to peers and is more dependent on revenues from tuition

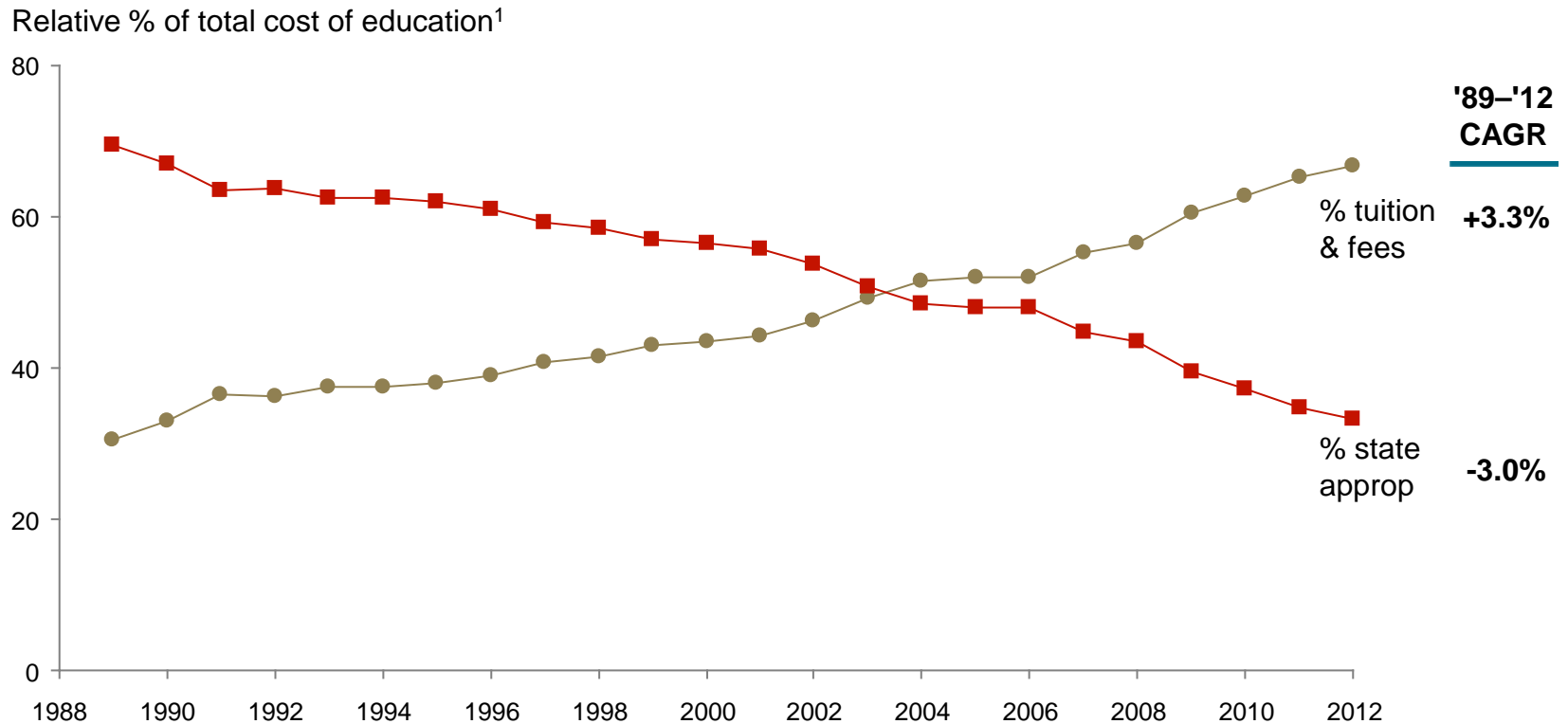
Rutgers mix of students is different than many peers on several dimensions

- Rutgers is less selective in admissions relative to peers and aspirants
- Rutgers attracts fewer out-of-state students
- Rutgers serves more diverse students, more under-represented minorities, and more students with financial need

Several specific academic programs are clearly excellent, but Rutgers lags aspirants in overall academic performance

- Rutgers lags aspirants on some student outcome measures
 - Freshman retention and 6-year graduation rates on par with peers, but lagging aspirants
- However, some evidence that Rutgers may exceed peers and aspirants in improving student performance
- Faculty receive fewer awards and less research funding than peers
- Publications and citations by Rutgers faculty are below peers

