

Education System Outcomes

Washington Compared to Other States

Mr. Ben Rarick, Executive Director

State rankings: What's available?

➤ **K-12**

- National Assessment of Educational Progress (NAEP)
- Programme for International Student Assessment (PISA)
- SAT & ACT

➤ **Higher Education & Employment**

- Alignment of Higher Ed and Labor Market
- Entering and graduating from college
- Remediation rate

➤ **Other Indicators of Child Well-Being**

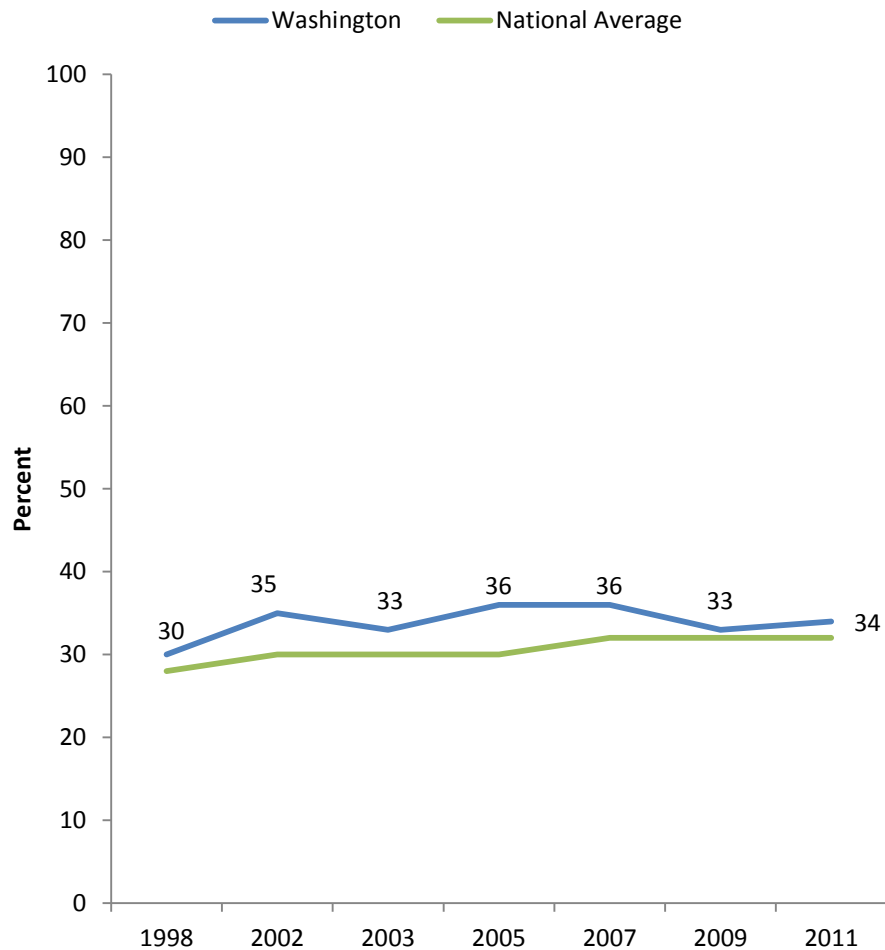
State rankings: How are they valuable?

Rankings often, but not always, convey valuable information to policymakers.

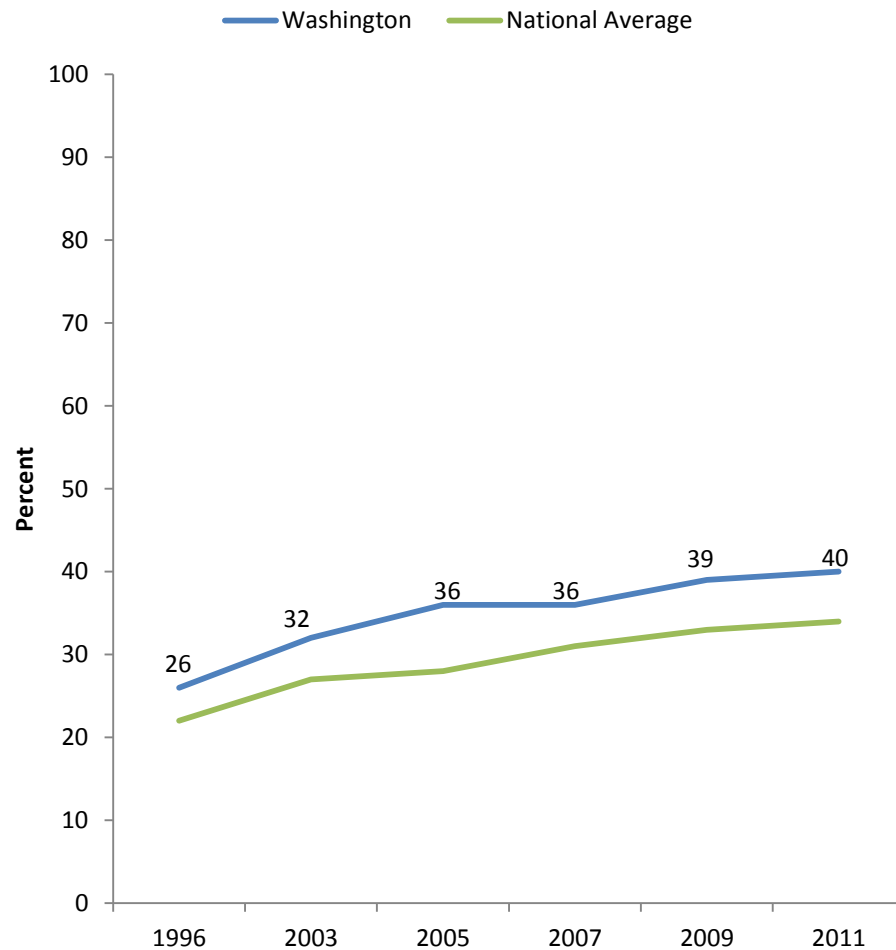
- What are you comparing?
- What's most useful is not always what's available.
- Progress relative to other states is not always progress towards your own goal.

