



The Washington State  
**BOARD OF EDUCATION**

**STATEWIDE INDICATORS OF THE EDUCATIONAL SYSTEM HEALTH**  
**SUPPLEMENTAL DATA TABLES**

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**2020 Version**



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Office of the Superintendent of Public Instruction (OSPI)

Workforce Training and Education Coordinating Board (WTECB)

Education Opportunity Gap Oversight and Accountability Committee (EOGOAC)

Washington Student Achievement Council (WSAC)

Washington State Board of Community and Technical Colleges (SBCTC)

Washington State Charter School Commission (CSC)

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Education Research and Data Center (ERDC)

Professional Educator Standards Board (PESB)

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## Section 1: Statewide Indicators of the Educational System Health

With assistance from partner agencies, the Washington State Board of Education (SBE) is charged with establishing goals and reporting on the goal attainment for the statewide indicators of educational system health under [RCW 28A.150.550](#).

Summary of the Statewide Indicators and the Measures for the National and Peer State Comparisons

RCW 28A.150.550 Indicator	Data Sources
<p><b>Kindergartener Characteristics:</b> Percentage of students who demonstrate the characteristics of entering kindergarteners in all six domains of the Washington Kindergarten Inventory of Developing Skills (WaKIDS).</p>	<p>WaKIDS data from the Washington Report Card.  <b>National and peer state comparison</b> data from the American Community Survey and the National Center for Educational Statistics.</p>
<p><b>4<sup>th</sup> Grade Reading:</b> Percentage of students Meeting or Exceeding standard on the 4<sup>th</sup> Grade statewide reading assessment.</p>	<p>Smarter Balanced Assessment results from the Washington Report Card.  <b>National and peer state comparison</b> data from the 2019 NAEP.</p>
<p><b>8<sup>th</sup> Grade Math:</b> Percentage of students Meeting or Exceeding standard on the 8<sup>th</sup> Grade statewide mathematics assessment.</p>	<p>Smarter Balanced Assessment results from the Washington Report Card.  <b>National and peer state comparison</b> data from the 2019 NAEP.</p>
<p><b>High School Graduation:</b> The percentage of students graduating using the 4-Year adjusted cohort graduation rate (ACGR).</p>	<p>Graduation rate data from the Washington Report Card.  <b>National and peer state comparison</b> data from the Digest of Educational Statistics from the National Center for Educational Statistics and state report cards.</p>
<p><b>Quality of High School Diploma:</b> Percentage of students (high school graduates) enrolled in precollege or remedial courses in public post-secondary institutions.</p>	<p>Data file provided by the Washington Educational Research and Data Center.  <b>National and peer state comparison</b> data from Complete College America is incomplete and have not been fully integrated into the analysis.</p>
<p><b>Post-Secondary Attainment and Workforce:</b> Percentage of high school graduates enrolled in post-secondary education, training or are employed in the 2<sup>nd</sup> and 4<sup>th</sup> quarters after graduation.</p>	<p>Data file provided by the Washington Educational Research and Data Center and a separate analysis conducted by the Educational Research and Data Center.  <b>National and peer state comparison</b> have not yet been integrated into this analysis.</p>

## **KINDERGARTNER CHARACTERISTICS**

The Kindergarten Characteristics indicator is measured through the [Washington Kindergarten Inventory of Developmental Skills](#) (WaKIDS), and is the percentage of children demonstrating the characteristics of entering kindergarteners in the six domains of the WaKIDS. The WaKIDS assesses kindergartener characteristics on social-emotional, physical, cognitive, language, literacy, and mathematics domains.

While less than one-half of all incoming kindergarteners are kindergarten ready per the WaKIDS, that number is considerably lower for young children of Native American, Black, Hispanic, and Pacific Islander race/ethnicities (Figure 1.1).

Figure 1.1: shows the recent performance for the Kindergarten Readiness indicator by student group.

<b>Kindergartener Characteristics Demonstrating All Six WaKIDS Domains</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>
<b>All Students</b>	<b>45.6</b>	<b>46.7</b>	<b>45.7</b>	<b>51.5</b>
American Indian / Alaskan Native	31.4	30.5	30.1	34.6
Asian	55.4	56.9	56.9	63.0
Black / African American	40.7	40.0	40.0	44.1
Hispanic / Latinx	30.1	30.9	29.6	35.4
Pacific Islander	27.0	29.1	30.8	33.1
White	52.1	52.7	51.4	57.5
Two or More	49.9	50.7	50.7	56.0
Limited English	29.4	30.7	30.0	35.8
Low-Income*	31.3	31.5	30.5	35.4
Students with Disabilities*	18.4	18.5	18.0	22.4

\*Note: low-income refers to the students qualifying for the Free and Reduced Price Lunch program and students with a disability refers to students receiving special education per an individualized educational plan or a section 504 plan. Updated from Washington Report Card.

## 4<sup>TH</sup> GRADE READING

The indicator is the percentage of 4<sup>th</sup> grade students meeting or exceeding standard on the 4<sup>th</sup> grade English/language arts assessment developed by the Smarter Balanced Assessment Consortium (SBA).

The performance of all student groups are mostly unchanged or slightly declined from 2018 to 2019 (Figure 1.2).

Figure 1.2: shows the performance on the 4<sup>th</sup> grade ELA Indicator by student group.