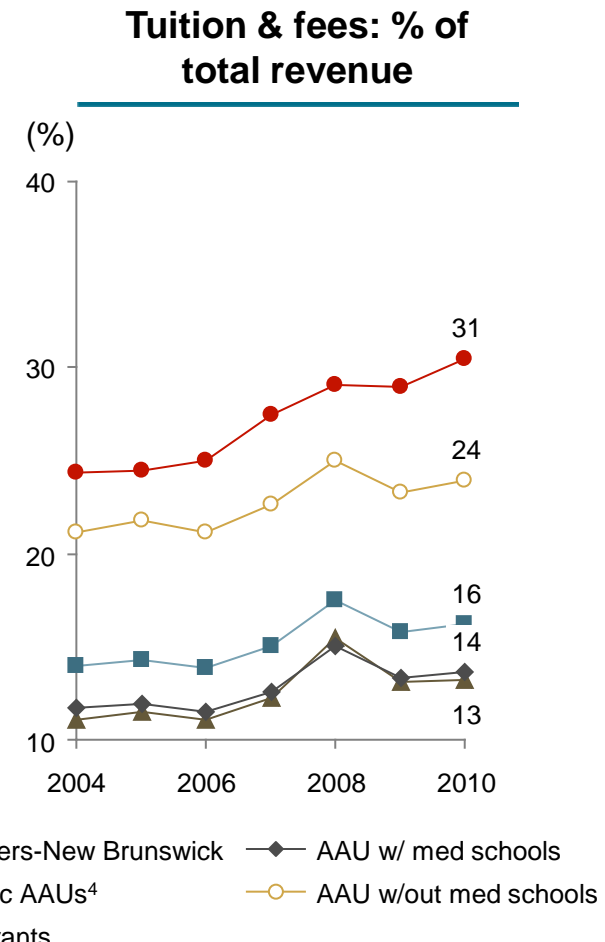
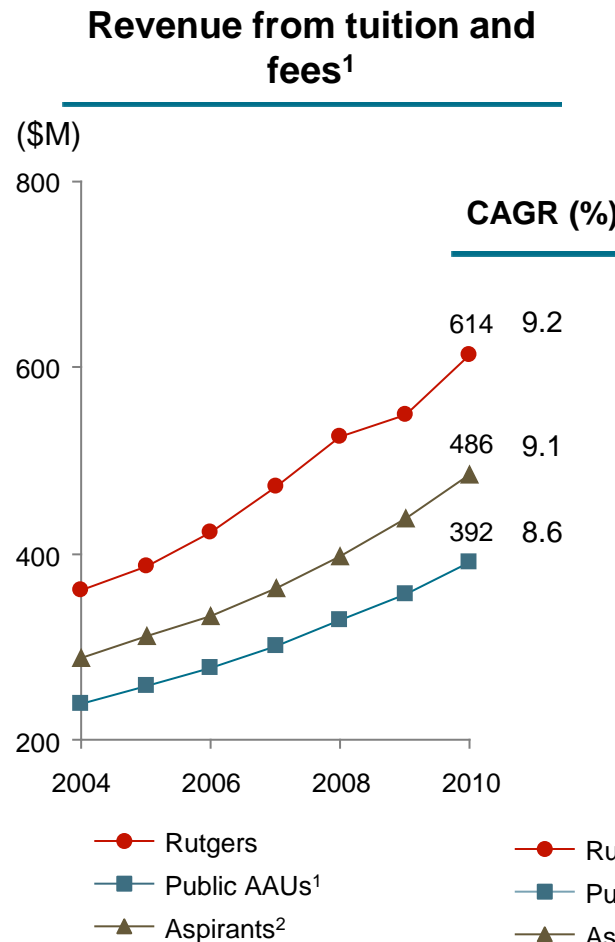
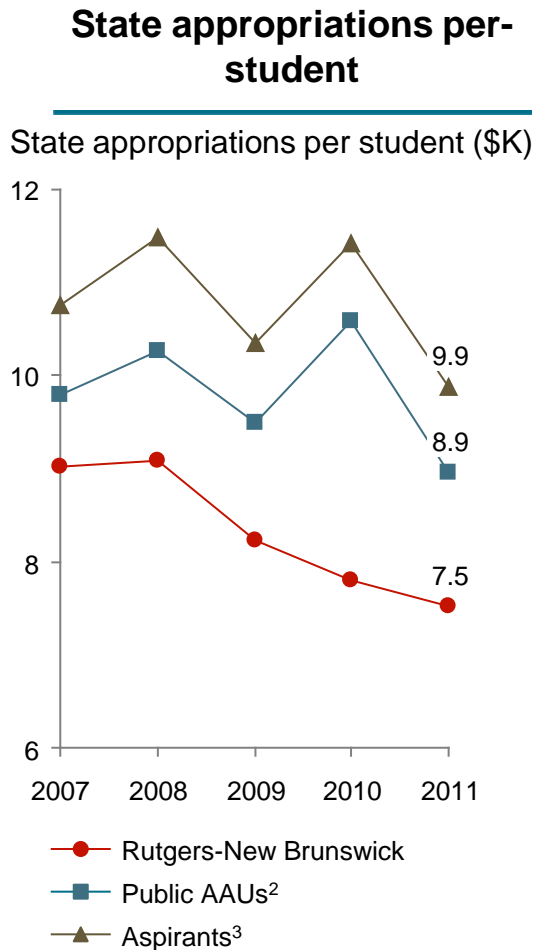
Rutgers students paying a steadily increasing share of the cost of their education as the state share declines



1. Includes the percentages of the total costs covered by tuition/.fees and state appropriations – not all costs. Percentages are calculated as the share of the total of these two items (tuition/fees + state approps)

Source: Rutgers Office of Institutional Research. BCG Analysis.

Rutgers receives lower state appropriations than peers and is more dependant on revenues from tuition

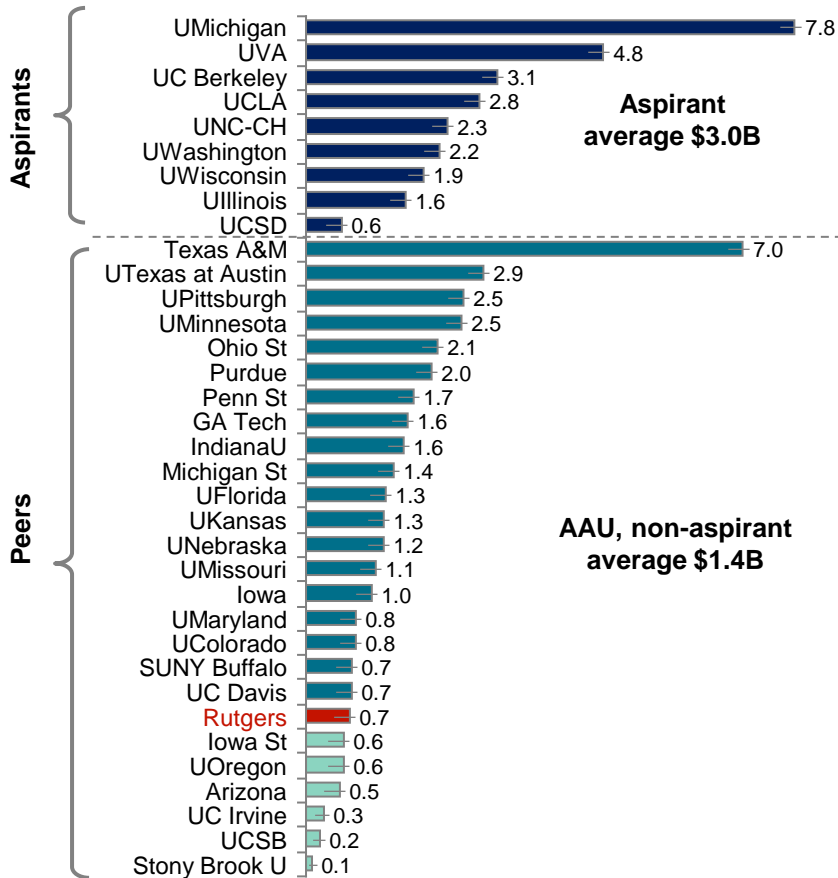


1. Tuition and fees after deducting discounts and allowances 2. Excludes Penn State Univ. and Univ. of Pittsburgh (data not available) 3. AAU Aspirants, as defined by Rutgers. See Appendix for full list 4. Public members of the Association of American Universities. See appendix for full list of schools
 Source: National Center for Education Statistics <http://nces.ed.gov/ipeds/datacenter> . BCG Analysis.