NAEP Achievement – “at or above Proficient”

4th Grade Reading



8th Grade Math



Source: The Nation's Report Card – NCES database

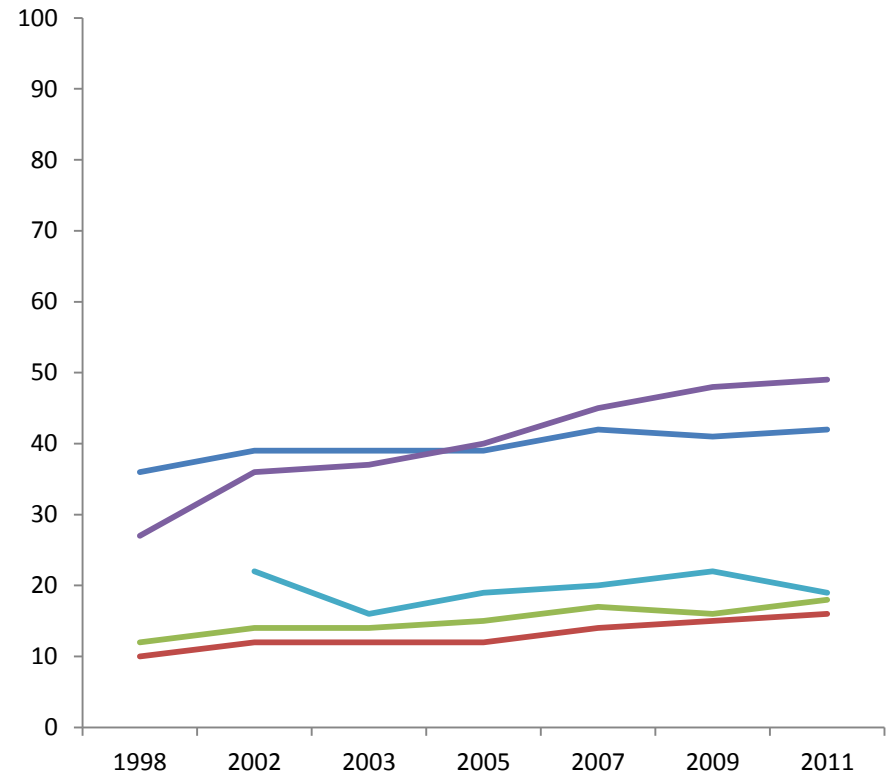
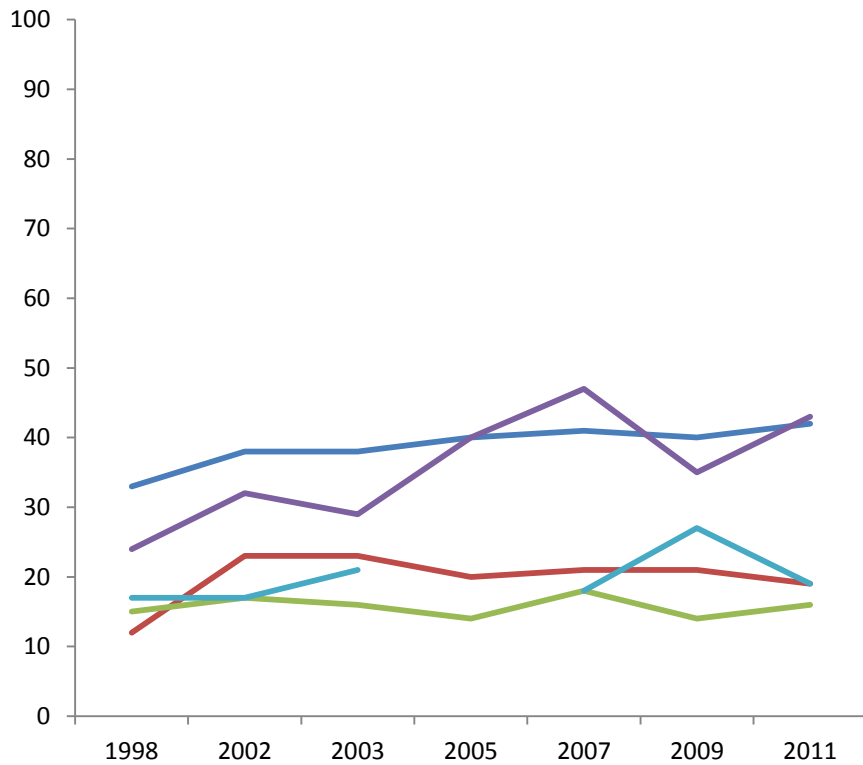
Reading Achievement Gap

Percent at or above proficient on 4th grade NAEP Reading Assessment

Washington

National Public

— White — Black — Hispanic — Asian/Pacific Islander — American Indian



Note: Includes data for all years post-1998 for which state & national data are available.

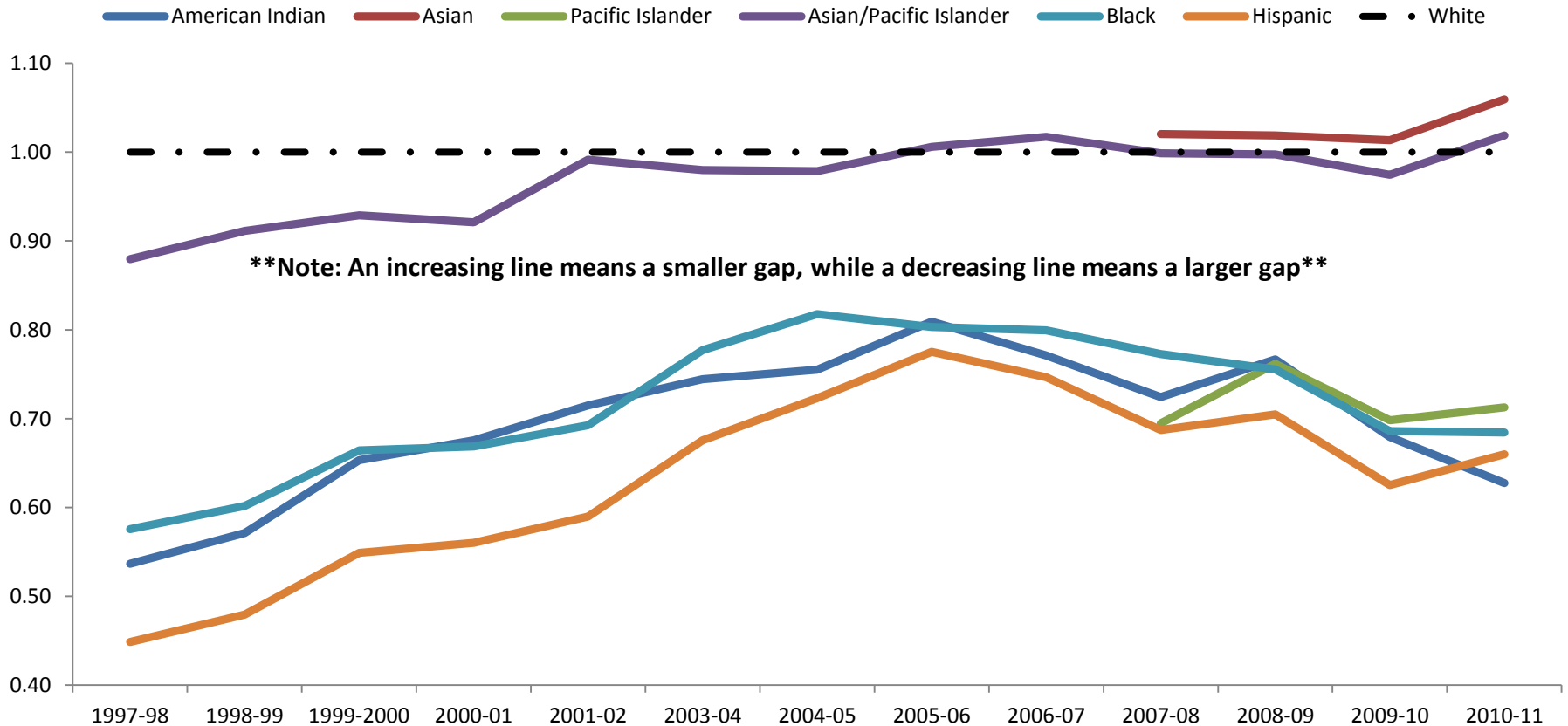
Source: The Nation's Report Card – NCES database