4 <sup>th</sup> Grade ELA	2015-16	2016-17	2017-18	2018-19	2019-20
<b>All Students</b>	<b>57.0</b>	<b>55.2</b>	<b>57.3</b>	<b>56.9</b>	<b>N.D.</b>
American Indian / Alaskan Native	29.9	27.5	28.1	26.9	N.D.
Asian	75.1	74.1	76.0	75.1	N.D.
Black / African American	38.7	35.7	37.3	40.3	N.D.
Hispanic / Latinx	38.8	36.9	39.6	39.3	N.D.
Native Hawaiian / Pacific Islander	36.1	32.5	35.9	33.6	N.D.
White	65.0	63.1	65.0	64.6	N.D.
Two or More Races	58.5	58.9	59.8	59.7	N.D.
Limited English	20.6	15.5	16.6	16.7	N.D.
Low-Income*	40.2	37.9	41.2	41.3	N.D.
Students with a Disability*	21.8	20.1	23.6	23.7	N.D.

\*Note: low-income refers to the students qualifying for the Free and Reduced Price Lunch program and students with a disability refers to students receiving special education per an individualized educational plan or a section 504 plan. Updated from Washington Report Card.

## 8<sup>TH</sup> GRADE MATH

The indicator is the percentage of 8<sup>th</sup> grade students meeting or exceeding standard on the 8<sup>th</sup> grade Smarter Balanced Assessment in math.

The performance for all student groups are mostly unchanged or slightly declined from 2018 to 2019 (Figure 1.3).

Figure 1.3: Performance on the 8<sup>th</sup> grade math indicator by ESSA student group.

8 <sup>th</sup> Grade SBA Math	2015-16	2016-17	2017-18	2018-19	2019-20
<b>All Students</b>	<b>47.8</b>	<b>46.6</b>	<b>47.5</b>	<b>45.8</b>	<b>N.D.</b>
American Indian / Alaskan Native	22.0	23.6	21.0	18.0	N.D.
Asian	74.2	73.5	72.9	72.9	N.D.
Black / African American	27.0	26.5	25.3	23.6	N.D.
Hispanic / Latinx	29.6	30.0	30.1	28.3	N.D.
Native Hawaiian / Pacific Islander	26.4	22.4	25.9	21.4	N.D.
White	53.6	53.6	53.7	52.4	N.D.
Two or More Races	48.8	48.1	48.9	46.0	N.D.
Limited English	11.6	10.6	10.2	10.3	N.D.
Low-Income*	30.4	29.8	30.3	30.4	N.D.
Students with a Disability*	8.4	8.6	8.6	8.7	N.D.

\*Note: low-income refers to the students qualifying for the Free and Reduced Price Lunch program and students with a disability refers to students receiving special education per an individualized educational plan or a section 504 plan. Updated from Washington Report Card.

## HIGH SCHOOL GRADUATION RATE

The indicator is the official 4-year graduation rate following the Adjusted Cohort methodology utilized by all of the United States. The class of 2020 four-year adjusted cohort graduation rate (ACGR) for Washington was approximately 82.9 percent, which was two percentage points higher the class of 2019 (Figure 1.4).

Table 1.4: Shows the Washington 4-Year Adjusted Cohort Graduation Rate by ESSA student group.

<b>4-Yr Adjusted Cohort Graduation Rate</b>	<b>Class of 2015-16</b>	<b>Class of 2016-17</b>	<b>Class of 2017-18</b>	<b>Class of 2018-19</b>	<b>Class of 2019-20</b>
<b>All Students</b>	<b>79.1</b>	<b>79.3</b>	<b>80.9</b>	<b>80.9</b>	<b>82.9</b>
American Indian / Alaskan Native	60.6	60.3	60.4	61.7	69.8
Asian	88.6	87.5	90.0	90.4	91.1
Black / African American	70.7	71.5	74.4	73.6	76.3
Hispanic / Latinx	72.3	72.7	75.2	75.7	77.7
Native Hawaiian / Pacific Islander	68.2	68.1	74.0	74.4	77.3
White	81.5	81.9	82.9	82.8	84.7
Two or More Races	77.9	79.7	80.7	81.2	83.9
Limited English	57.6	57.8	64.1	62.4	68.4
Low-Income*	69.4	70.0	72.1	72.1	75.1
Students with a Disability*	58.1	59.4	61.7	62.1	64.5

\*Note: low-income refers to the students qualifying for the Free and Reduced Price Lunch program and students with a disability refers to students receiving special education per an individualized educational plan or a section 504 plan. Updated from Washington Report Card.

## **READINESS FOR COLLEGE COURSEWORK**

The indicator is the percentage of high school graduates who bypass developmental (or remedial) courses in college during the year immediately following graduation from high school. The measure includes only the recently graduated high school students who were enrolled in higher education and who did not enroll in non-credit bearing or developmental English or math courses in either the fall or spring quarters. In other words, the denominator used here is a subset of a subset, a measure derived from the students who graduate high school and enroll in higher education.

Interpreting the measure is complicated by the fact that each higher education institution establishes a policy for placement into college level coursework and there is variation in terms of assessments used and cut scores for college level placement. As a result, two students who are similarly prepared in high school may be placed differently depending on where they attend college. This complication is not limited to Washington, as all 50 states are potentially susceptible to the application of unique placement policies which complicates the national comparison.

For the All Students group and all other all student groups, the percentage of students bypassing non-credit bearing or developmental courses increased a little or was unchanged from the prior year (Figure 1.5).

Table 1.5: Shows the annual steps by student group and other data elements for the Readiness for College Coursework indicator.