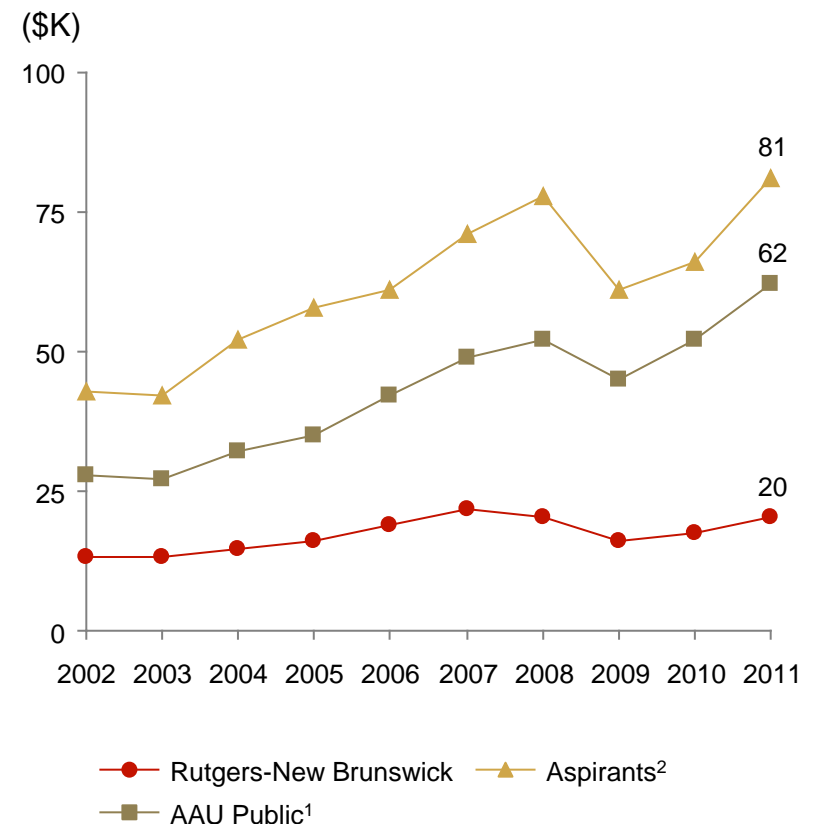
Rutgers endowment lags peers and aspirants

Peer endowments per FTE have doubled since 2002 while Rutgers growing modestly

Total endowments of selected peers and aspirants



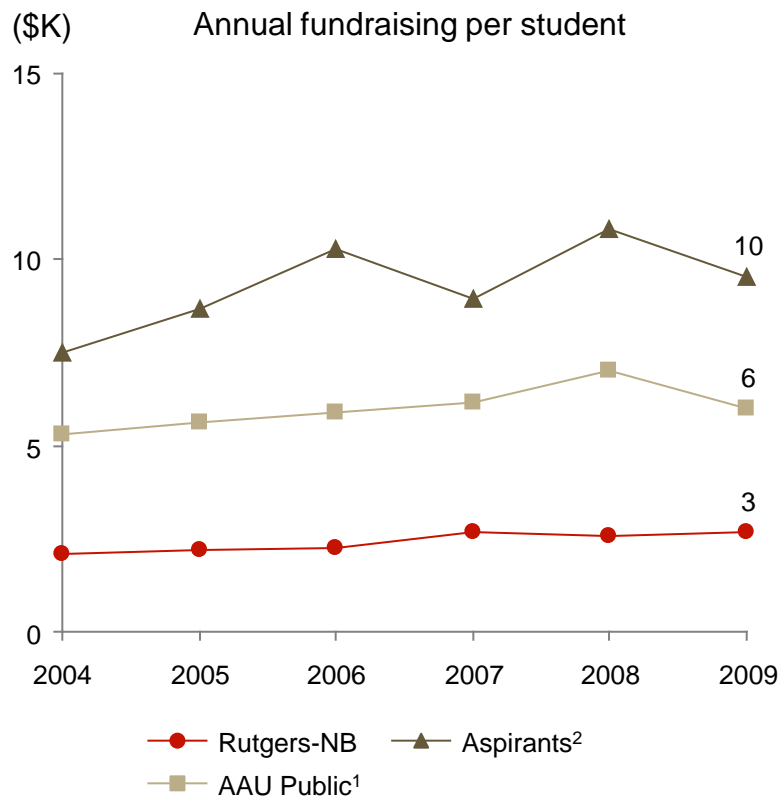
Total endowment per student FTE



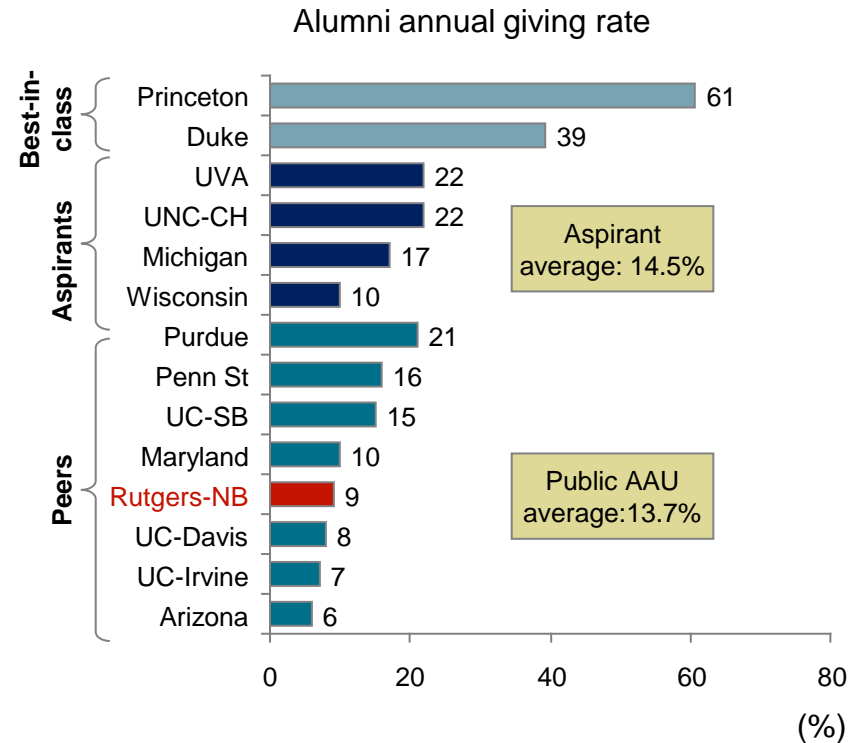
1. Public members of the Association of American Universities. See appendix for full list of schools 2. AAU Aspirants, as defined by Rutgers. See Appendix for full list Source: Rutgers Dashboard Indicators, 2011. Reports from individual universities. University of California Annual endowment report—fiscal year 2011. BCG Analysis.

Rutgers fundraising significantly lower than peers

RU has historically raised much less money than peers and aspirants ...