Reading Achievement Gap

Ratio comparing % proficient on 4th grade reading

Ratio Shows Achievement Gap for Students of Color

Numerator: Students of Color
Denominator: Caucasian Students



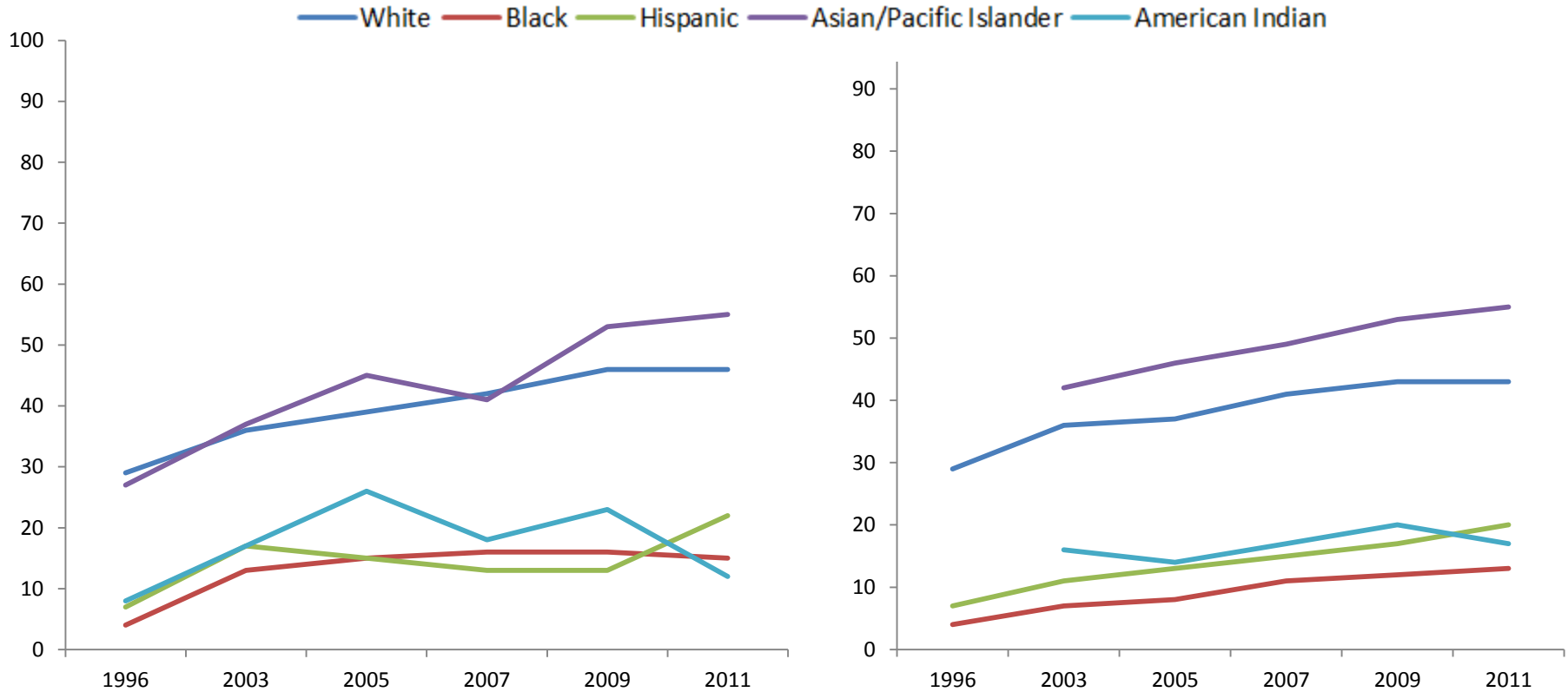
Source: OSPI Washington State Report Card

Math Achievement Gap

Percent at or above proficient on 8th grade NAEP Math Assessment

Washington

National Public



Note: Includes data for all years post-1996 for which state & national data are available.

