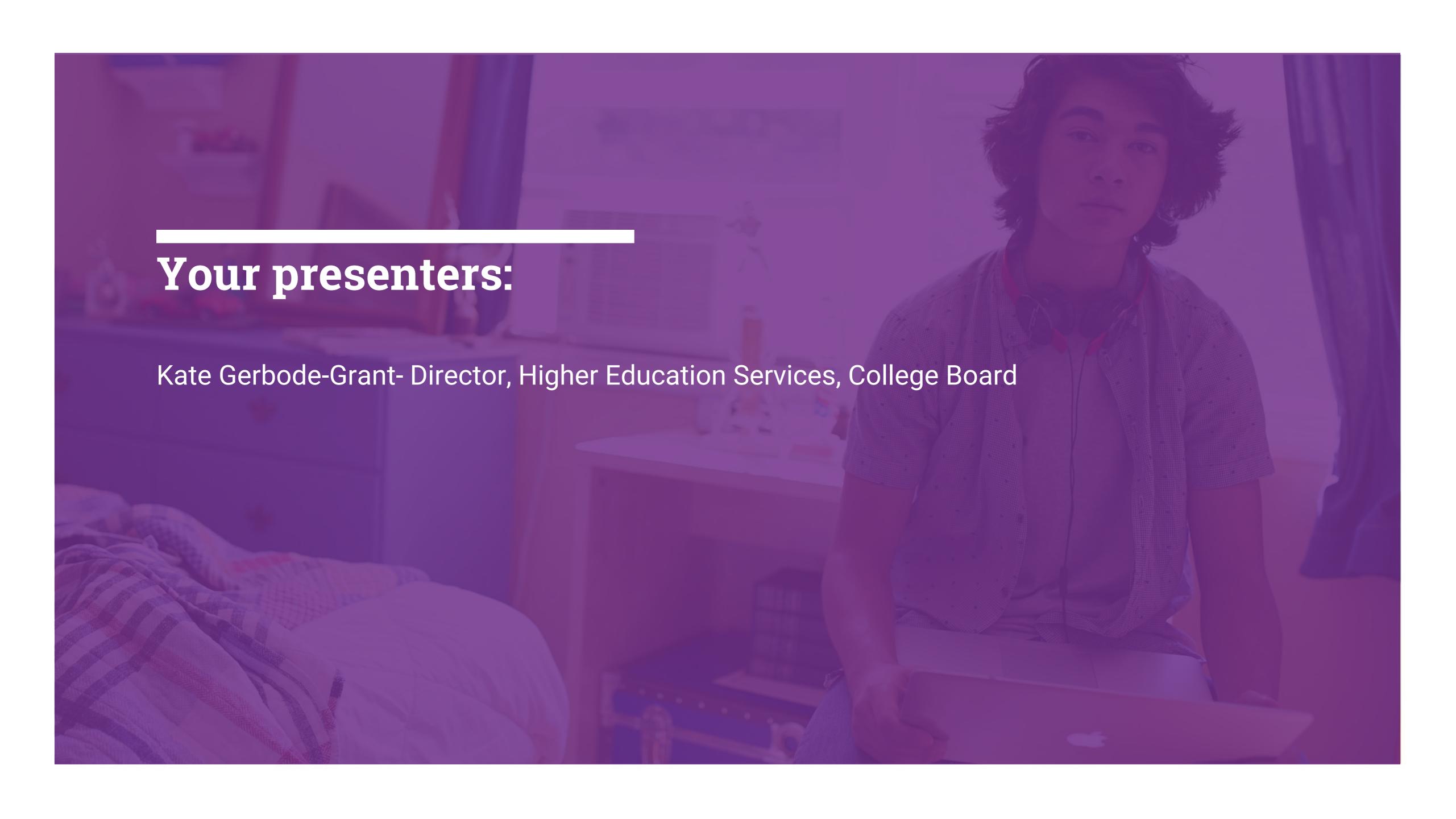
## Warning: Demographic Cliff Ahead

**Connecticut Conference of Independent Colleges** 

June 11, 2019

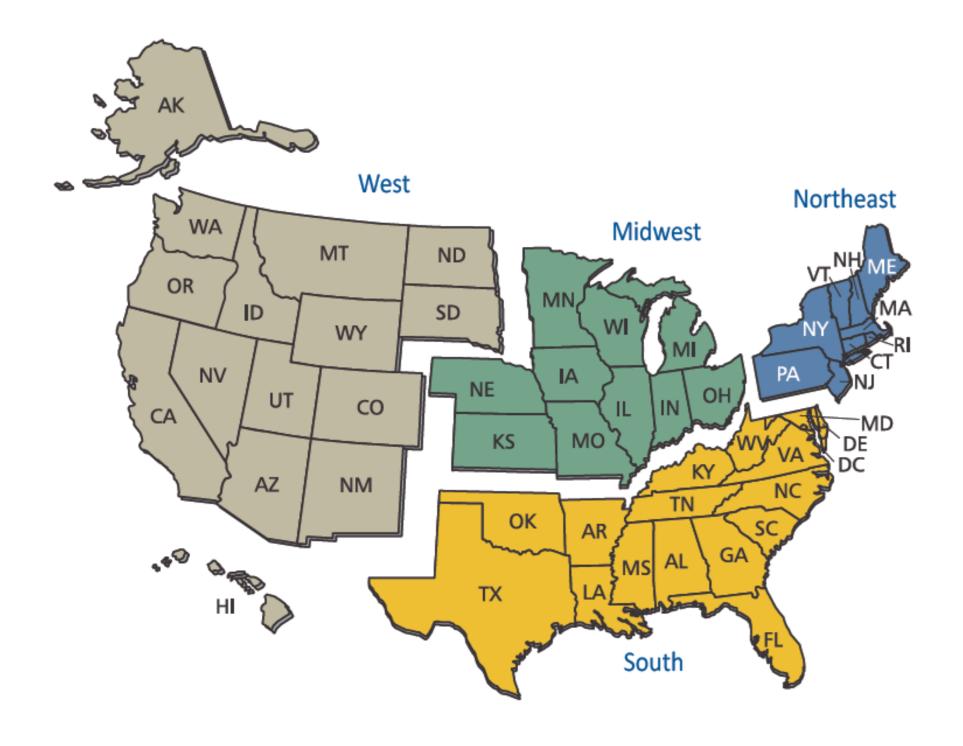




The class of 2025 will mark the beginning of a significant decline in the number of high school graduates in the United States.

This has important implications for higher education institutions.

## Knocking on the College Door (WICHE)



2017-2029

U.S.A. 2017 3,385,917by 2021+34,294 (+1%)

U.S.A. 202‡ 3,420,21 by 2025+140,840 (+4%)

U.S.A. 2025 3,561,05thy 2029-293,225-8%)

West 2017 808,871,by 2021+21,792 (+3%)

West 202‡830,692,by 2025+25,160 (+3%)

West 2025 855,852,by 2029 73,901 - (9%)

Midwest 2017 726,05tby 2021-6,970 (1%)

Midwest 202‡ 719,08tby 2025+13,477 (+2%)

Midwest 2025 732,563by 2029-61,503-9%)

Northeast 2017 603,414by 2021-3,406 (1%)

Northeast 2025 612,637by 2029-41,983-(7%)

South 2017 1,244,58 by 2021+22,288 (+2%)

South 202‡ 1,266,869by 2025+85,769 (+7%)

South 2025 1,352,6383y 2029-113,857-9%)

Hispanic 2017-2025

+31%

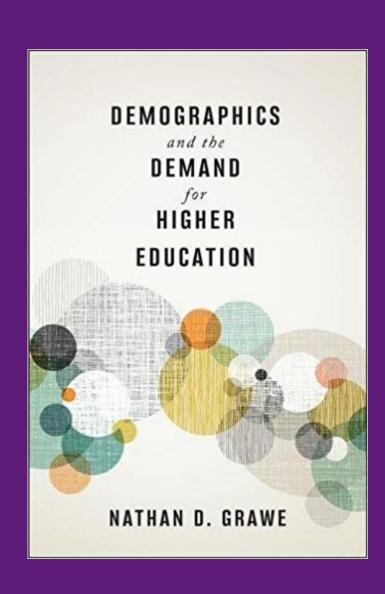
+219,150

Private School 2017-2023

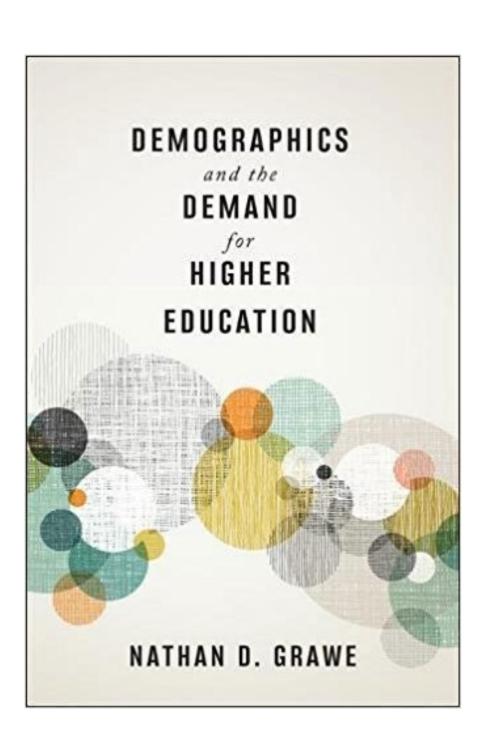
-18%

-48,823

Are headcounts the right way to think about future demand for higher education?