<b>Readiness for College Coursework</b>	<b>2013-14 Graduates</b>	<b>2014-15 Graduates</b>	<b>2015-16 Graduates</b>	<b>2016-17 Graduates</b>
<b>All Students</b>	<b>77.1</b>	<b>77.7</b>	<b>78.7</b>	<b>81.9</b>
American Indian / Alaskan Native	71.0	68.5	73.1	71.7
Asian	84.4	84.5	86.1	88.8
Black / African American	67.8	68.6	70.1	74.1
Hispanic / Latinx	60.6	60.8	63.3	68.7
Native Hawaiian / Pacific Islander	74.3	73.5	73.3	80.1
White	79.9	81.1	81.7	84.7
Two or More Races	78.4	78.1	80.4	84.5
Limited English	48.9	46.4	52.0	54.8
Low-Income*	65.7	66.2	67.8	72.5
Students with a Disability*	51.3	55.4	53.6	58.9

\*Note: low-income refers to the students qualifying for the Free and Reduced Price Lunch program and students with a disability refers to students receiving special education per an individualized educational plan or a section 504 plan. Updated from Washington Report Card.

## POST-SECONDARY ATTAINMENT

The percentage of recent high school graduates enrolled in post-secondary education, training or are employed in the 2<sup>nd</sup> quarter and the percentage of recent high school graduates enrolled in post-secondary education, training or are employed in the 4<sup>th</sup> quarter after graduation is required in the authorizing legislation (Table 1.6 and Table 1.7). As with the other statewide indicators, the postsecondary engagement measure was reset and applies an endpoint goal of 90 percent to be attained in 10 years.

Table 1.6: shows the results of the Post-Secondary Engagement indicator by year for the 2<sup>nd</sup> quarter.

<b>2<sup>nd</sup> Quarter Postsecondary Engagement</b>	<b>2013-14 Graduates</b>	<b>2014-15 Graduates</b>	<b>2015-16 Graduates</b>	<b>2016-17 Graduates</b>
<b>All Students</b>	<b>80.2</b>	<b>80.2</b>	<b>80.5</b>	<b>80.1</b>
American Indian / Alaskan Native	66.2	63.3	65.0	66.5
Asian	87.1	86.1	85.4	86.6
Black / African American	80.2	79.6	80.0	81.3
Hispanic / Latinx	76.1	76.4	76.5	76.3
Native Hawaiian / Pacific Islander	66.7	73.8	66.7	72.9
White	80.7	80.8	81.4	80.7
Two or More Races	79.9	81.0	81.5	79.7
Students with a Disability*	56.1	59.7	58.9	58.3
Limited English	67.0	69.9	65.4	66.7
Low-Income*	74.2	75.5	74.7	74.0

Table 1.7: shows the results of the Post-Secondary Engagement indicator by year for the 4<sup>th</sup> quarter.

<b>4<sup>th</sup> Quarter Postsecondary Engagement</b>	<b>2013-14 Graduates</b>	<b>2014-15 Graduates</b>	<b>2015-16 Graduates</b>	<b>2016-17 Graduates</b>
<b>All Students</b>	<b>82.2</b>	<b>82.0</b>	<b>81.4</b>	<b>80.0</b>
American Indian / Alaskan Native	71.0	68.5	66.4	66.5
Asian	88.6	87.6	87.1	87.2
Black / African American	82.3	81.4	80.6	81.0
Hispanic / Latinx	79.7	79.5	78.2	76.8
Native Hawaiian / Pacific Islander	72.4	73.1	67.6	68.4
White	82.4	82.3	82.0	80.4
Two or More Races	81.4	82.1	81.5	80.3
Students with a Disability*	60.2	62.5	61.1	59.0
Limited English	70.8	74.4	70.3	69.0
Low-Income*	77.3	77.9	76.2	74.2

\*Note: low-income refers to the students qualifying for the Free and Reduced Price Lunch program and students with a disability refers to students receiving special education per an individualized educational plan or a section 504 plan. Updated from Washington Report Card.

## Section 2: National and Peer State Comparisons

### **SUMMARY AND BACKGROUND INFORMATION**

The list of states for the peer states comparisons comes from the State [New Economy Index](#) produced every few years by the Information Technology and Innovation Foundation. The latest (2017) New Economy Index measures the degree to which states' economic structure matches the ideal structure of the innovation driven New (Global) Economy. The 2017 Index used 25 indicators divided into five broad categories (Knowledge Jobs, Globalization, Economic Dynamism, Digital Economy, and Innovation Capacity) to capture that which is important about the new global economy.

The list of the states for the peer state comparisons and the states' current ranking on the New Economy Index are presented in Figure 1. Massachusetts has been the highest performing state on all the New Economy Indices since 1999. Washington has been in the top five performing states for all of the years since 1999. The ten peer states used in the 2020 report are the same as those used in the 2018 report.

### **NATIONAL AND PEER STATE COMPARISONS**

#### **OVERVIEW**

In nearly all instances, the performance of the Washington educational system is not in the top ten percent nationally and is lower than the peer states (Figure 2.1 and Appendix B). Only the 8<sup>th</sup> grade math measure is comparable to the peer states. The SBE is unable to locate suitable national and peer state data sources for the Readiness for College Coursework and Postsecondary Engagement and Workforce indicators for comparison. Aside from this overview table, these two indicators are not addressed any further in this update.

Figure 2.1: shows the list of peer states used in the required comparisons for the December 2018 report to the Education Committees of the Washington Legislature.

<b>New Economy Ranking (2017)</b>	<b>Peer States (2020 Report)</b>	<b>New Economy Ranking (2017)</b>	<b>Peer States (2020 Report)</b>
1	Massachusetts	6	Maryland
2	California	7	Colorado
3	Washington	8	New Jersey
4	Virginia	9	Utah
5	Delaware	10	Connecticut

Figure 2.2: shows the status of each of the six statutorily required indicators of the educational system health for the All Students group (See Appendix A).