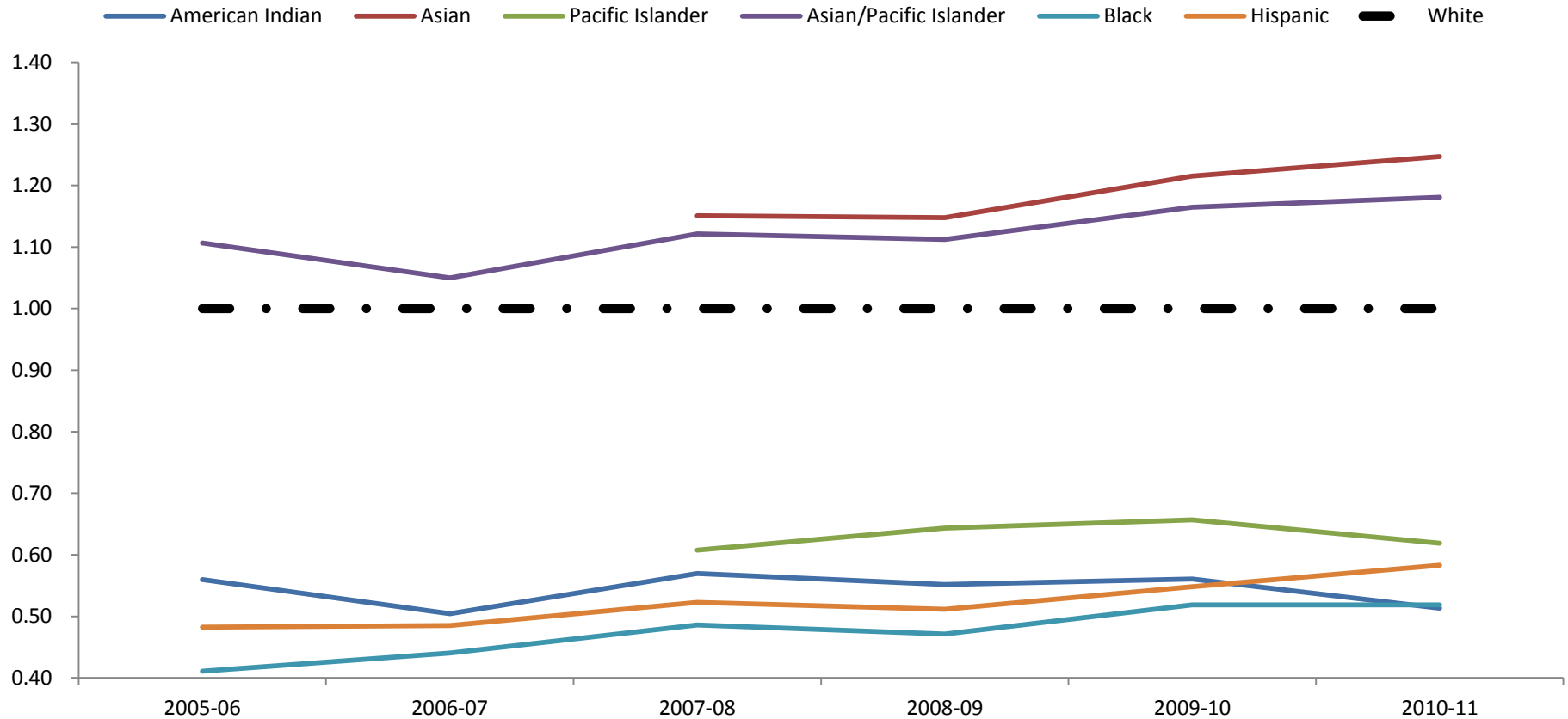
Source: The Nation's Report Card – NCES database

Math Achievement Gap

Ratio comparing % proficient on 8th grade math

Ratio Shows Achievement Gap for Students of Color

Numerator: Students of Color
Denominator: Caucasian Students



Source: OSPI Washington State Report Card

NAEP to PISA Conversion – 2011

Math

19 countries would have outperformed Washington.

- Countries with similar percentages of proficient students were Czech Republic, France, Hungary, Poland, and the U.K.

Reading

10 countries would have outperformed Washington.

- Countries with similar percentages of proficient students were France, Germany, Netherlands, Norway, and Switzerland.

Global Challenge States Ranking	National Ranking
1. Massachusetts	1 st
2. New Jersey	3 rd
3. Connecticut	6 th
4. Minnesota	9 th
5. Colorado	15 th
6. Washington	16 th
7. Virginia	18 th
8. Maryland	21 st
9. North Carolina	32 nd
10. California	45 th

Source: Harvard's Program on Education Policy and Governance: *Globally Challenged: Are U.S. Students Ready to Compete?* 2011

Washington's scores: SAT vs. ACT

(Average composite)



SAT ranked 25th
in the nation in
2011.



ACT ranked 5th in
the nation in 2012.

Are we 5th or 25th?

Sources:

ACT National and State Scores <http://www.act.org/newsroom/data/>

<http://www.commonwealthfoundation.org> (third party source)

Understanding Washington's 2012 ACT scores:

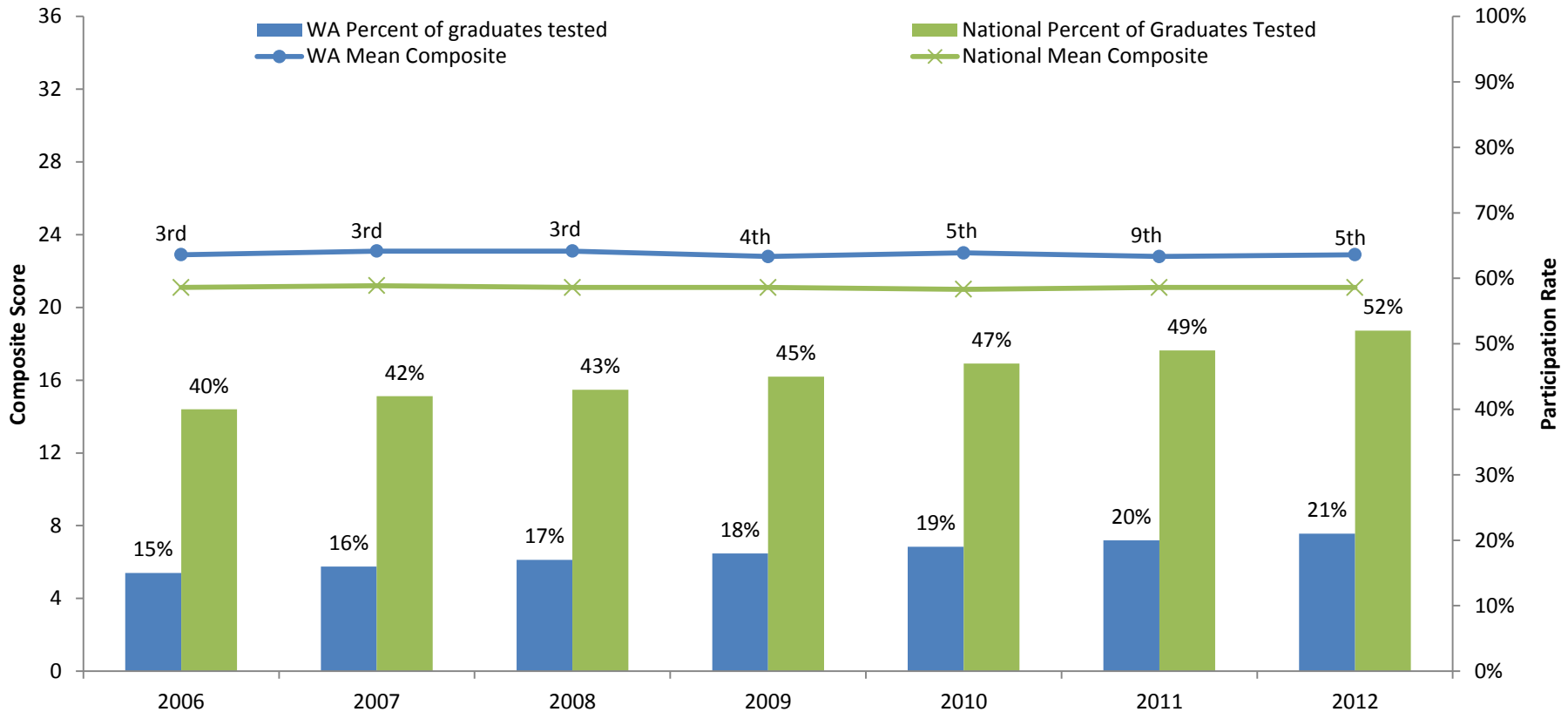
Subject	ACT Benchmark ("college ready")	Washington (mean)	Nation (mean)
English	18	22.3	20.5
Math	21	23.1	21.1
Reading	22	23.3	21.3
Science	24	22.4	20.9
Composite	N/A	22.9	21.1