## Higher Education Demand Index (HEDI)



- For a wide variety of reasons, there have been different patterns of college attendance along the lines of gender, race, income, geography, parental education, family structure, etc.
- Different groups of students have different probabilities of attending college.
- Dr. Nathan Grawe built a model of higher education attendance and developed future demand forecasts – the Higher Education Demand Index (HEDI)
- The HEDI should be considered a baseline. Think of these projections as what would happen if nothing of significance changed.

## The problem with headcounts

#### Example:

Lilly: Asian American female living in Boston with both parents who both have a bachelor's degree and earn \$125,000 annually.

Marco: Hispanic male living in California with a mother who hold no degree and earns \$40,000 annually.

Probability of Lilly attending a 4 year college or university = 96%

Probability of Marco attending a 4 year college or university = 9%

Probability of Lilly attending a college or university ranked in the top 50 = 73%

Probability of Marco attending a college or university ranked in the top 50 = 2%

### Dimensions of HEDI

#### **HEDI Personal Characteristics**

- "Full Pay"
- Income Greater Than and Less Than \$100K
- Parental Education (No BA, One BA, Two BA)
- Race/Ethnicity (Asian, Black, Hispanic, Other, White)

#### **HEDI Institution Types**

- Any college
- 2-year
- 4-year with regional, national, and elite splits

**HEDI Geography** - Projections are available across 63 different Metropolitan Statistical Areas (MSA) and States.

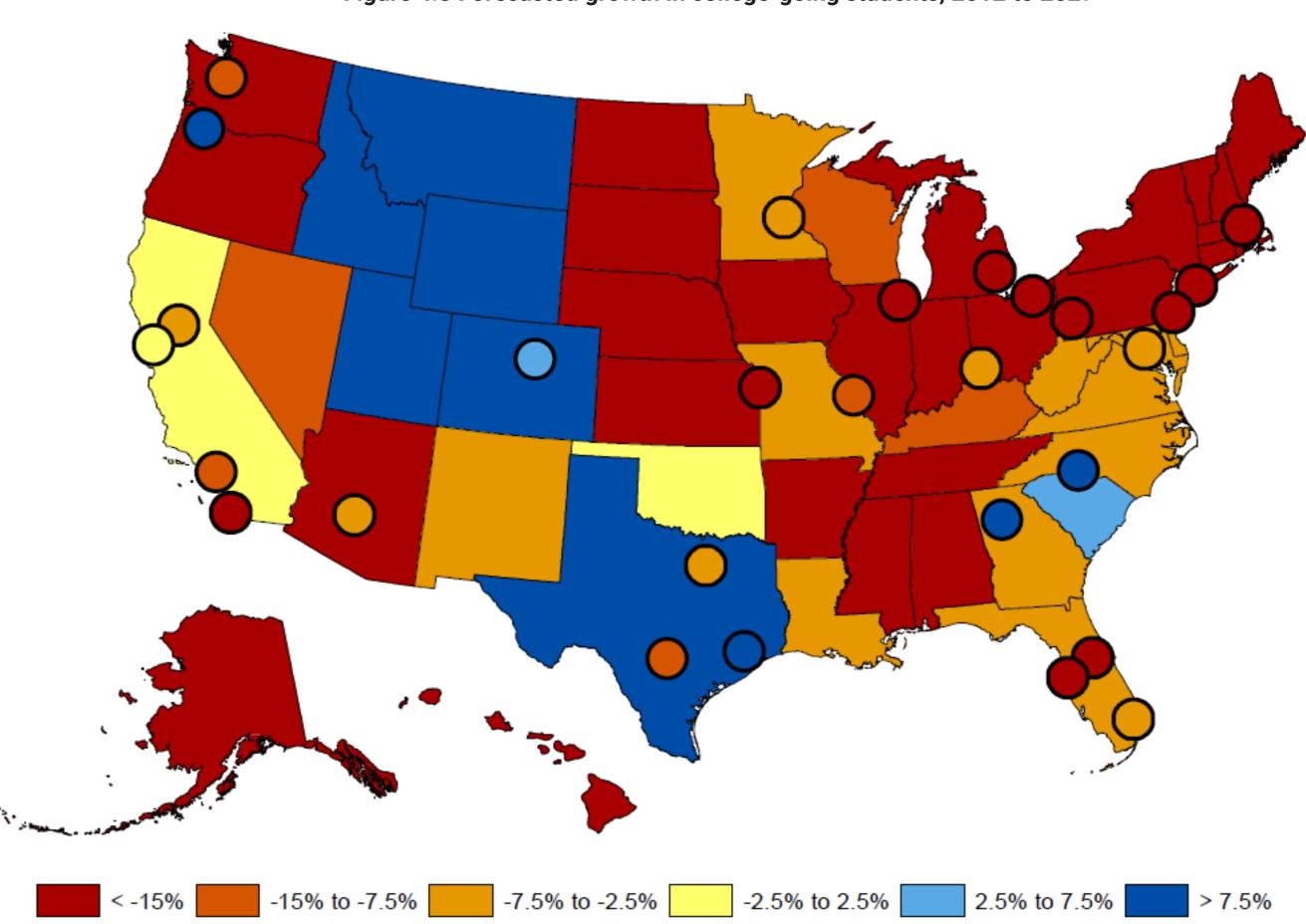


Figure 4.3 Forecasted growth in college-going students, 2012 to 2029

## Higher Education Demand Index (HEDI)



2018-2029

All percentages relative to 2018

All FourYear 2018 1,783,720

All FourYear 2019 1,783,517 (0%)

All FourYear 2025 1,863,528 (+4%)

All FourYear 2029 1,583,889 (-11%)

Regional FouYear 2018 1,446,526

Regional FouYear 2019 1,442,102 (0%)

Regional FouYear 2025 1,511,125 (+4%)

Regional FouYear 2029 1,268,267 (-12%)

National FoulYear 2018 281,214

National FoulYear 2019 282,856 (+1%)

National FoulYear 2025 299,651 (+7%)

National FoulYear 2029 251,825 (-10%)

Elite FourYear 2018 170,980

Elite FourYear 2019: 174,054 (+2%)

Elite FourYear 2025 188,006 (+10%)

Elite FourYear 2029 174,451 (+2%)

#### **HEDI Category Definitions**

**Elite**=#1-50 USNWR National Colleges and Universities

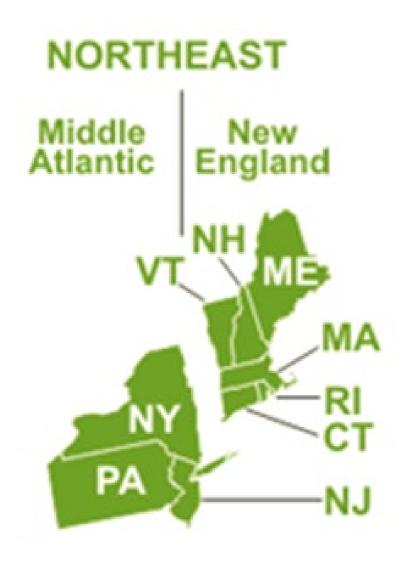
Nationa⊨#51-100 USNWR

Regional Outside top 100 USNWR

#### How do I read the numbers?

"The market for prospective students in 2018 seeking a four-year college in the United States was 1,783,720."