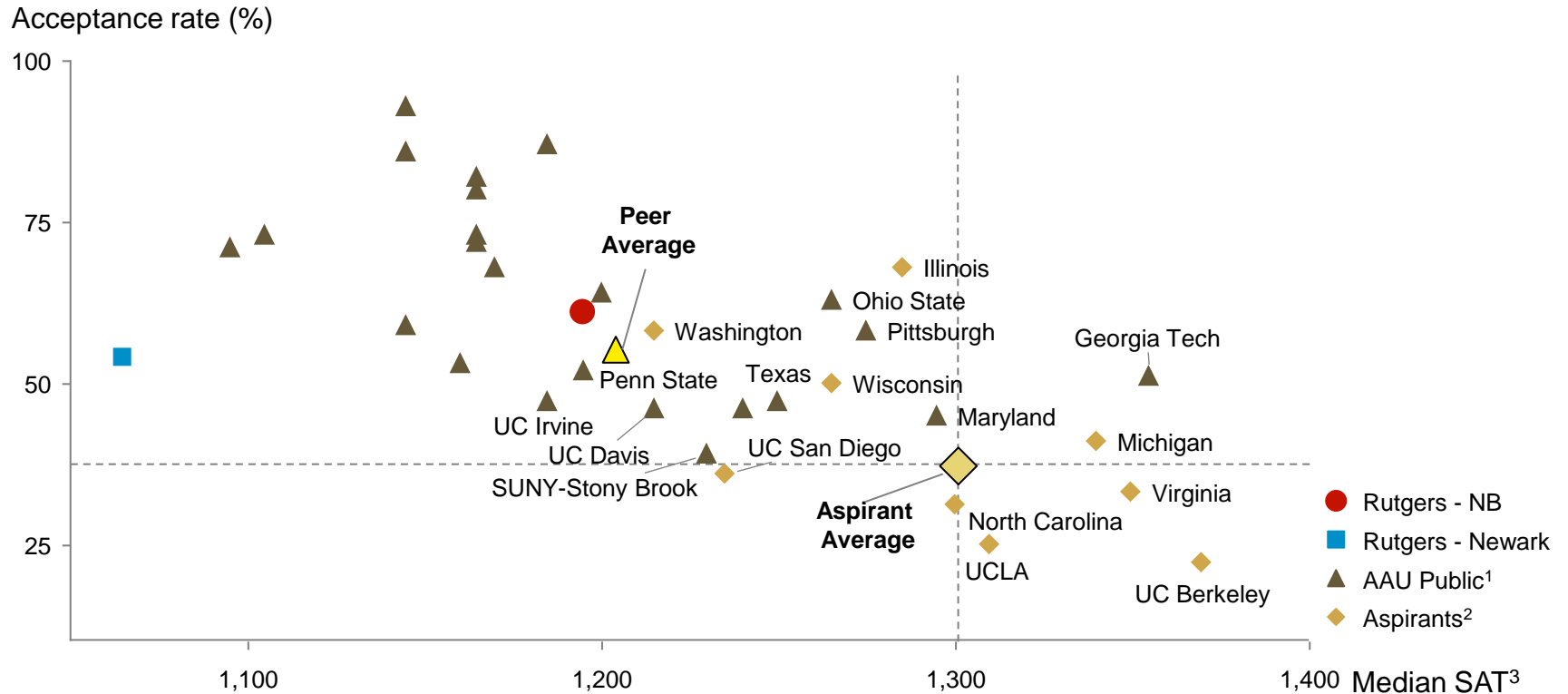


... including alumni giving rate well below peers



1. Public members of the Association of American Universities. See appendix for full list of schools 2. AAU Aspirants, as defined by Rutgers. See Appendix for full list Source: Rutgers Office of Institutional Research. US News and World Report. BCG Analysis.

Rutgers is less selective in admissions relative to aspirants



Note: Rutgers-Camden is considered regional university and not included in national university ranking

1. Public members of the Association of American Universities. See appendix for full list of schools 2. AAU Aspirants, as defined by Rutgers. See Appendix for full list

3. ACT scores were converted into SAT scores using the conversion table published by ACT

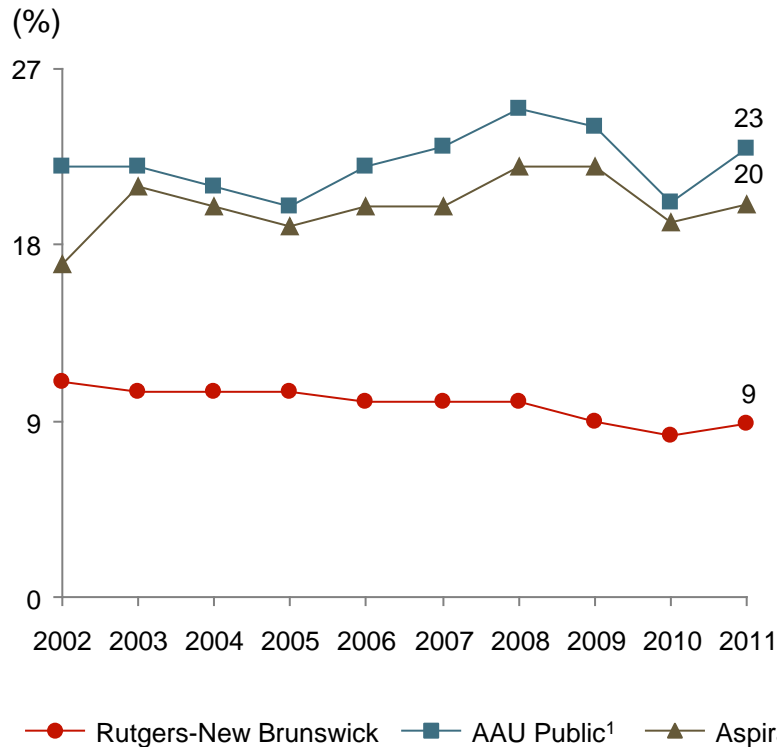
Source: US News & World Report 2013 annual undergraduate rankings of colleges. BCG Analysis.