Indicator	Comparable to Peer States*	Top 10 Percent Nationally*
Kindergarten Readiness	No	No
4 <sup>th</sup> Grade Reading	No	No
8 <sup>th</sup> Grade Math	Yes	No
High School Graduation	No	No
Readiness for College Coursework	N.D.	N.D.
Postsecondary Engagement and Workforce	N.D.	N.D.

\*Note: the peer state and national comparisons utilize a combination of measures comprised of the recommended measures, nationwide administered assessments, and other publicly available information. The peer state comparison is for the most recent year. A No means that Washington was lower than the peer states. N.D. means no data.

### KINDERGARTNER CHARACTERISTICS

There is no direct comparison of the Washington Kindergarten Inventory of Developmental Skills, so we use the early childhood education enrollment of 3- and 4-year olds for the national and peer state comparison. The 2018 enrollment percentages for Washington are mostly similar to or a little higher than the U.S. average, but not in the top ten percent nationally. Washington's performance on the measure is mostly lower than the peer states (Figure 2.3).

Figure 2.3: three- and four-year old enrollment in early childhood education in 2018.

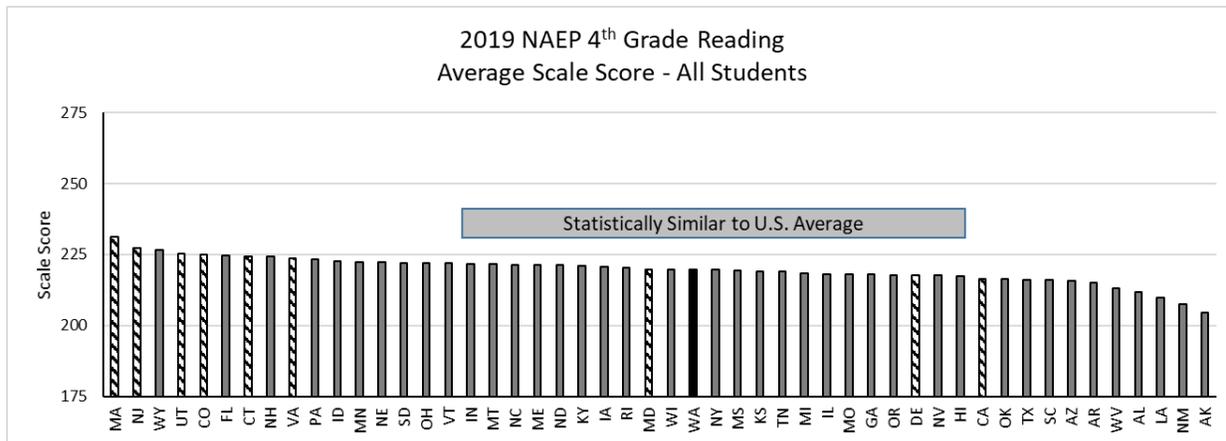
3 and 4 Year Old Enrollment in Early Childhood Education	WA %	U.S. %	Peer State %	U.S. Comparison	Peer State Comparison
<b>All Students</b>	<b>46.2</b>	<b>48.4</b>	<b>53.7</b>	<b>Similar</b>	<b>WA Lower</b>
American Indian / Alaskan Native	50.6	45.6	N.D.	WA Higher	N.D.
Asian	56.8	56.5	58.0	Similar	WA Lower
Black / African American	43.1	51.8	59.9	Similar	WA Lower
Hispanic / Latinx	34.7	41.4	43.3	WA Lower	WA Lower
Native Hawaiian / Pacific Islander	N.D.	29.5	N.D.	N.D.	N.D.
White	48.4	50.3	58.9	Similar	WA Lower
Two or More Races	54.6	49.7	54.2	WA Higher	Similar

### 4<sup>TH</sup> GRADE NAEP IN READING

For 4<sup>th</sup> grade students in Washington (All Students group), the average reading scale score of 219.7 is statistically similar to the U.S. average of 219.4. Washington's average scale score is statistically similar to the average scale scores of California, Delaware, and Maryland (Figure 2.4). The Washington scale score is statistically different and lower than six peer states Colorado,

Connecticut, Massachusetts, New Jersey, Utah, and Virginia, all of which are statistically higher than the U.S. average. For the All Students group, Washington is not in the top ten percent nationally and generally lower than the peer states.

Figure 2.4: Shows the average scale score by state for the All Students group on the 2019 4<sup>th</sup> grade NAEP in reading.



Regarding the 4<sup>th</sup> grade NAEP in reading (Figure 2.5), the following facts are noteworthy:

- The average scale score for most student groups is similar to the U.S. average and similar to the peer states.
- The estimated scale score on the 4<sup>th</sup> grade NAEP reading for Washington students identifying as Hispanic/Latinx is among the lowest 10 percent nationally,
- The scale score on the 4<sup>th</sup> grade NAEP reading for English learners in Washington is among the lowest 10 percent of nationally and the lowest of the peer states.