### **HEDI Northeast**



ear	2018
urYe	2019
I Fo	2025
Z	2029
	2018
na	
gio	2019
Ze	2025
	2029
F	2018
ons	2019
National	2025
	2029
	2018
<u>t</u> e	2019
	2025
	2023

2029

All Northeast	Middle Atlantic	New England
386,587	283,751	84,836
357,148 (-3%)	276,128 (-3%)	81,020 (-4%)
363,570 (-1%)	284,016 (0%)	79,555 (-6%)
305,726 (-17%)	240,297 (-15%)	65,430 (-23%)
294,294	232,049	62,244
282,035 (-4%)	224,106 (-3%)	57,928 (-7%)
290,979 (-1%)	232,372 (0%)	58,606 (-6%)
241,132 (-18%)	192,970 (-17%)	48,162 (-23%)
62,500	44,108	18,392
60,895 (-3%)	43,517 (-1%)	17,378 (-6%)
63,281 (+1%)	46,121 (+5%)	17,160 (-7%)
51,654 (-17%)	37,825 (-14%)	13,830 (-25%)
45,619	32,609	13,101
46,336 (+2%)	33,086 (+1%)	13,251 (+2%)
47,542 (+4%)	34,311 (+5%)	13,231 (+2%)

31,691 (-3%)

11,029 (-15%)

2018-2029

All percentages relative to 2018

CollegeBoard

42,720 (-6%)

## **HEDI Midwest**



2018-2029
All percentages relative to 2018

	All Midwest	West North Central	East North Central
B 2018	403,276	120,259	283,108
₹ 2019	397,099 (-2%)	131,158 (+9%)	265,941 (-6%)
之 2019 2025	403,980 (0%)	126,879 (+6%)	277,100 (-2%)
₹ 2029	334,006 (-17%)	114,742 (-5%)	219,264 (-23%)
<del>a</del> 2018	319,978	95,885	224,093
<u></u>	316,963 (-1%)	104,655 (+9%)	212,308 (-5%)
2018 2019 2025	323,219 (+1%)	101,750 (+6%)	221,468 (-1%)
2029	263,594 (-18%)	90,193 (-6%)	173,401 (-23%)
0040		0.4.1.17	
<u></u> 2018	75,499	24,117	75,499
<u>5</u> 2019	73,745 (-2%)	26,805 (+11%)	73,745 (-9%)
National 2019 2025	75,049 (-1%)	24,702 (+2%)	75,049 (-2%)
2029	60,614 (-20%)	21,903 (-9%)	60,614 (-25%)
2018	36,628	7,001	29,626
<u>a</u> 2019	34,073 (-7%)	7,675 (+10%)	26,398 (-11%)
<del>Ш</del> 2025	36,629 (0%)	8,409 (+20%)	28,220 (-5%)
2029	32,367 (-12%)	8,820 (+26%)	23,547 (-21%)

### **HEDI South**



2018	
2019	
2025	
2029	
2018	
2019	
2025	
2029	
2018	
2019	
2025	

18	640,460
19	651,365 (+2%
25	695,777 (+9%
29	582,970 (-9%
18	534,480
19	541,006 (+1%)
25	578,825 (+8%)
29	480,314 (-10%)
18	99,722
19	103,758 (+4%)
25	113,914 (+14%)
29	94,730 (-5%)
18	47,501
19	50,211 (+6%)

<u>a</u>	2010
ons	2019
Nati	2025
	2029

Elite	2018
	2019
	2025
	2029

All South	West South Central	East South Central	South Atlantic
640,460	222,763	86,596	331,102
651,365 (+2%)	223,170 (0%)	88,492 (+2%)	339,703 (+3%)
695,777 (+9%)	256,263 (+15%)	91,394 (+6%)	348,121 (+5%)
582,970 (-9%)	205,090 (-8%)	74,191 (-14%)	303,690 (-8%)

534,480	193,699	73,249	267,532
541,006 (+1%)	193,740 (0%)	74,483 (+2%)	272,783 (+2%)
578,825 (+8%)	220,575 (+14%)	76,269 (+4%)	281,981 (+5%)
480,314 (-10%)	173,315 (-11%)	60,779 (-17%)	246,221 (-8%)

99,722	33,966	12,579	53,177
103,758 (+4%)	34,387 (+1%)	12,888 (+2%)	56,483 (+6%)
113,914 (+14%)	40,297 (+19%)	13,629 (+8%)	59,987 (+13%)
94,730 (-5%)	32,704 (-4%)	11,461 (-9%)	50,565 (-5%)

7,963	5,623	33,914
8,619 (+8%)	5,831 (+4%)	35,761 (+5%)
13,257 (+66%)	6,760 (+20%)	36,375 (+7%)
14,793 (+86%)	6,119 (+9%)	32,027 (-6%)

CollegeBoard

2018-2029

All percentages relative to 2018

56,392 (+19%)

52,939 (+11%)

### **HEDI West**



2018-2029

All percentages relative to 2018

	All West	Pacific	Mountain
<b>E</b> 2018	371,396	246,242	125,154
	377,906 (+2%)	247,456 (0%)	130,450 (+4%)
上 2019 2025	400,201 (+8%)	256,215 (+8%)	134,986 (+8%)
₹ 2029	361,186 (-3%)	244,161 (-1%)	117,025 (-6%)
0040		100010	100 505
<u>s</u> 2018	297,774	189,248	108,527
<u>්</u> 2019	302,099 (+1%)	189,486 (0%)	112,612 (+4%)
2018 2019 2025	318,103 (+7%)	204,509 (+8%)	113,594 (+5%)
2029	283,227 (-5%)	186,780 (-1%)	96,447 (-11%)
_ 2018	43,493	20.862	12 161
<u> </u> 2010		29,862	13,161
<u>5</u> 2019	44,458 (+2%)	30,177 (-1%)	14,281 (+5%)
2019 2025	47,408 (+9%)	32,126 (+8%)	15,272 (+12%)
2029	44,826 (+3%)	30,864 (+3%)	14,142 (+4%)
2018	41,233	34,172	7,060
<u>a</u> 2019	43,434 (+5%)	35,627 (+4%)	7,807 (+11%)
<b>□</b> 2025	47,443 (+15%)	37,715 (+10%)	9,728 (+38%)
2029	46,424 (+13%)	36,571 (+7%)	9,853 (+40%)