Draft: advisory, consultative & deliberative material for discussion purposes only

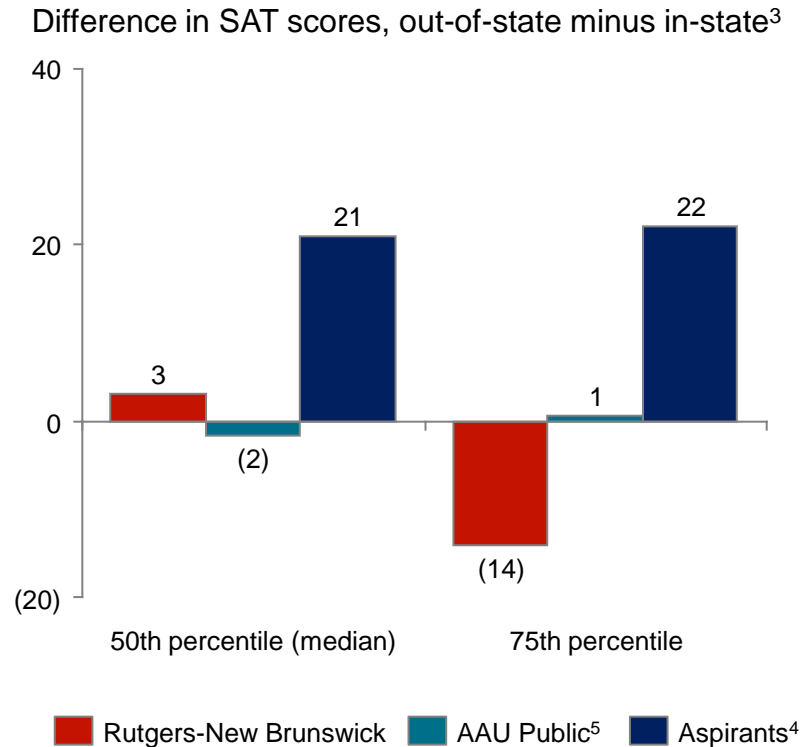
Rutgers attracts fewer out-of-state students than peers

Out-of-state students are not more qualified than in-staters

Percentage of out-of-state students well below peers and aspirants



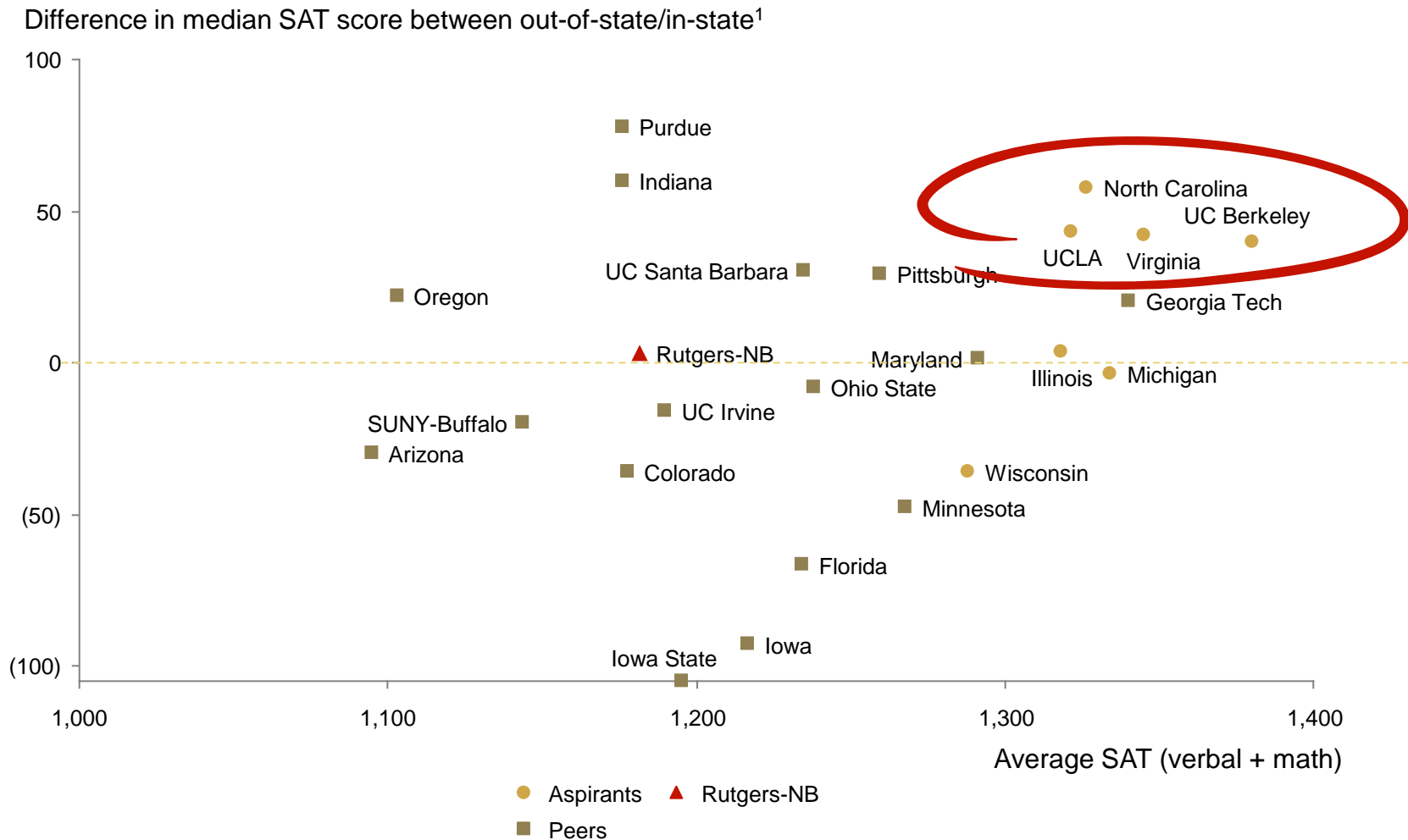
Little distinction between in-state and out-of-state on SAT scores



1: Public members of the Association of American Universities. See appendix for full list of schools 2. AAU Aspirants, as defined by Rutgers. See Appendix for full list
 3. Difference in median combined (Math + Verbal) SAT scores, average for 2007–2012 4. Average of 7 aspirants, excludes UC-San Diego and Univ. Washington—data not available for these schools 5. Average of 23 AAU public schools—data not available for all schools
 Source: Rutgers Office of Institutional Research. BCG Analysis

Aspirants use out-of-state students to raise standards

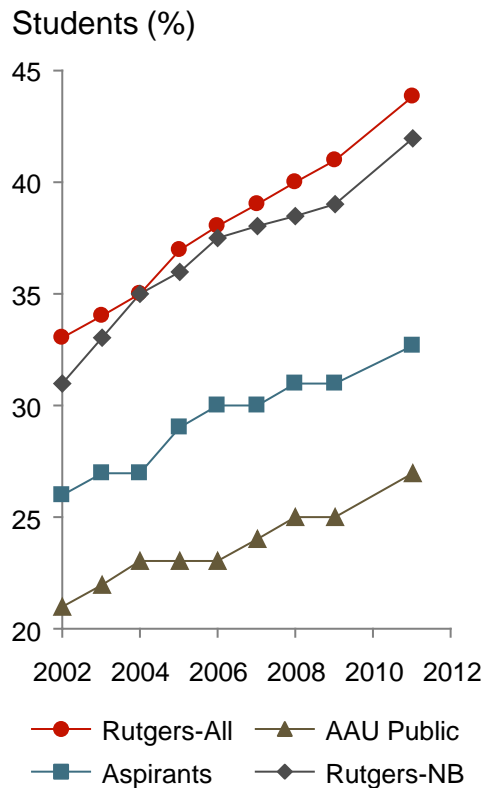
Out-of-state students at UNC, Berkeley, UCLA better-qualified than in-state