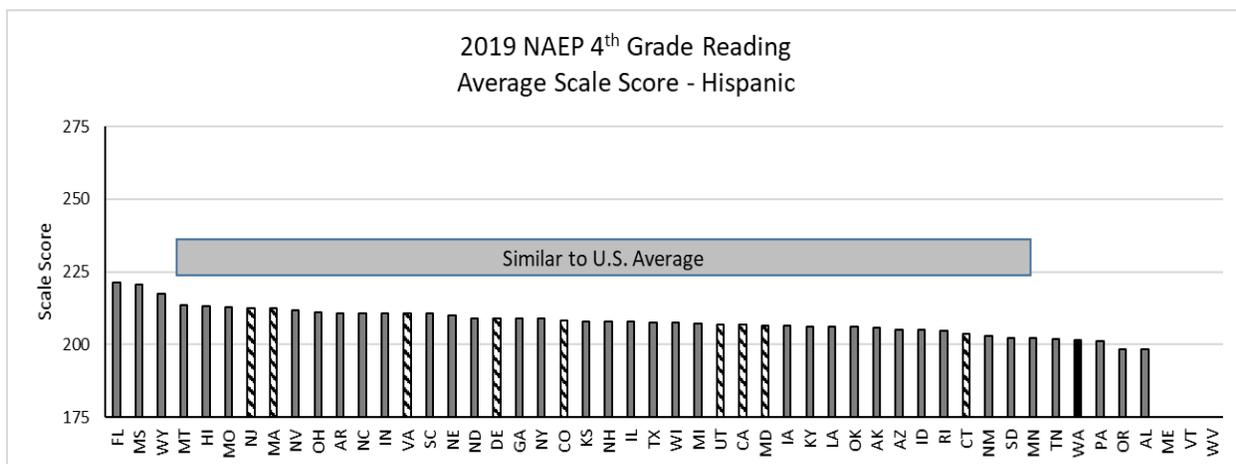
Figure 2.5: summary of student group performance on the 2019 4<sup>th</sup> grade NAEP in reading.

4 <sup>th</sup> Grade NAEP in Reading	WA Scale Score	U.S. Scale Score	U.S. Comparison*	Peer State Comparison*
<b>All Students</b>	<b>219.7</b>	<b>219.4</b>	<b>Similar</b>	<b>WA Lower</b>
American Indian / Alaskan Native	203.5	203.9	Similar	WA Higher
Asian	234.5	239.1	Similar	Similar
Black / African American	209.2	203.0	Similar	Similar
Hispanic / Latinx	201.7	208.3	WA Lower	Similar
Native Hawaiian / Pacific Islander	N.D.	209.4	N.D.	N.D.
White	228.3	229.3	Similar	Similar
Two or More Races	227.0	225.2	Similar	Similar
Limited English	179.6	191.0	WA Lower	WA Lower
Low-Income*	206.5	206.9	Similar	Similar
Students with a Disability*	180.0	179.9	Similar	Similar

\*Note: U.S. comparison is derived from the NAEP Data Explorer statistical test of significance and the peer state comparison is deemed similar if Washington’s score is statistically similar to or better than four or more peer states. N.D. = No Data. The students with a disability group excludes students identified and served under a Section 504 plan. The low-income group are the students qualifying for the Free and Reduced Price Lunch (FRL) program.

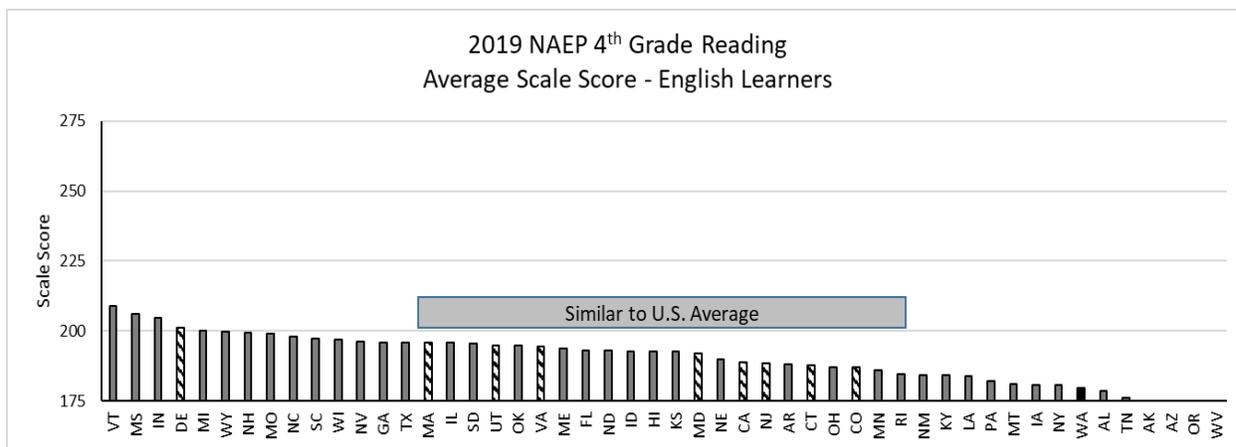
On the 2019 NAEP in reading, the Hispanic student group for Washington posted an average scale score of 201.7, which was statistically lower than the U.S. average of 208.3 (Figure 2.6). The Washington scale score is statistically similar to California, Connecticut, Maryland, and Utah, but is statistically lower than the other five peer states.

Figure 2.6: shows the rank ordering of the performance of the Hispanic student group on the 2019 4<sup>th</sup> grade NAEP in reading for each of the states.



Washington students identified as English learners (EL) posted an average scale score of 179.6, which was statistically lower than the U.S. average of 191.0 (Figure 2.7). All of the peer states performed statistically similar to or better than the U.S. average. California, Delaware, Maryland, Massachusetts, Utah, and Virginia performed statistically different and higher than Washington.

Figure 2.7: shows the rank ordering of the performance of the English learner student group on the 2019 4<sup>th</sup> grade NAEP in reading for each of the states.