## Dimensions of HEDI

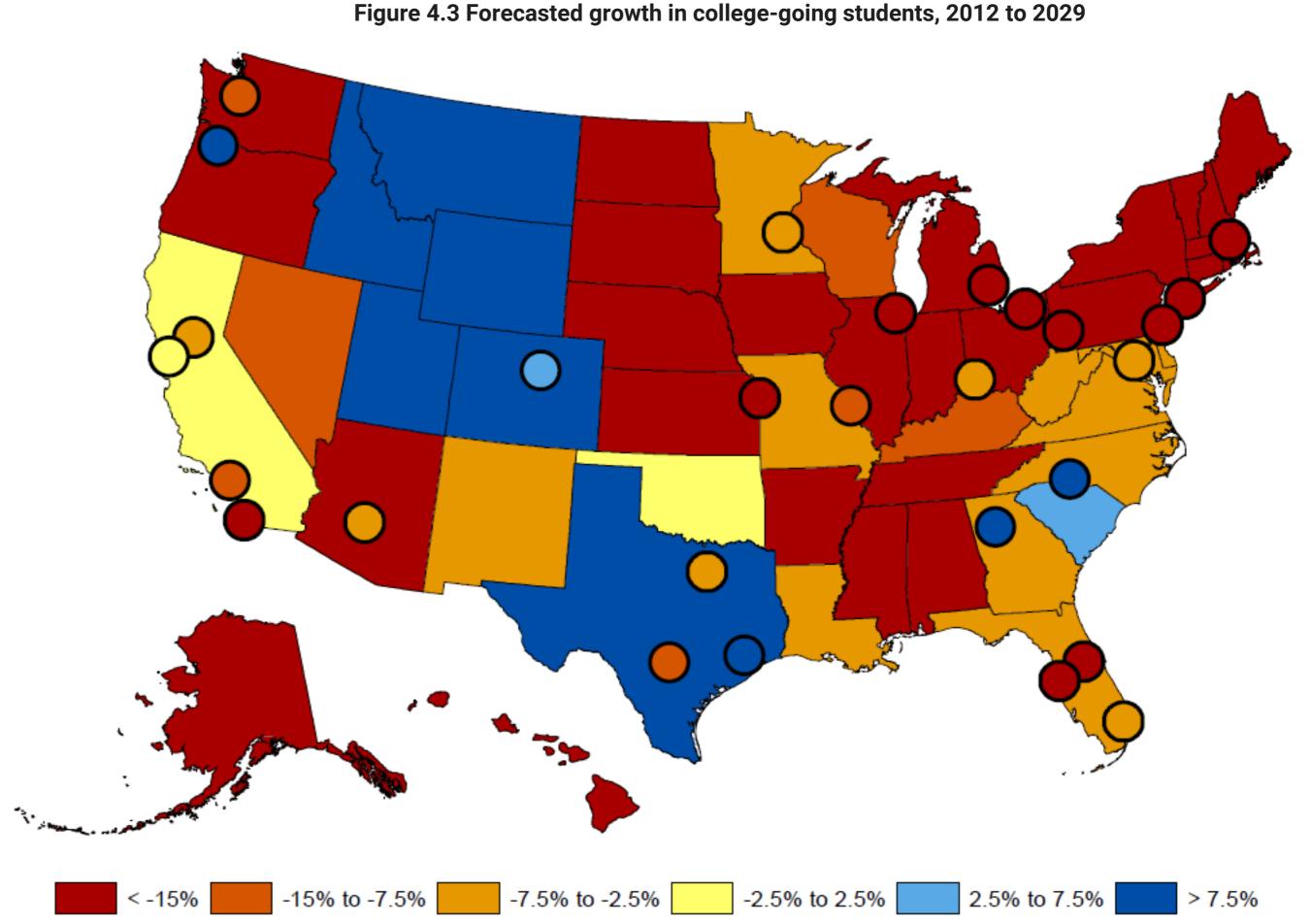
#### **HEDI Personal Characteristics**

- "Full Pay"
- Income Greater Than and Less Than \$100K
- Parental Education (No BA, One BA, Two BA)
- Race/Ethnicity (Asian, Black, Hispanic, Other, White)

#### **HEDI Institution Types**

- Any college
- 2-year
- 4-year with regional, national, and elite splits

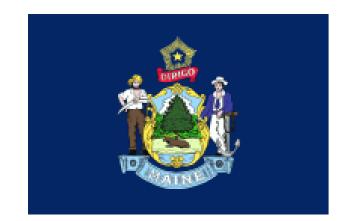
HEDI Geography - Projections are available across 63 different Metropolitan Statistical Areas (MSA) and States.



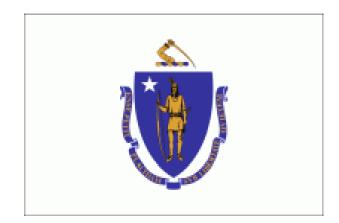
## **HEDI New England**













2018-2029

All percentages relative to 2018

	New England	ME, NH, VT outside Boston Me
<b>E</b> 2018	84,836	10,582
2018 2019 2025	81,020-4%)	10,588 (0%)
	79,555-6%)	9,557 (10%)
₹ 2029	65,430-(23%)	9,156 (13%)
<del>-</del> 2018	62,244	7,933
2018 2019 2025	57,928-(7%)	7,769 (2%)
<b>2025</b>	58,606-6%)	7,125 (10%)
2029	48,162-(23%)	6,787 (14%)
_ 2018	18,392	1,946
2018 2019 2025	17,378-6%)	1,958 (+1%)
<u>‡</u> 2025	17,160-7%)	1,739 (11%)
2029	13,830-(25%)	1,694 (13%)
2018	13,101	1,163
<b>2019</b>	13,251 (+2%)	1,234 (+6%)
型 2019 四 2025	13,231 (+2%)	1,140 (2%)
2029	11,029-(15%)	1,176 (+1%)

## **HEDI New England**













201	8-2029	

All percentages relative to 2018

	ı	

<b>E</b> 2018	74,254	23,312	50,942
¥ 2019	70,433 (-5%)	23,468 (+1%)	46,945 (-8%)
<u>0</u> 2025		20,875 (-10%)	49,122 (-4%)
₹ 2029	56,274 (-24%)	16,802 (-28%)	39,471 (-23%)
<del>a</del> 2018	54,311	17,357	36,954
Redional 2018 2019 2025	50,160 (8%)	17,367 (0%)	32,792 (-11%)
e 2025	51,482 (-5%)	16,124 (-7%)	35,357 (-4%)
2029	41,374 (-24%)	12,757 (-27%)	26, 618 (-23%)
<u>a</u> 2018	16,446	4,407	12,039
<u>5</u> 2019	15,420 (-6%)	4,408 (0%)	11,012 (-9%)
National 2018 2019 2025	15,421 (-6%)	3,731 (-15%)	11,689 (-3%)
2029		3,188 (-28%)	8,947(-26%)
2018	11,847	3,060	8,787
<u>a</u> 2019	12,017 (+1%)	3,120 (+2%)	8,897 (+1%)
□ 2025		2,740 (-10%)	9,352 (+6%)
2029	9.853 (-17%)	2,432 (-21%)	7.421 (-16%)

CT, MA, RI outside Boston Met

**Boston Metro** 

**♦** CollegeBoard

All MA, CT, RI (incl. Boston)

### HEDI NY & NJ





ම් 2018	188,357	35,357	153,000
₹ 2019	184,648 (-2%)	35,563 (+1%)	149,085 (-3%)
≥ 2019 ≥ 2025		32,333 (-9%)	162,201 (+6%)
₹ 2029	159,341 (-15%)	28,206 (-20%)	131,135 (-14%)
·			
ত 2018	153,581	29,421	124,160
2018 2019 2025	149,276 (-3%)	29,417 (0%)	119,859 (-3%)
စ္တိ 2025	159,361 (+4%)	26,542 (-10%)	132,820 (+7%)
2029	127,125 (-17%)	22,340 (-24%)	104,785 (-16%)
2019	20.040	1762	25 279
ल 2018	30,040	4,763	25,278
2019 2025	29,843 (-1%)	4,998 (+5%)	24,845 (-2%)
<b>E</b> 2025	33,181 (+10%)	4,661 (-2%)	28,521 (+13%)
2029	25,975 (-14%)	4,195 (-12%)	21,780 (-14%)
2018	22,474	3,391	19,083
<u>a</u> 2019	23,043 (+3%)	3,542(+4%)	19,501 (+2%)
□ 2025	23,455 (+4%)	3,276 (-3%)	20,178 (+6%)
2029	22,525 (0%)	3,326 (-3%)	19,199 (+1%)

NY outside NYC

NYC including All NJ

2018-2029

All percentages relative to 2018

**♦** CollegeBoard

All New York & New Jersey

## **HEDI Pennsylvania**



a	All Pennsylvania	Not PHL or PIT	Philadelphia Metro	Pittsburgh Metro
<u>F</u> 2018	95,394	36,817	45,274	13,304
₹ 2019	91,480 (-4%)	33,120 (-10%)	46,268 (+2%)	12.092 (-9%)
<u>2025</u>	89,482 (-6%)	32,938 (-11%)	43,168 (-5%)	13,376 (+1%)
₹ 2029	80,956 (-15%)	31,723 (-14%)	37,959 (-16%)	11,274 (-15%)
<u>a</u> 2018	78,468	30,838	36,897	10,733
<u>5</u> 2019	74,830 (-5%)	27,412 (-11%)	37,741 (+2%)	9,678 (-10%)
<b>2025</b>	73,011 (-7%)	27,290 (-12%)	34,691 (-6%)	11,030 (+3%)
2029	65,845 (-16%)	25,770 (-16%)	30,951 (-16%)	9,124 (-15%)

14,067 7,432 1,976 1,839 (-7%) 13,674 (-3%) 4,281 (-8%) 7,555(+2%) 12,940 (-8%) 4,055 (-13%) 6,778 (-9%) 2,106 (+7%) 11,850 (-16%) 3,965 (-15%) 6,242 (-16%) 1,644 (-17%) 1,496

1,503 (+1%)

1,485 (-1%)

1,169 (-22%)

2018-2029 All percentages relative to 2018

10,135	3,389	5,250
10,043 (-1%)	3,205 (-5%)	5,334 (+2%)
10,856 (+7%)	3,473 (+2%)	5,898 (+12%)
9,166 (-10%)	3,514 (+4%)	4,483 (-15%)

4,659

## HEDIDE, MD, VA, WV, DC











2018-2029

All percentages relative to 2018

	All DE MD VA WV DC	DE MD VA WV	DC Metro
2018 8	95,273	33,470	61,804
<b>≿</b> 2019	103,067 (+8%)	38,668 (+16%)	64,399 (+4%)
<b>运</b> 2025	102,138 (+7%)	38,266 (+14%)	63,872 (+3%)
₹ 2029	91,314 (-4%)	35,047 (+5%)	56,286 (-9%)
2040	72.524	27.204	16 110
<u>a</u> 2018	73,534	27,394	46,140
	80,014 (+9%)	31,158 (+14%)	48,856 (+6%)
2018 2019 2025	79,844 (+9%)	31,198 (+14%)	48,646 (+5%)
2029	72,271 (-2%)	28,835 (+5%)	43,436 (-6%)
_ 2018	17,123	4,889	12,234
$\boldsymbol{\omega}$	19,314 (+13%)	5,982 (+22%)	13,332 (+9%)
2019 2025	19,740 (+13%)	6,353 (+30%)	13,387 (+9%)
2029	16,683 (-3%)	5,964 (+22%)	10,719 (-12%)
2018	12,526	2,961	9,565
<u>a</u> 2019	13,193 (+5%)	3,616 (+22%)	9,578 (0%)
〒 2025	13,148 (+5%)	3,539 (+20%)	9,609 (0%)
2029	11,220 (-10%)	3,096 (+5%)	8,125 (-15%)

## WICHE & HEDI are not destiny.

Actions taken in the (a) recruitment and (b) preparation of future students can change outcomes.