Science: Above the national average, but not "college ready"

The national average is not "college ready" in Reading & Science.

When comparing states to the nation, participation rates are key.

ACT Composite Scores and Participation Rate

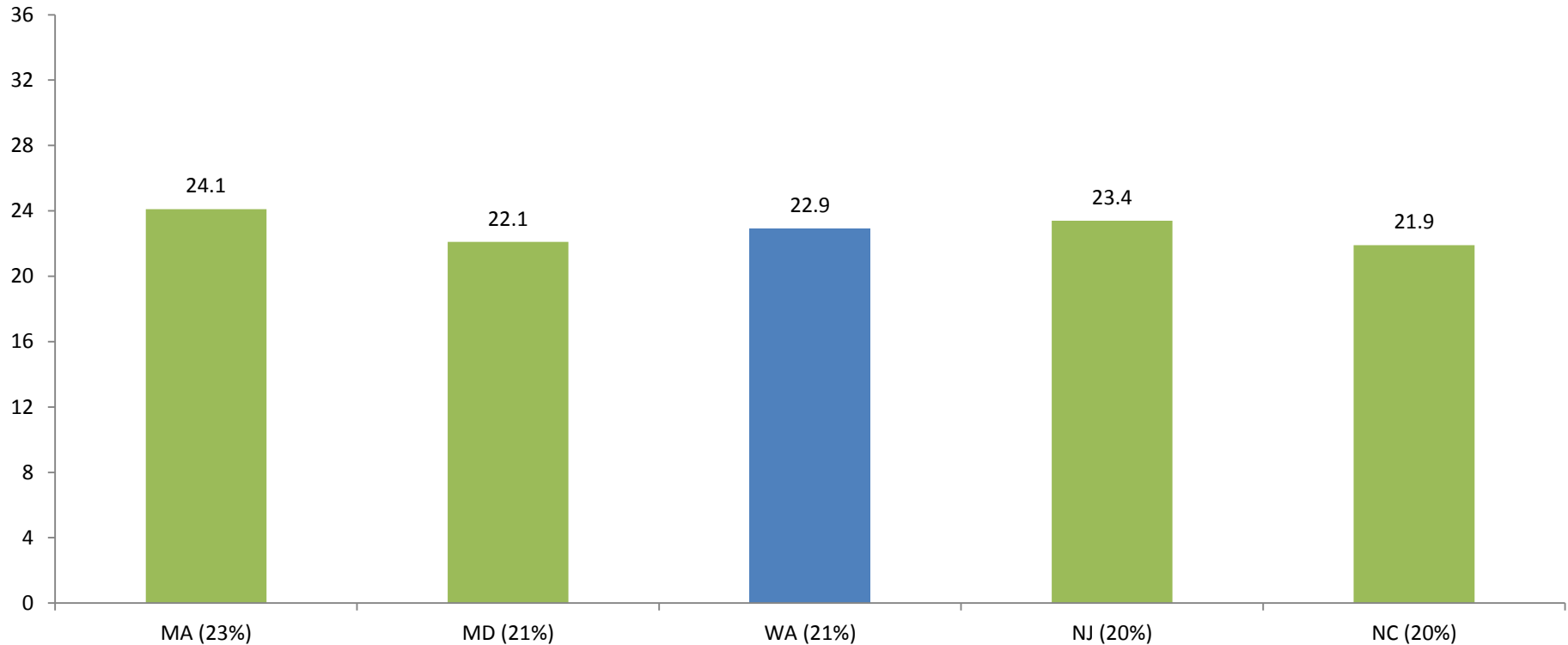


“Washington’s average composite score...was the nation’s fifth highest,”
 Our participation rate ranked 28th in the nation.

Source: OSPI Communications/Media.
 ACT National and State Scores <http://www.act.org/newsroom/data/>