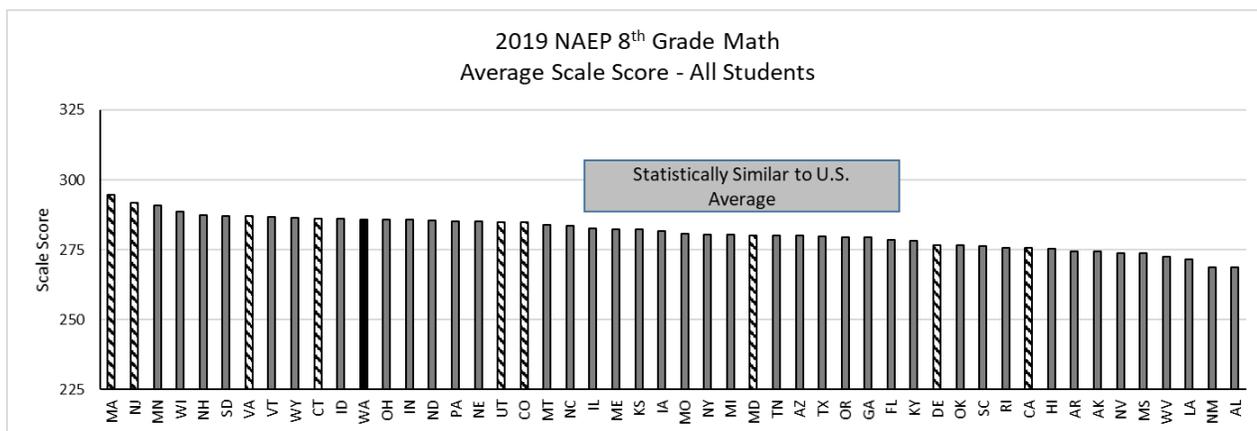


The performance of English learner students on the NAEP is complicated by the fact that not all English learner students in all states are assessed with accommodations (Appendix C). The English learner students testing with accommodations might be expected to perform better than similar students not testing with accommodations, which means that the percentage of English learner students assessed with and without accommodations might have an impact on the group performance. Other factors that are known to influence testing outcomes for English learners are years in bilingual education, home language, years of formal education outside of the U.S., and others, so it might be inappropriate to conclude that the Washington English learners are underperforming.

## 8<sup>TH</sup> GRADE MATH

On the 2019 8<sup>th</sup> grade NAEP in math, the All Students group for Washington posted an average scale score of 285.8, which is statistically different and higher than the U.S. average of 281.0 (Figure 2.8). The Washington scale score was statistically higher than seven peer states, but was statistically lower than the computed scores for Massachusetts and New Jersey. For the All Students group, Washington was not in the top ten percent nationally. However, Washington’s performance was similar to the peer states.

Figure 2.8: shows the rank ordering of the performance of the All Students group on the 2019 8<sup>th</sup> grade NAEP in math for each of the states.



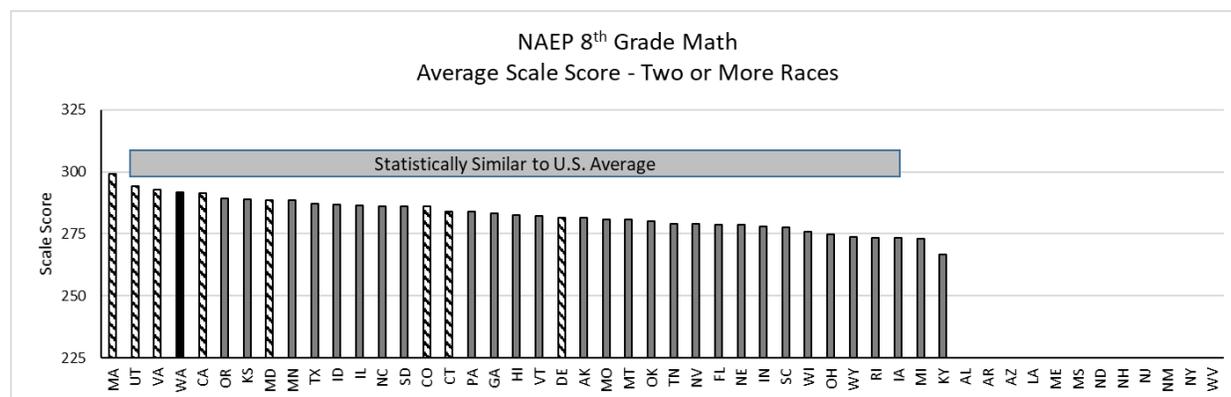
In Washington, the student group identifying with Two or More races achieved an estimated scale score of 291.8 on the 8<sup>th</sup> grade NAEP in math, which was the fourth highest in the nation (Figure 2.9b). The performance of Washington on this measure was statistically similar to the U.S. average of 285.0, was statistically similar to or higher than seven peer states, and Massachusetts was the only state to post a statistically higher scale score than Washington. Washington’s estimated scale score of 291.8 placed the state in the top ten percent nationally.

Figure 2.9a: summary of student group performance on the 2019 8<sup>th</sup> grade NAEP in math.

8 <sup>th</sup> Grade NAEP in Math	WA Scale Score	U.S. Scale Score	U.S. Comparison*	Peer State Comparison*
<b>All Students</b>	<b>285.8</b>	<b>281.0</b>	<b>WA Higher</b>	<b>Similar</b>
American Indian / Alaskan Native	259.3	262.8	Similar	N.D.
Asian	315.3	312.6	Similar	Similar
Black / African American	258.7	259.2	Similar	Similar
Hispanic / Latinx	267.4	268.0	Similar	Similar
Native Hawaiian / Pacific Islander	N.D.	274.3	N.D.	N.D.
White	291.8	291.5	Similar	Similar
Two or More Races	291.8	285.0	Similar	Similar
Limited English	243.1	242.8	Similar	Similar
Low-Income*	268.3	266.1	Similar	Similar
Students with a Disability*	235.1	242.1	Similar	Similar

\*Note: U.S. comparison is derived from the NAEP Data Explorer statistical test of significance and the peer state comparison is deemed similar if Washington’s score is statistically similar to or better than four or more peer states. N.D. = No Data. The students with a disability group excludes students identified and served under a Section 504 plan. The low-income group are students qualifying for the Free and Reduced Price Lunch (FRL) program.