"Make no little plans; they have no magic to stir the blood and probably themselves will not be realized." - D. Burnham

In the Northeast in 2016, 52% of high school graduates attended a four-year institution and 18% a two-year or other type of institution.

But more than 30% of 2016 high school graduates in the Northeast, about 186,000 students, did not engage in higher education.

In the Midwest in 2016, 47% of high school graduates attended a four-year institution and 18% a two-year or other type of institution.

But more than 35% of 2016 high school graduates in the Midwest, about 255,000 students, did not engage in higher education.

In the South in 2016, 43% of high school graduates attended a four-year institution and 21% a two-year or other type of institution.

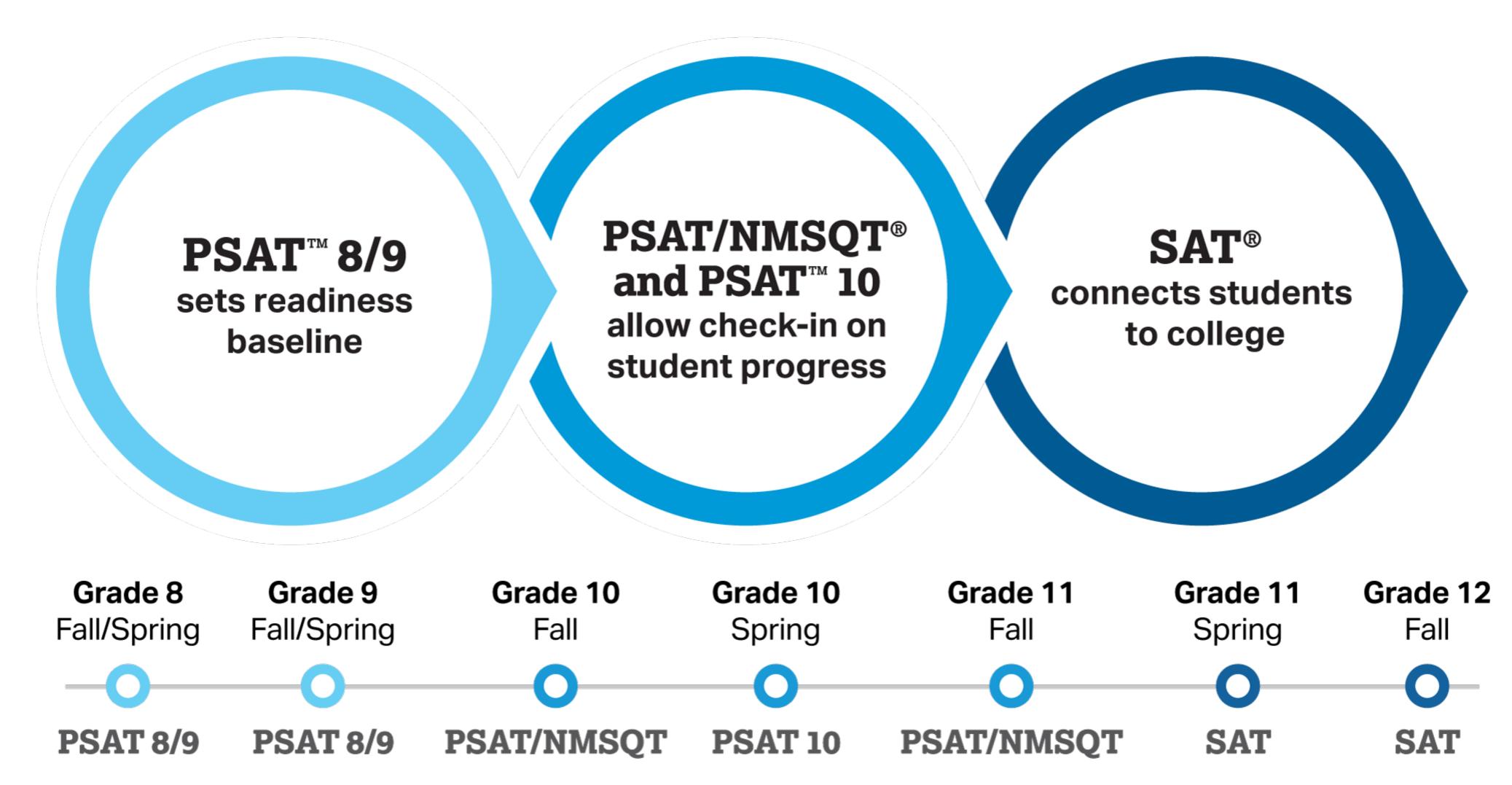
But more than 35% of 2016 high school graduates in the South, about 443,000 students, did not engage in higher education.

In the West in 2016, 35% of high school graduates attended a four-year institution and 23% a two-year or other type of institution.

But more than 41% of 2016 high school graduates in the South, about 339,000 students, did not engage in higher education.