WA Compared to States with Similar Participation

2012 Mean Composite Score

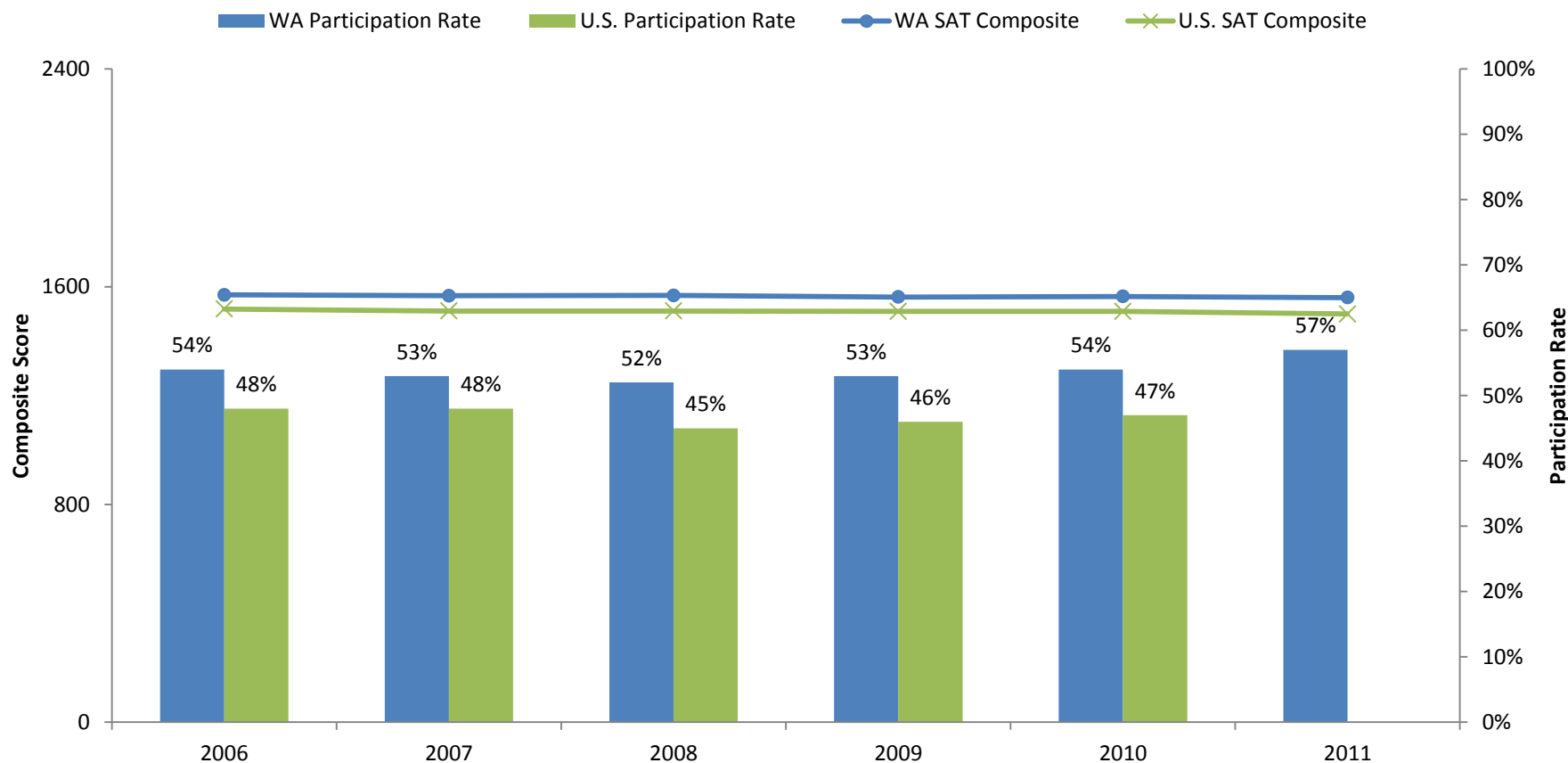


These are states with similar ACT participation rates as Washington. Massachusetts' mean composite score ranked first in the nation.

Source: ACT National and State Scores <http://www.act.org/newsroom/data/>

SAT Composite Scores and Participation Rate

Washington's SAT Scores Have Ranked 25th for 6 Straight Years



Twice as many of our students took the SAT than the ACT.

Sources: College Board

<http://www.commonwealthfoundation.org> (third party source)

Skill Mismatch Index

“The difference between the skill demand and supply in a state.”

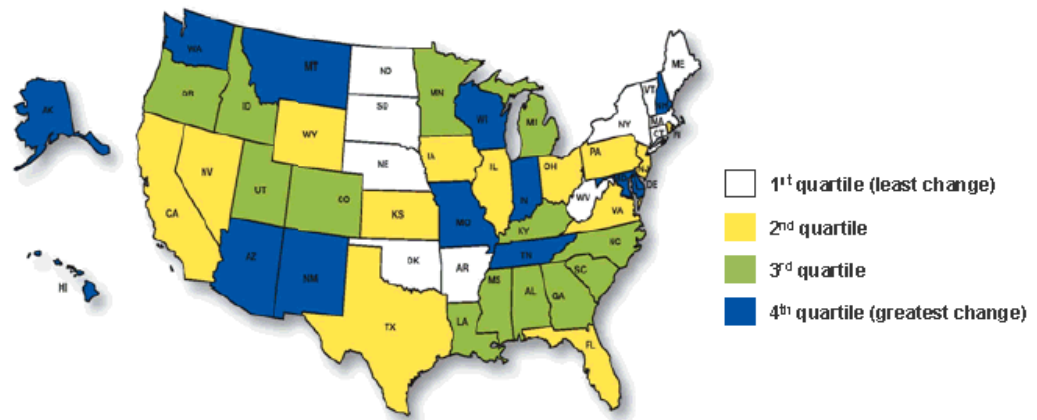
“Washington State experienced a double digit percentage increase in their skill mismatch index in 2010.”

Sources:
Estavao, Marcello and Evridiki Tsounta, “Has the Great Recession Raised U.S. Structural Unemployment?” International Monetary Fund, 2011/Haver Analytics, U.S. Bureau of Labor Statistics, U.S. Census Bureau, author’s calculations.

Lazowska, Ed. “STEM Education in Washington, The Facts of the Matter.”

The mismatch between the skills required for available jobs and the skills people have is growing.

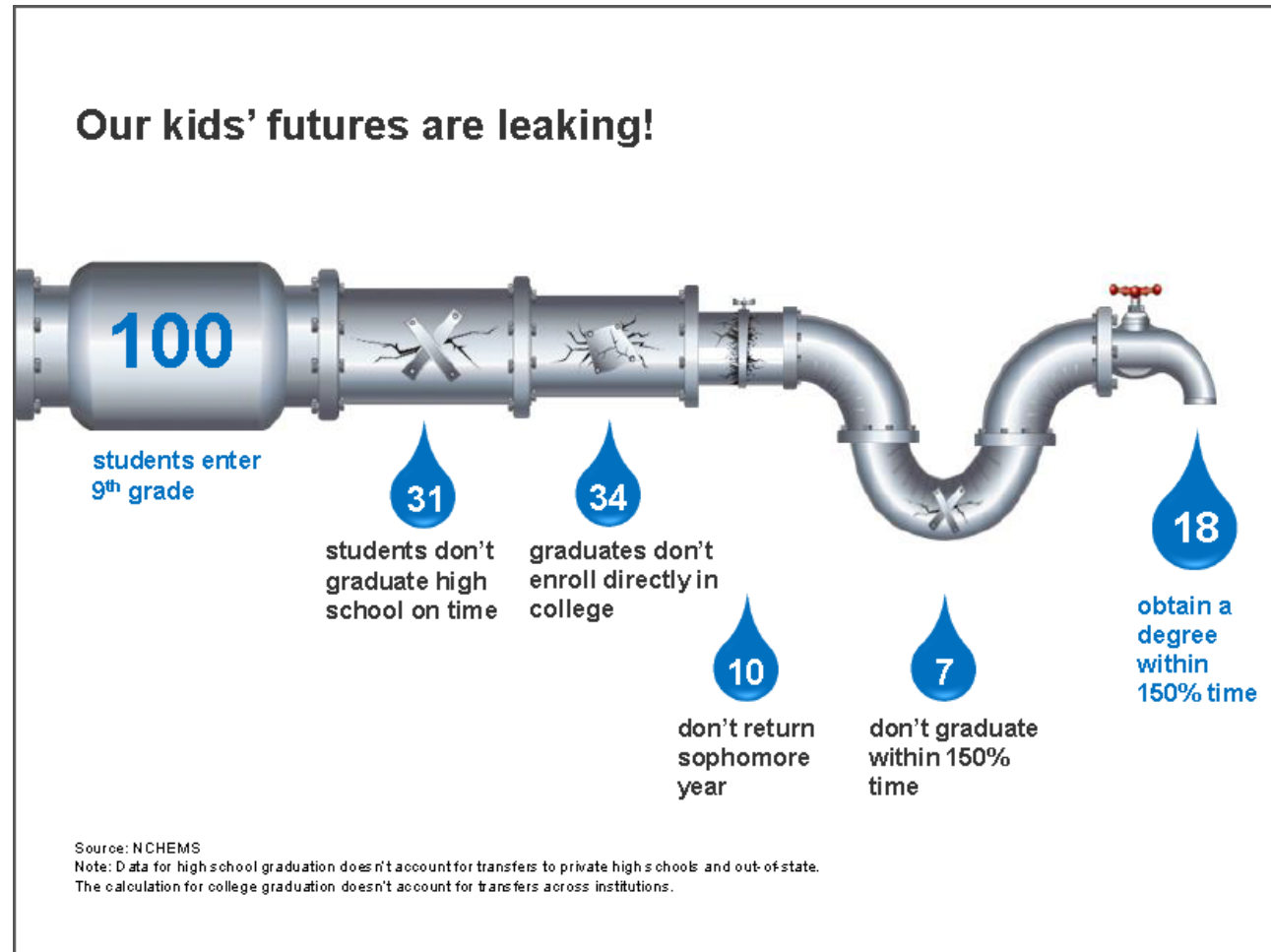
% Change in Skills Mismatch Index by State (2007-2010)