Figure 2.9b: shows the rank ordering of the performance of the Two or More Races student group on the 2019 8<sup>th</sup> grade NAEP in math for each of the states.



### HIGH SCHOOL GRADUATION

The Washington four-year, adjusted cohort graduation rate the class of 2019 was 80.9 percent, which is lower than the national average and lower than the peer state average (Figure 2.10). The 2019 high school graduation rate for Washington is the lowest of the peer states.

Figure 2.10: four-year high school graduation rates for Washington and peer states for the class of 2018 2019, and 2020.

Jurisdiction	Class of 2018	Class of 2019	Class of 2020	Peer State Rank 2019*
California	83.7	85.9	N.D.	8
Colorado	80.7	81.1	N.D.	9
Connecticut	88.3	88.5	N.D.	3
Delaware	86.7	88.3	N.D.	4
Maryland	87.1	86.9	N.D.	7
Massachusetts	87.8	88.0	N.D.	5
New Jersey	90.9	90.6	N.D.	2
Utah	87.0	87.4	88.2	6
Virginia	91.6	91.5	92.3	1
Washington	80.9	80.9	82.9	10
<b>Peer State Average</b>	<b>87.1</b>	<b>87.6</b>	N.D.	
<b>U.S. Average</b>	<b>85.0</b>	N.D.	N.D.	

\*Note: Each state has different types of high school diplomas and different graduation requirements based on credits, successful completion of assessments, and other criteria. The Education Commission of the States compiled the [most recent graduation requirements for all states](#). N.D. = No Data.

### Section 3: Status of the NAEP Assessments

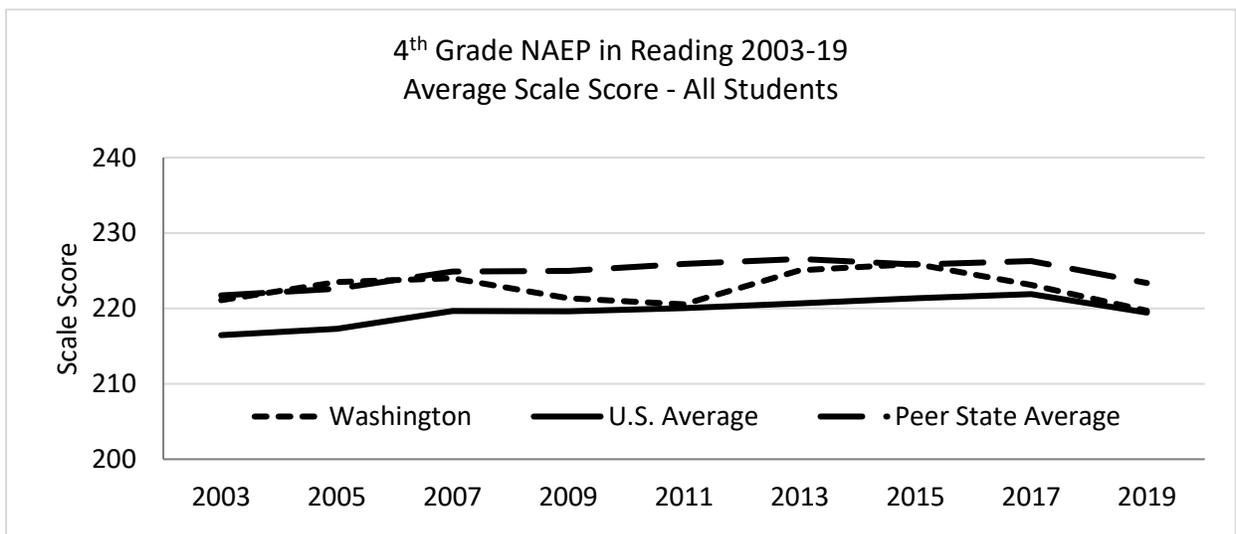
#### NAEP RESULTS OVER TIME

For the 4<sup>th</sup> grade NAEP in reading, the 2019 average scale score for Washington students of 219.7 was approximately 3.7 scale score points lower than the peer state average and similar to the U.S. average of 219.4 (Figure 3.1). In 2019, Washington’s scale score declined 6.2 scale score points from the 2015 administration (Figure 3.2), but the decline was statistically similar to all of the peer states, except for California, which increased the scale score by 3.8 points.

Figure 3.1: shows the estimated and average scale scores for the 4<sup>th</sup> grade NAEP in reading for All Students for Washington, the peer states, and the U.S. for the previous nine NAEP administrations.