## The SAT Suite of Assessments

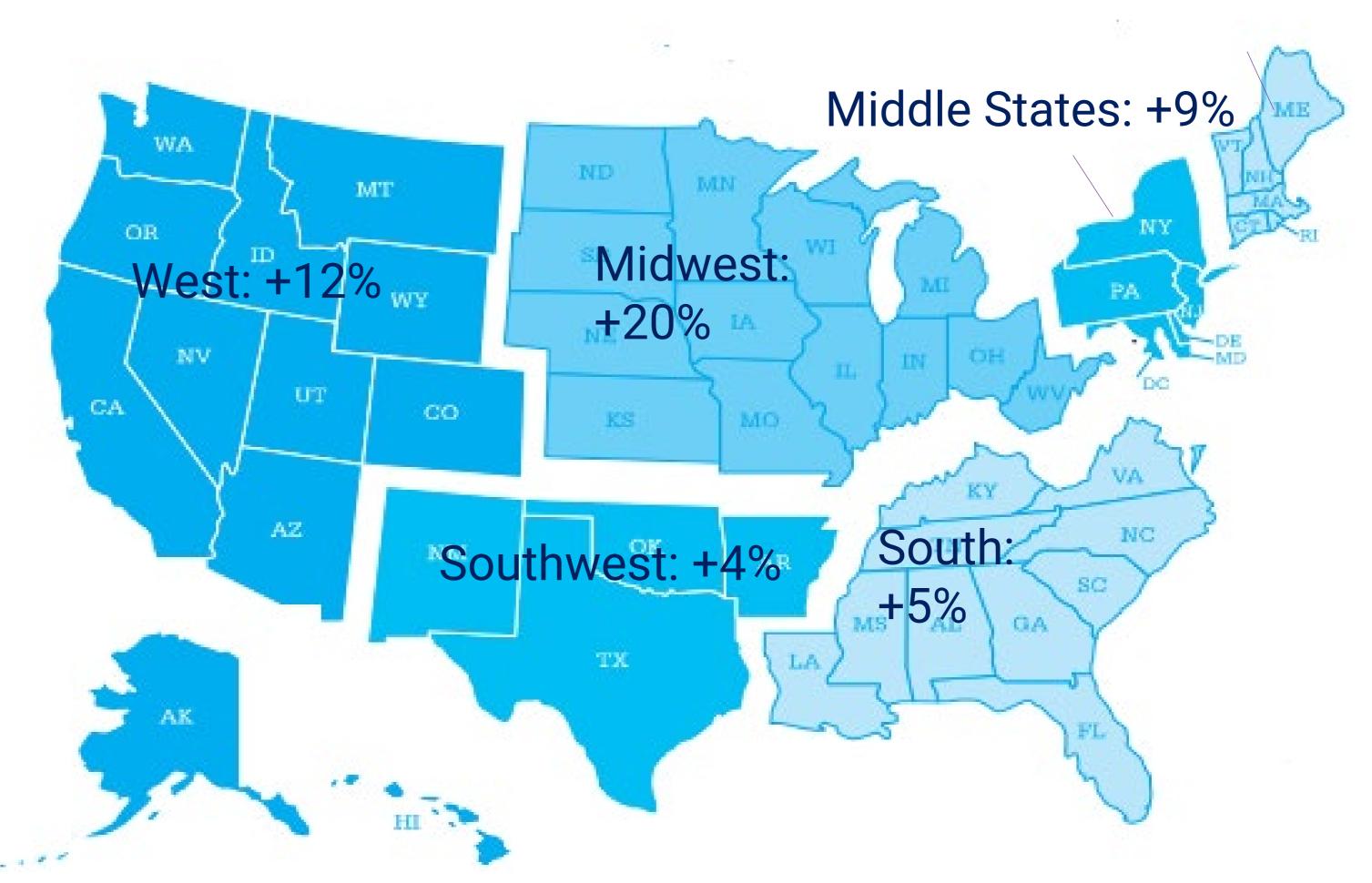


## U.S. Participation

Participation rates increased in every region.

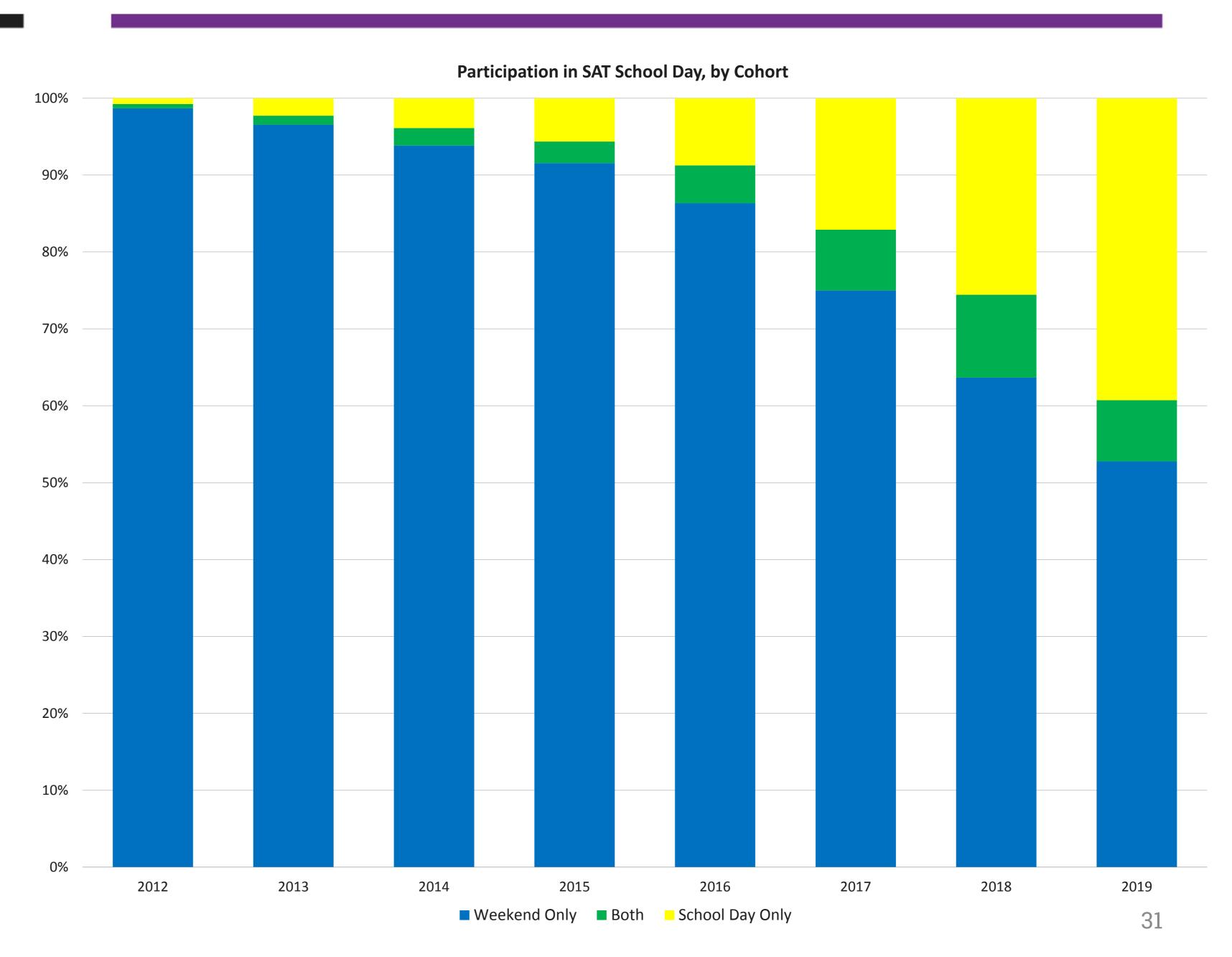
Percentage of students in the class of 2018 taking the SAT by region (and YOY change from class of 2017)

New England: +5%



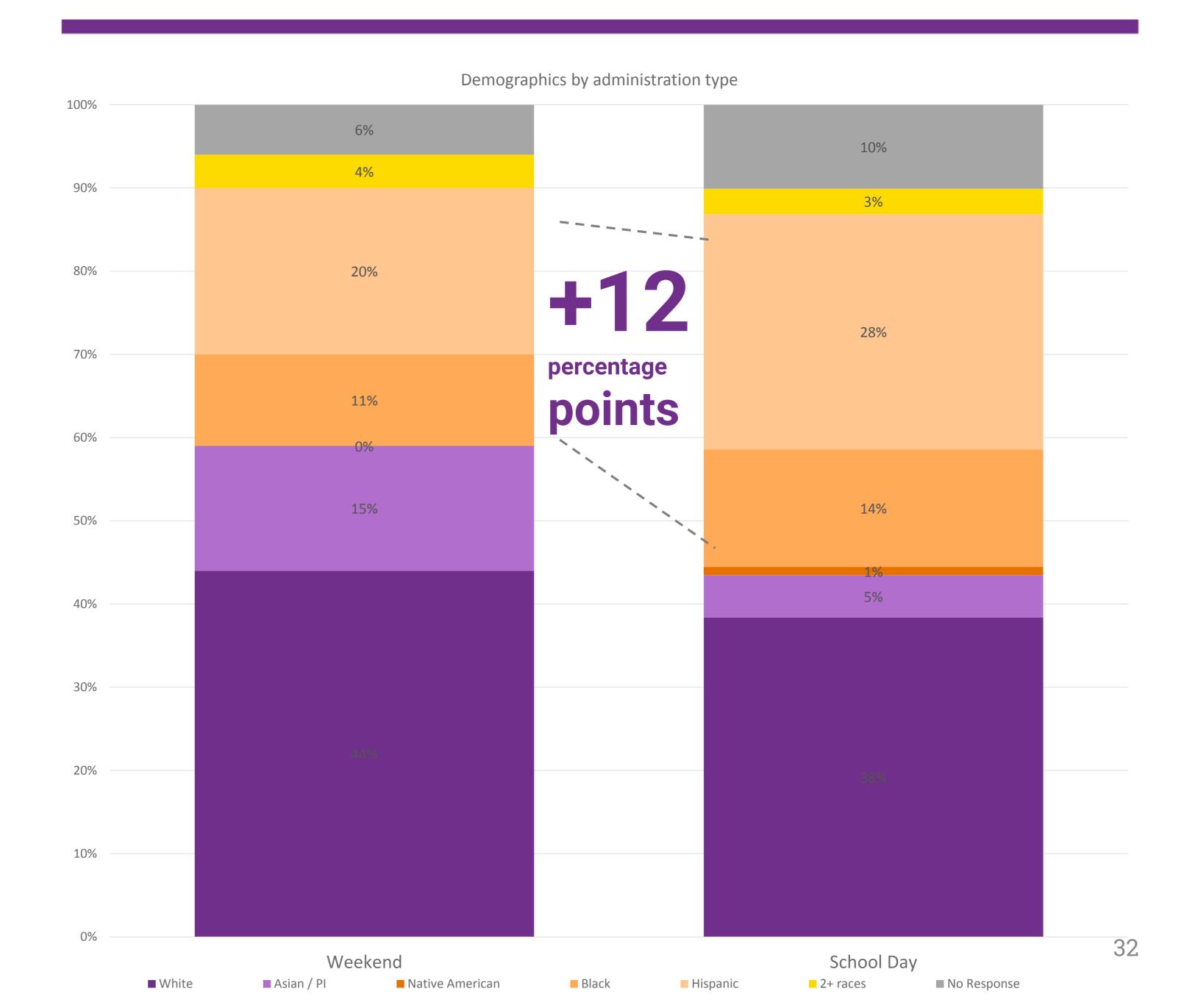
## SAT School Day & Saturday Administrations

Many School Day students retake the SAT.