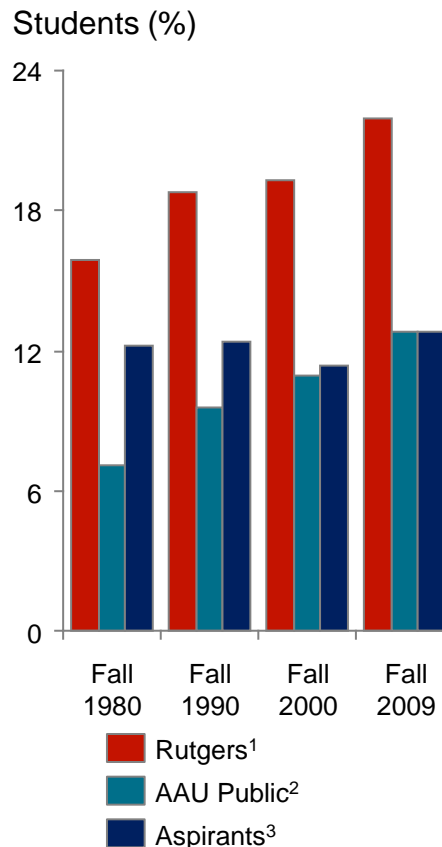
1. Difference in Median combined (Math + Verbal) SAT score, five-year average, 2007–2012
 Source: Rutgers Office of Institutional Research. BCG Analysis

Rutgers serves more diverse students, under-represented minorities, and those with financial need

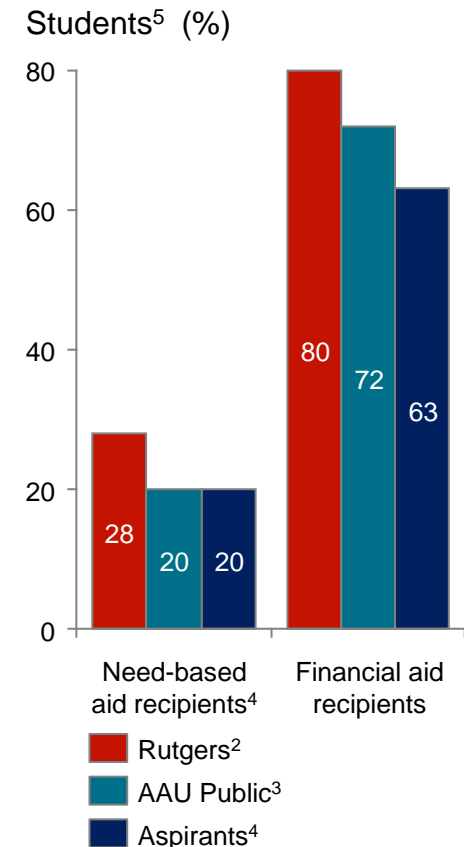
Total minority enrollment



Under-represented minorities¹



Students receiving financial aid

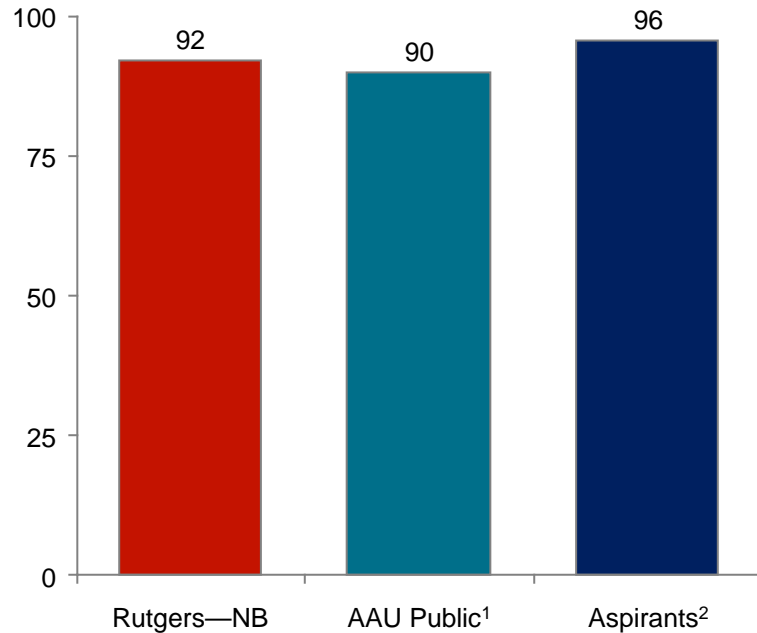


1. Underrepresented minorities exclude white Asians (includes African American, Latino, others) 2. Universitywide: includes all campuses 3. Public members of the Association of American Universities. See appendix for full list of schools 4. AAU Aspirants, as defined by Rutgers See Appendix for full list
Source: Rutgers Dashboard Indicators, 2011. BCG Analysis.

Rutgers aligned with peers in freshmen retention and graduation rates but behind aspirants

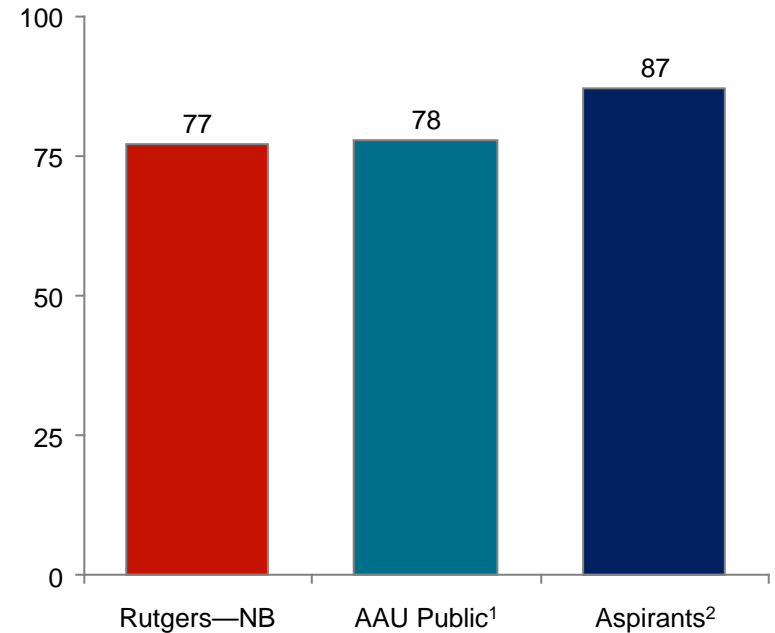
Rutgers has slight advantage over peers in freshmen retention rates ...