Source: Estavao, Marcello and Evridiki Tsounta, “Has the Great Recession Raised U.S. Structural Unemployment?” International Monetary Fund, 2011/Haver Analytics, U.S. Bureau of Labor Statistics, U.S. Census Bureau, author’s calculations

Washington's Pipeline

In 2008, **29 states** had higher 9th grade to college transition and completion rates than Washington.

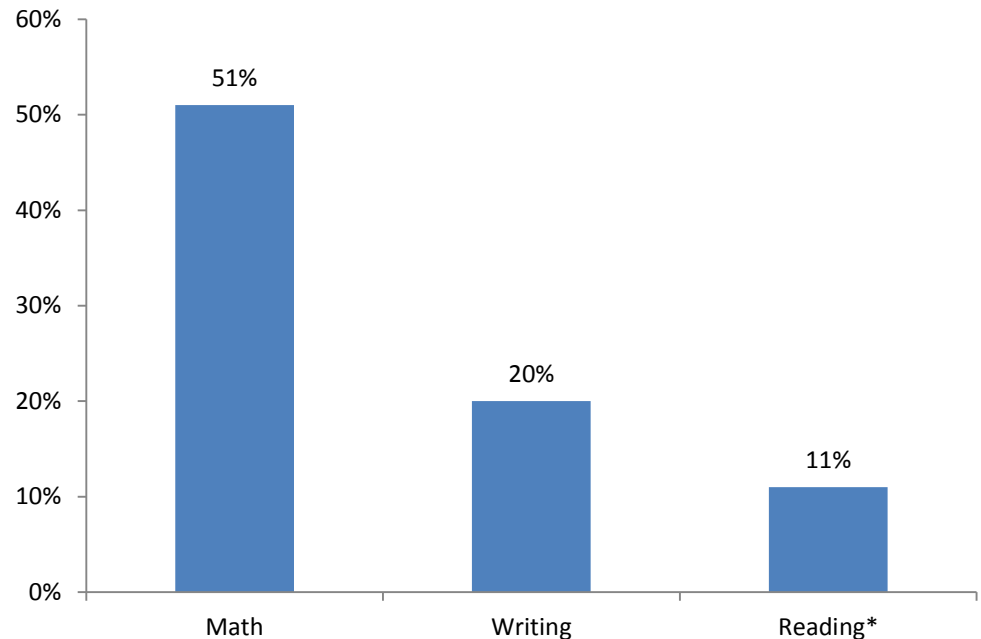


Sources:
Lazowska, Ed. "STEM Education in Washington, The Facts of the Matter."
NCHEMS

College Remediation Rates

57 percent of the 2009 high school graduating class enrolled in pre-college courses in 2009-10.

2009-10 Pre-College Course Enrollment



*Reading includes hybrid reading and writing classes.

System cost for college remediation of recent high school graduates = **\$20,961,402 per year**