## Test-Taker Differences

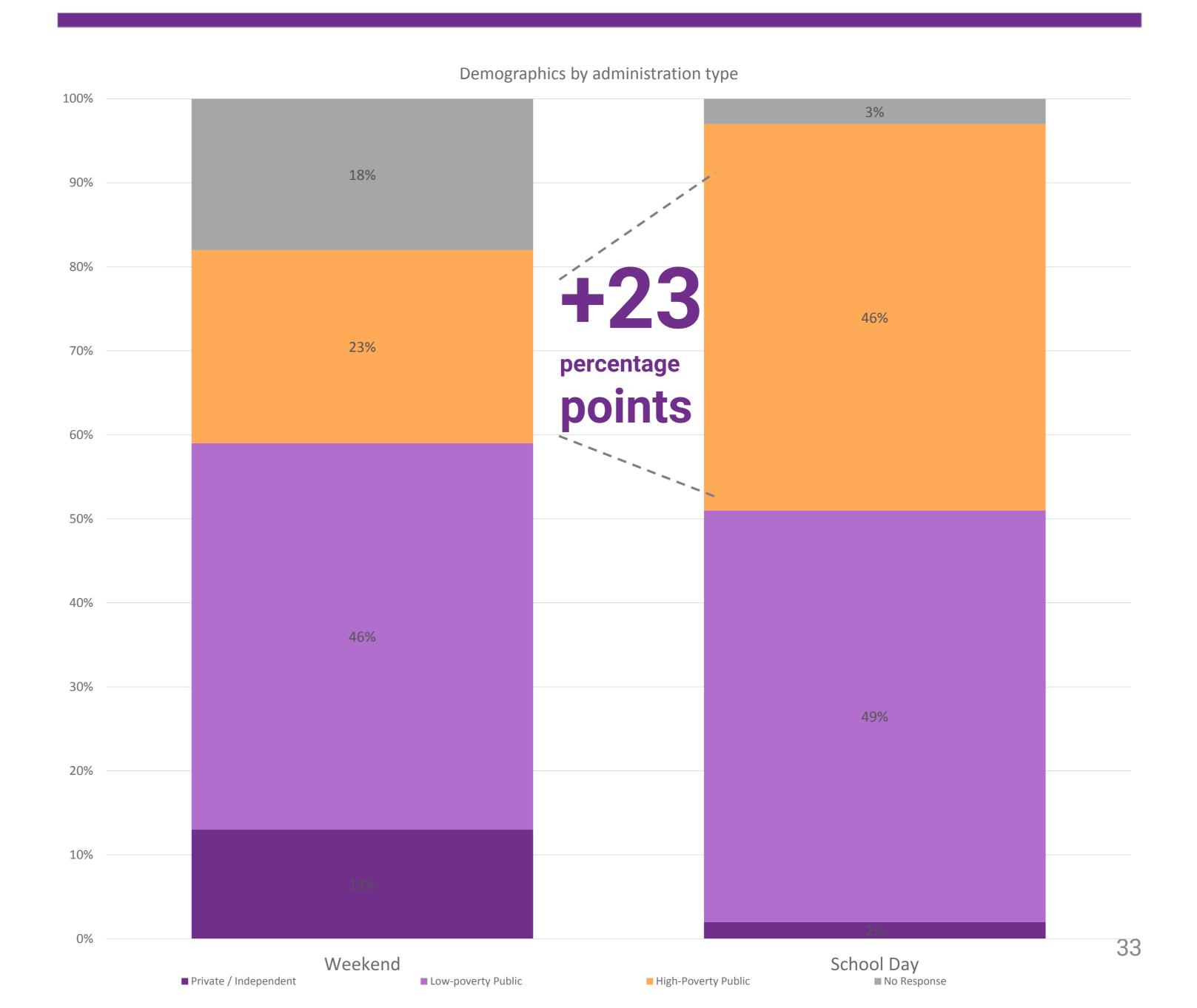
SAT School Day students are much more likely to identify as a student from an underrepresented group





## School Differences

SAT School Day students are much more likely to come from schools with fewer resources.

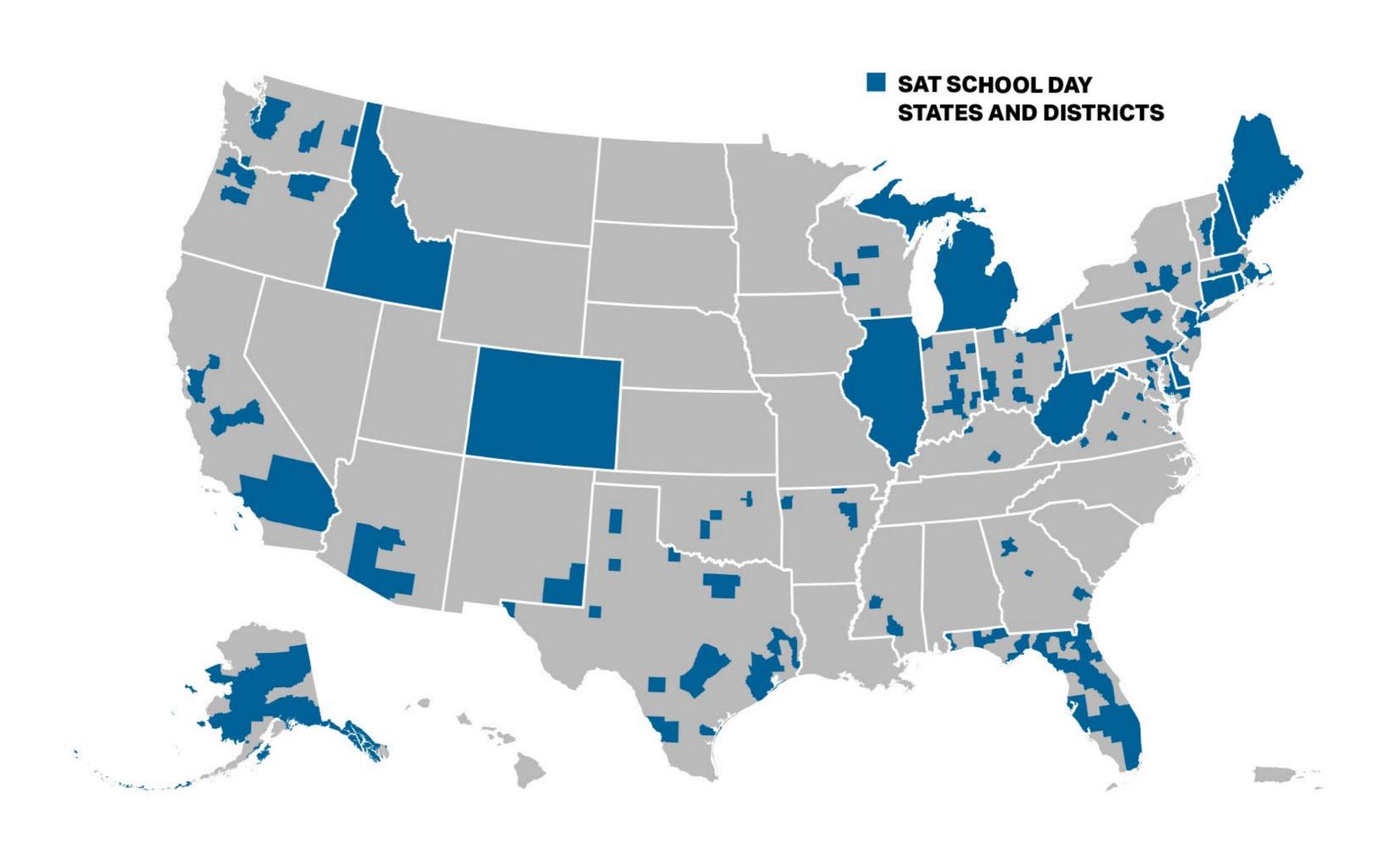




## SAT School Day: States & Districts

#### One Day Makes a Difference

- 3 states and D.C. in 2014-15
- 10 states and D.C. in 2017-18
- Starting in 2017-2018, open to any school that wants to order SAT School Day
- For Higher Education: Expanded opportunity signals more students preparing for college admission.