Retention among freshmen (%)



... but lagging behind aspirant average graduation rates³

Graduation (%)



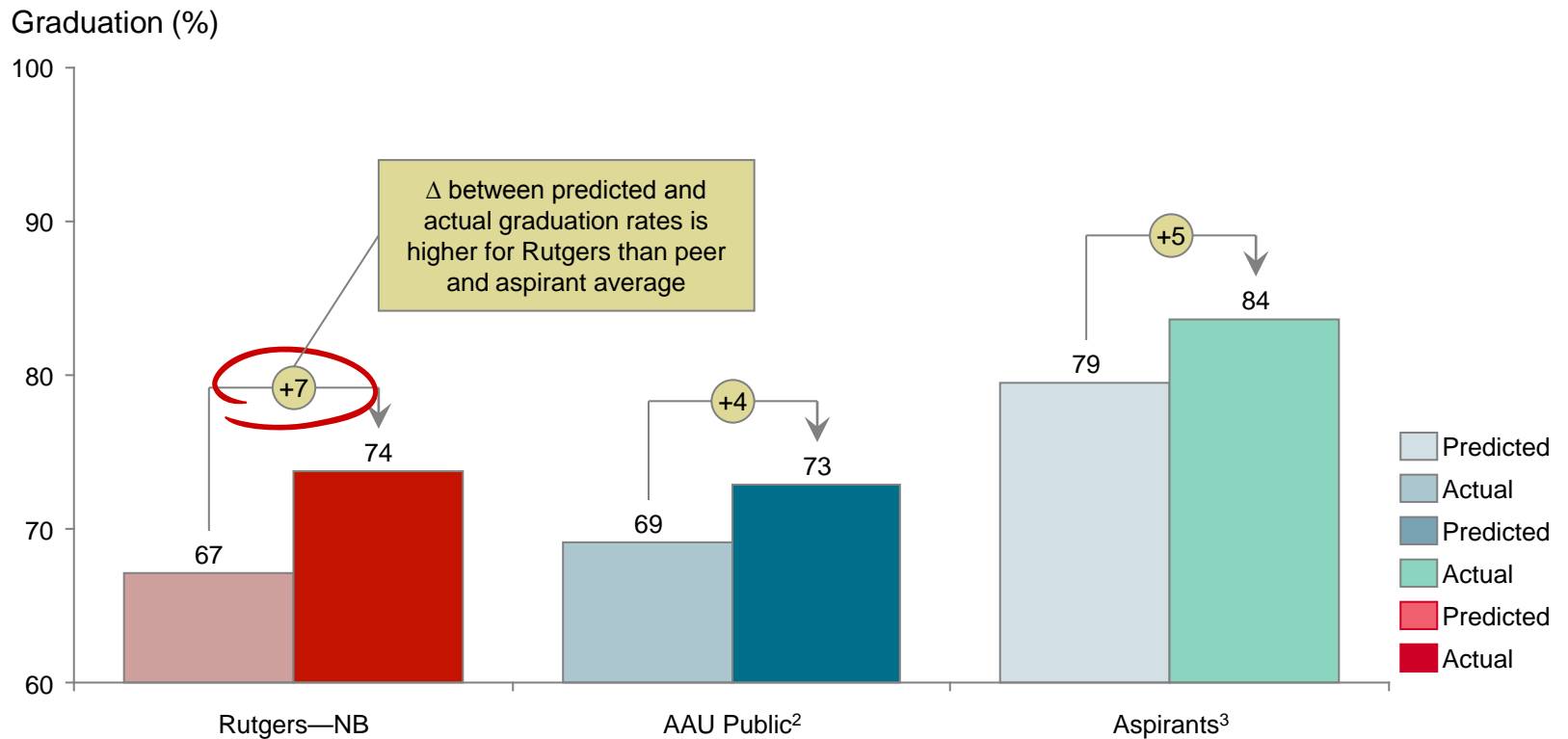
1. Public members of the Association of American Universities. See appendix for full list of schools 2. AAU Aspirants, as defined by Rutgers. See Appendix for full list

3. Percentage of students who graduate within 6 years

Source: US News & World Report 2013 annual undergraduate rankings of colleges

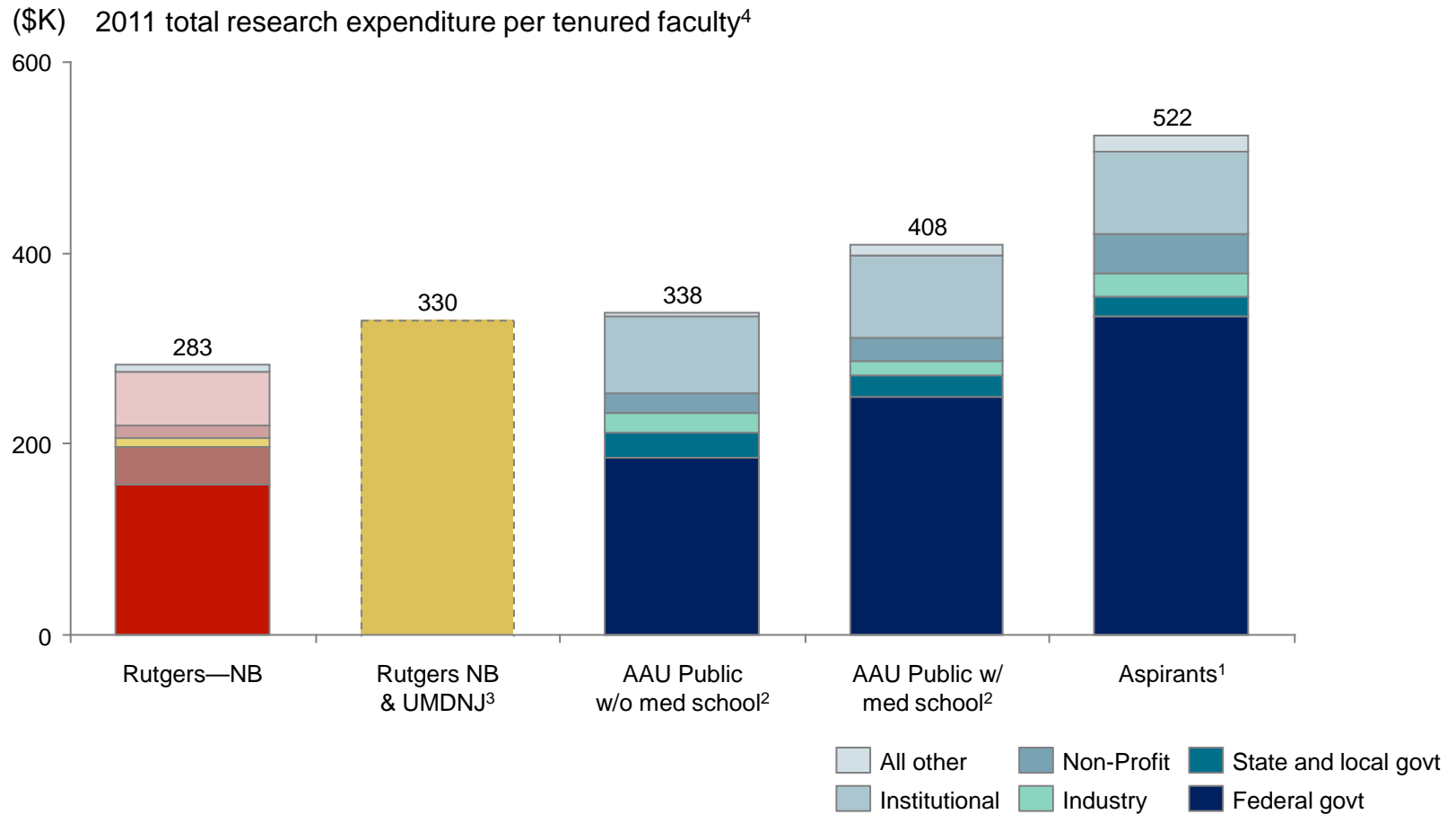
Some evidence that Rutgers is increasing student outcomes more than peers and aspirants