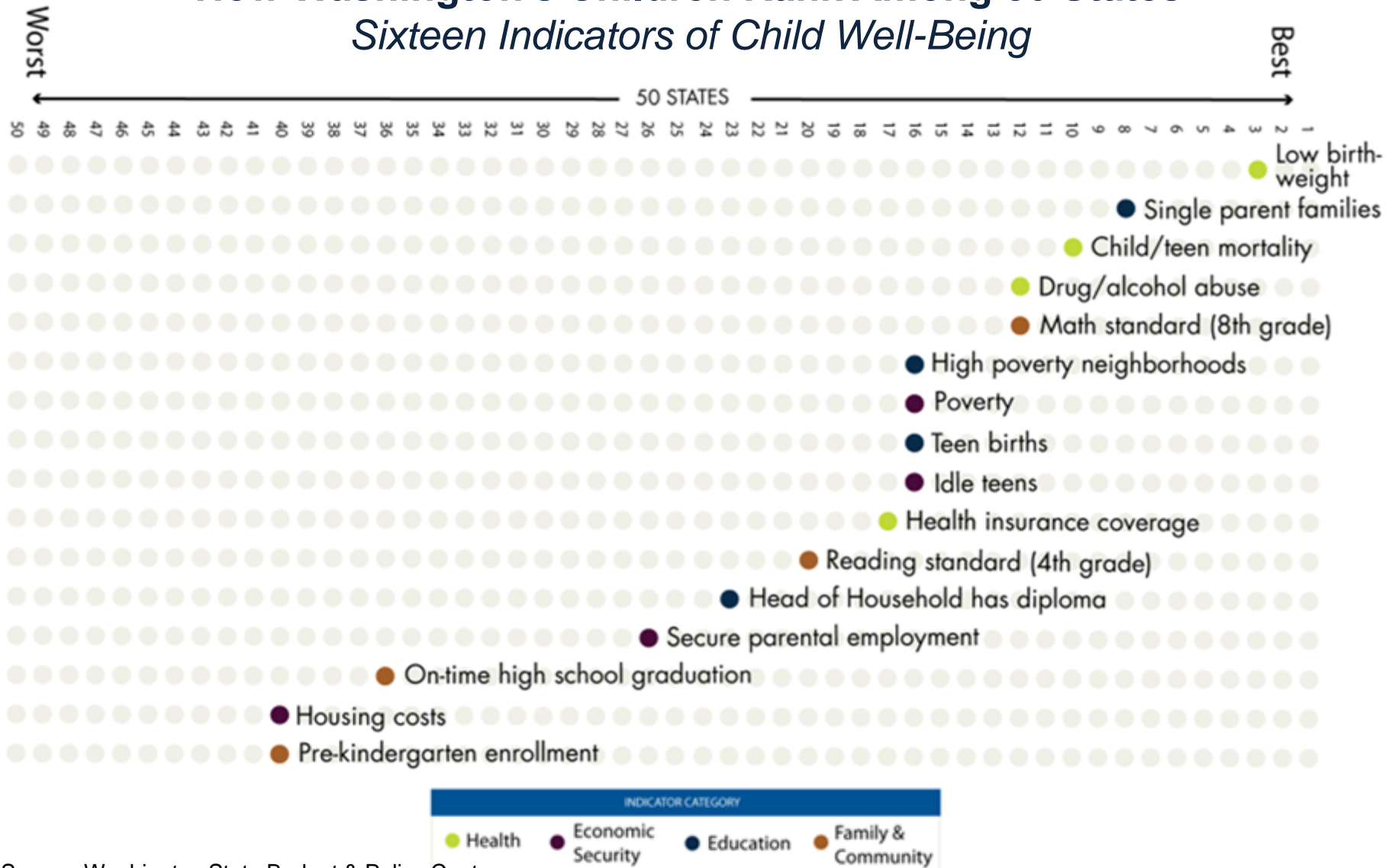
Source: State Board of Community and Technical Colleges: Role of Pre-College (Developmental and Remedial) Education in 2008-09 High School Graduates Who Enroll in Washington Community and Technical Colleges in 2009-10.

Final Thoughts

- When viewing rankings, keep in mind – what's the ultimate goal?
 - Participation rates, socio-economic factors play heavily in the outcome.
 - Some outcomes make more sense to 'rank' than others.
 - On most major indicators, WA performs above the national average – about where you think it would, given income/demographics.
- High school graduation is not always enough.
 - A high percentage of graduating students require remediation at the next level.
 - Significant mismatch in workforce needs versus preparation/training.
- When it comes to system outcomes, aggregate state rankings can mask the 'opportunity gaps' that exist for students of color.
 - American Indian children – concern for the trend line.
 - Widening gaps in some areas.

Appendix A:

How Washington's Children Rank Among 50 States *Sixteen Indicators of Child Well-Being*



Source: Washington State Budget & Policy Center

Appendix B – Reading ratio data

4th Grade Reading	Percent Meeting Standard													
	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
All	47.90%	55.60%	59.10%	65.80%	66.10%	65.60%	79.80%	79.50%	81.20%	76.6%	72.6%	73.6%	67.2%	67.3%
American Indian		33.00%	37.30%	46.90%	48.70%	50.90%	59.40%	63.80%	69.1%	62.7%	56.7%	60.8%	50.4%	46.5%
Asian											79.9%	80.8%	75.2%	78.5%
Pacific Islander											54.4%	60.4%	51.8%	52.8%
Asian/Pacific Islander		54.10%	59.50%	66.70%	66.40%	70.60%	78.20%	82.70%	85.9%	82.7%	78.2%	79.1%	72.3%	75.5%
Black		35.40%	39.30%	47.70%	48.20%	49.30%	62.00%	69.10%	68.6%	65.0%	60.5%	59.9%	50.9%	50.7%
Hispanic		27.60%	31.30%	39.40%	40.40%	42.00%	53.90%	61.10%	66.2%	60.7%	53.8%	55.9%	46.4%	48.9%
White		61.50%	65.30%	71.80%	72.10%	71.20%	79.80%	84.50%	85.4%	81.3%	78.3%	79.3%	74.2%	74.1%
Two or More Races														70.5%

4th Grade Reading	Ratio: Percent Students of Color Meeting Standard divided by Percent Caucasian Students Meeting Standard													
	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
American Indian		0.54	0.57	0.65	0.68	0.71	0.74	0.76	0.81	0.77	0.72	0.77	0.68	0.63
Asian		0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	1.02	1.02	1.01	1.06
Pacific Islander		0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	0.69	0.76	0.70	0.71
Asian/Pacific Islander		0.88	0.91	0.93	0.92	0.99	0.98	0.98	1.01	1.02	1.00	1.00	0.97	1.02
Black		0.58	0.60	0.66	0.67	0.69	0.78	0.82	0.80	0.80	0.77	0.76	0.69	0.68
Hispanic		0.45	0.48	0.55	0.56	0.59	0.68	0.72	0.78	0.75	0.69	0.70	0.63	0.66
White		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Two or More Races		0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	-	-	0.95

Appendix C – Math ratio data

8th Grade Math MSP	Percent Meeting Standard					
	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
American Indian	30.5%	28.3%	32.8%	31.4%	32.0%	28.7%
Asian			66.3%	65.3%	69.4%	69.7%
Pacific Islander			35.0%	36.6%	37.5%	34.6%
Asian/Pacific Islander	60.3%	58.9%	64.6%	63.3%	66.5%	66.0%
Black	22.4%	24.7%	28.0%	26.8%	29.6%	29.0%
Hispanic	26.3%	27.2%	30.1%	29.1%	31.3%	32.6%
White	54.5%	56.1%	57.6%	56.9%	57.1%	55.9%
Two or More Races						50.1%

8th Grade Math MSP	Ratio: Percent Students of Color Meeting Standard divided by Percent Caucasian Students Meeting Standard					
	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
American Indian	0.56	0.50	0.57	0.55	0.56	0.51
Asian	-	-	1.15	1.15	1.22	1.25
Pacific Islander	-	-	0.61	0.64	0.66	0.62
Asian/Pacific Islander	1.11	1.05	1.12	1.11	1.16	1.18
Black	0.41	0.44	0.49	0.47	0.52	0.52
Hispanic	0.48	0.48	0.52	0.51	0.55	0.58
White	1.00	1.00	1.00	1.00	1.00	1.00
Two or More Races	-	-	-	-	-	0.90