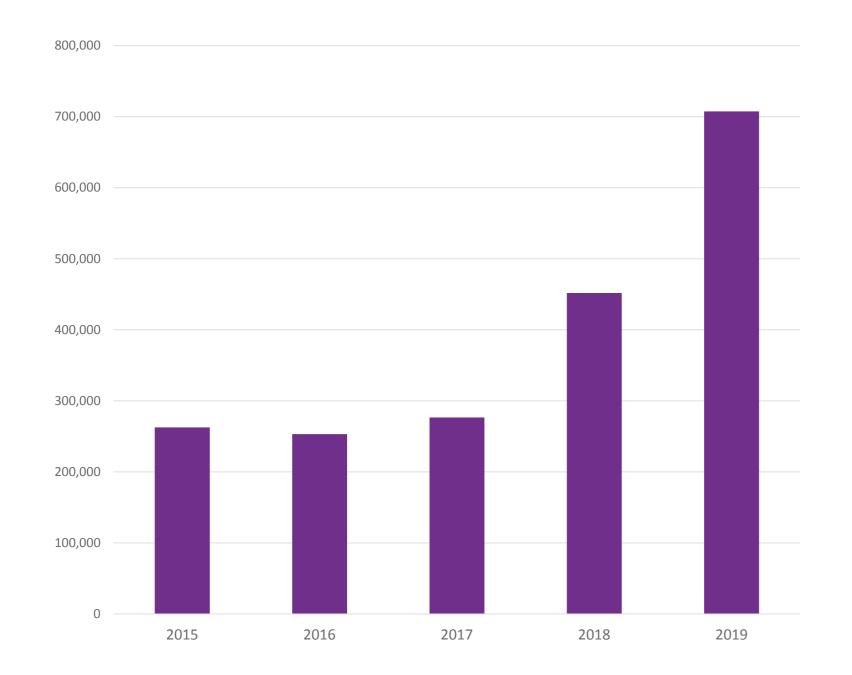


## Score-Sending Behavior

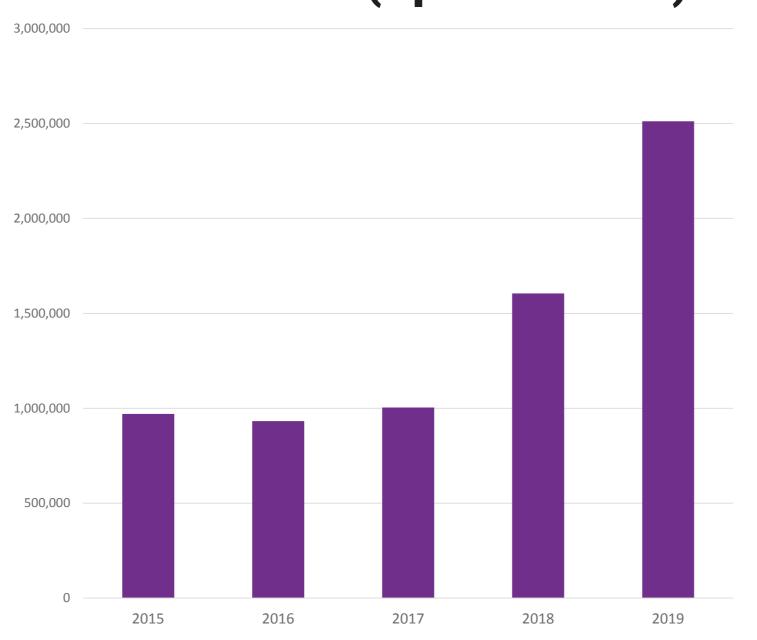
SAT School Day answer sheet and unlimited free score sends for low income students increase number and breadth of sends

- Prior to senior year....
  - More students sending
  - More score reports sent
  - More colleges receiving scores

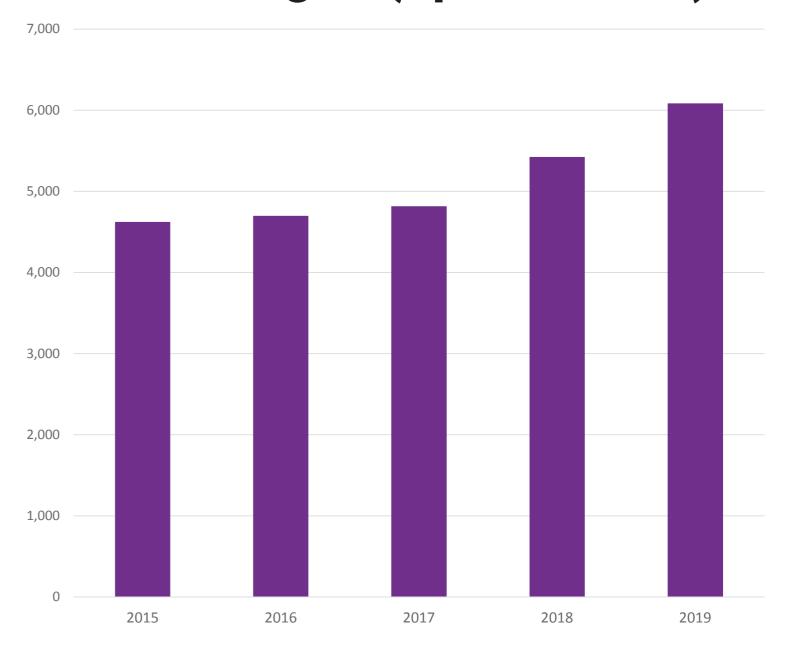
#### Students (up 57% YOY)



#### Scores (up 57% YOY)



#### Colleges (up 12% YOY)



## Grawe: Possible responses can be grouped roughly under three broad descriptions

 The Hard-Nosed Approach



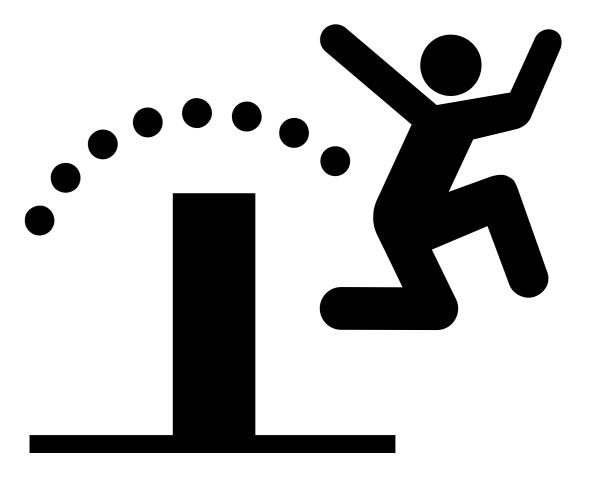
Increasing revenue and/or cutting costs

 The Hopeful Approach



Looking for policies that increase attendance rates above those assumed in the model

The Nimble Approach



Seeks ways to beat the odds by carefully adjusting recruitment efforts to auspicious new student pools

## What does all this mean?

### College participation rates are likely to change

Presence of first-generation students increasing

## The mix of student characteristics will continue to change

- Racial and ethnic composition Students of color will represent a far greater portion of college bound students, and nearly 50% of that growth will be among Hispanic students
- Immigration patterns what will happen?
- Geographic origin

### Demand for affordable college options will grow

 Average family income is going down – need for financial aid support will increase

# Challenges and Opportunities for Higher Education

- Increasing or decreasing # of applicants & enrollees?
  - Recruiting practices targeted, broad-brush or both?
    - Reaching out to growth states
    - Transfer articulation agreements
  - Are approaches consistent with values of new populations?
    - More emphasis on families; personal, multi-lingual publications and media need to be geared to this "new" population of students
    - Early outreach about affordability and fit/tentative aid awards

#### Retention

- Are faculty prepared to teach "new students?"
  - Budgetary and institutional dollars implications
  - Campus cultural shifts
  - Increased demands on institutional funds creative solutions – look for new revenue streams?

## Questions?

Kate Gerbode-Grant, Director, Higher Education Services

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