Average predicted¹ and actual graduation rates from 2001 to 2012



1. Predicted graduation rates are calculated by US News & World Report using SAT scores and education expenditure per FTE student 2. Public members of the Association of American Universities. See appendix for full list of schools 3. AAU Aspirants, as defined by Rutgers. See Appendix for full list
 Source: US News & World Report 2013 annual undergraduate rankings of colleges

Rutgers lags peers in research activities per faculty



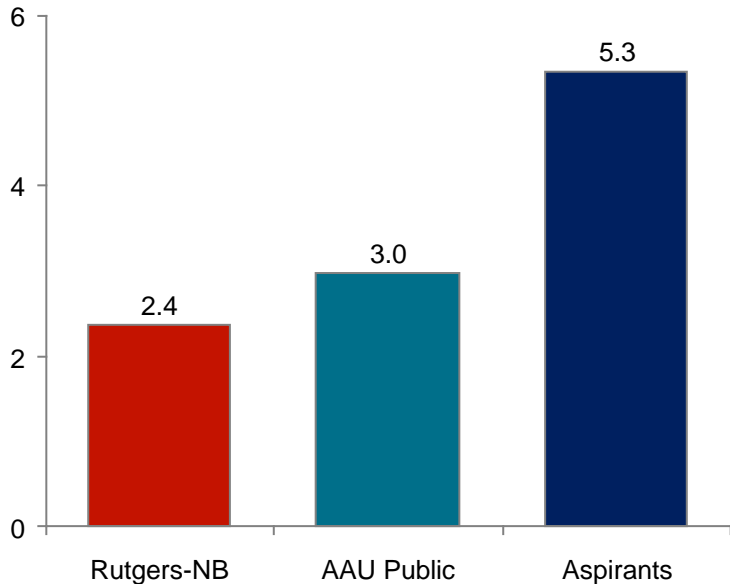
1. All aspirants have medical school except for UC Berkeley 2. Public members of the Association of American Universities. See Appendix for full list of schools 3. Funding for all UMDNJ schools was included except for the School of Osteopathic Medicine which will be integrated into Rowan University 4. Tenured faculty includes non tenured faculty on tenure track. Note: Rutgers-NB tenured + tenure track faculty size is 1,526. UMDNJ excluding SOM tenured faculty size is 482 based on data from UMDNJ annual institutional profile.

Source: BCG Analysis. National Institute of Health grant database; 2011 National Science Foundation database; National center for education statistics <http://nces.ed.gov/ipeds/datacenter>

Rutgers' academic memberships and citations are below peers

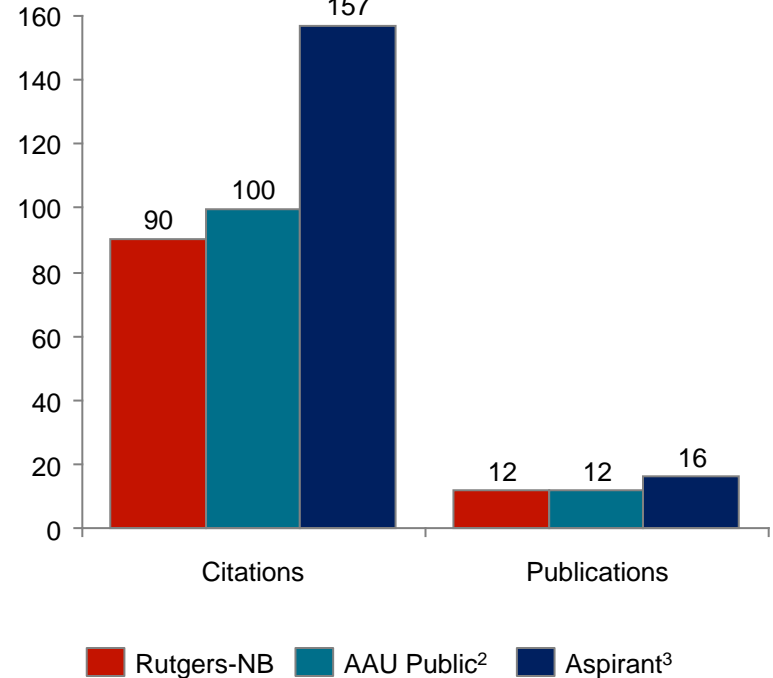
Lower % of faculty with academic membership

Tenured faculty⁴ in academic organizations¹ (%)



Fewer citations per faculty

Publications and citations per tenured faculty⁴ (2007-2011)



1. Includes membership in National Academy of Sciences, National Academy of Engineering and institute of Medicine in 2010 2. Public members of the Association of American Universities. See appendix for full list of schools 3. AAU Aspirants, as defined by Rutgers. See Appendix for full list 4. Tenured faculty includes non tenured faculty on tenure track. Source: BCG Analysis Rutgers Dashboard Indicators, 2011; Thomson Reuters Citations & Publications for 2007 to 2011