State	2003	2005	2007	2009	2011	2013	2015	2017	2019
California	205.6	206.5	208.5	209.8	211.4	212.5	212.7	215.4	216.5
Colorado	223.7	223.7	223.7	225.7	223.4	226.7	224.0	224.7	224.9
Connecticut	228.3	225.8	227.2	229.0	227.4	229.6	228.9	228.4	224.3
Delaware	223.9	225.8	225.1	225.5	225.1	225.8	223.7	221.5	217.7
Maryland	218.7	220.0	224.8	226.0	230.8	232.1	222.9	225.0	219.8
Massachusetts	227.6	231.3	235.8	233.7	236.8	232.4	235.3	235.7	231.1
New Jersey	225.1	223.3	230.6	229.4	231.2	228.7	229.5	232.9	227.2
Utah	219.3	221.3	221.3	219.2	220.4	222.8	226.1	225.2	225.1
Virginia	223.3	225.8	227.1	226.5	226.4	228.6	229.0	227.6	223.6
Washington	221.1	223.5	224.0	221.3	220.5	225.0	225.9	223.1	219.7
U.S. Average	216.5	217.3	219.7	219.6	220.0	220.7	221.4	221.9	219.4
Peer State Average	221.7	222.6	224.9	225.0	225.9	226.6	225.8	226.3	223.4

Figure 3.2.: Shows the average scaled scores over time for the All Students group for the national and peer state comparisons using the 4<sup>th</sup> grade NAEP reading results.

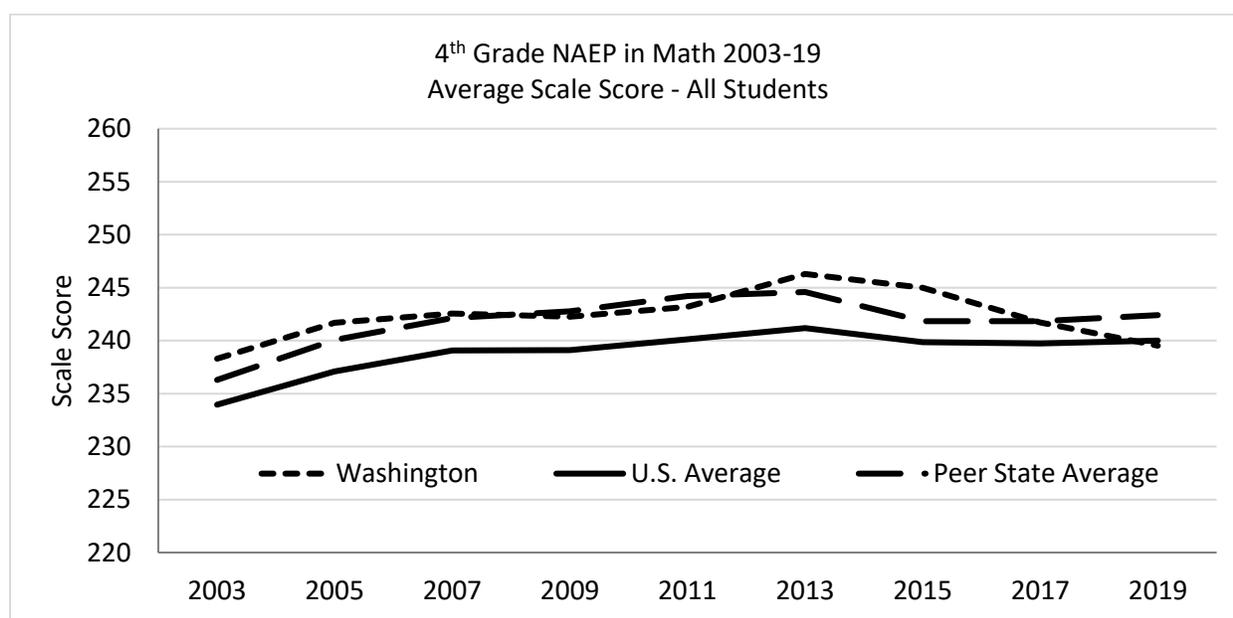


Over the past nine NAEP administrations, Washington’s average scale score on the 4<sup>th</sup> grade NAEP in math for the All Students group was consistently three to five scale score points higher than the U.S. average (Figure 3.3 and 3.4). However, on the 2019 administration, Washington’s scale score fell below the U.S. average for the first time. From the 2013 NAEP administration, Washington’s scale score declined from a high of 246.3 to the 2019 score of 239.5. The 6.8 scale score point decline for Washington is among the three largest declines of all the states. Four peer states (Colorado, Delaware, Maryland, and Massachusetts) posted slightly smaller declines over the same period, although the declines were statistically similar.

Figure 3.3: shows the estimated and average scale scores for the 4<sup>th</sup> grade NAEP in math for All Students for Washington, the peer states, and the U.S. for the previous nine NAEP administrations.

State	2003	2005	2007	2009	2011	2013	2015	2017	2019
California	227.5	230.4	230.0	231.7	234.2	233.7	231.5	232.3	234.7
Colorado	235.2	239.2	240.2	243.1	244.5	247.0	241.6	240.7	241.9
Connecticut	240.6	242.1	242.8	244.7	242.4	243.4	240.2	239.2	243.3
Delaware	235.9	239.7	241.8	239.5	240.4	243.1	238.7	236.1	239.3
Maryland	233.1	238.4	240.3	243.8	247.1	245.2	239.5	240.6	238.6
Massachusetts	241.7	247.3	252.4	252.3	253.4	253.0	250.6	249.1	247.3
New Jersey	238.8	244.0	248.6	246.5	248.0	246.9	245.4	247.9	245.9
Utah	234.8	238.8	239.4	240.3	242.5	242.8	242.6	242.5	243.8
Virginia	239.2	240.5	243.5	243.1	245.3	246.2	246.6	248.0	246.9
Washington	238.3	241.7	242.5	242.3	243.2	246.3	245.0	241.7	239.5
U.S. Average	234.0	237.1	239.1	239.1	240.1	241.2	239.9	239.7	240.0
Peer State Average	236.3	240.1	242.1	242.8	244.2	244.6	241.8	241.8	242.4

Figure 3.4: shows the average scaled scores over time for the All Students group for the national and peer state comparisons using the 4<sup>th</sup> grade NAEP math results.

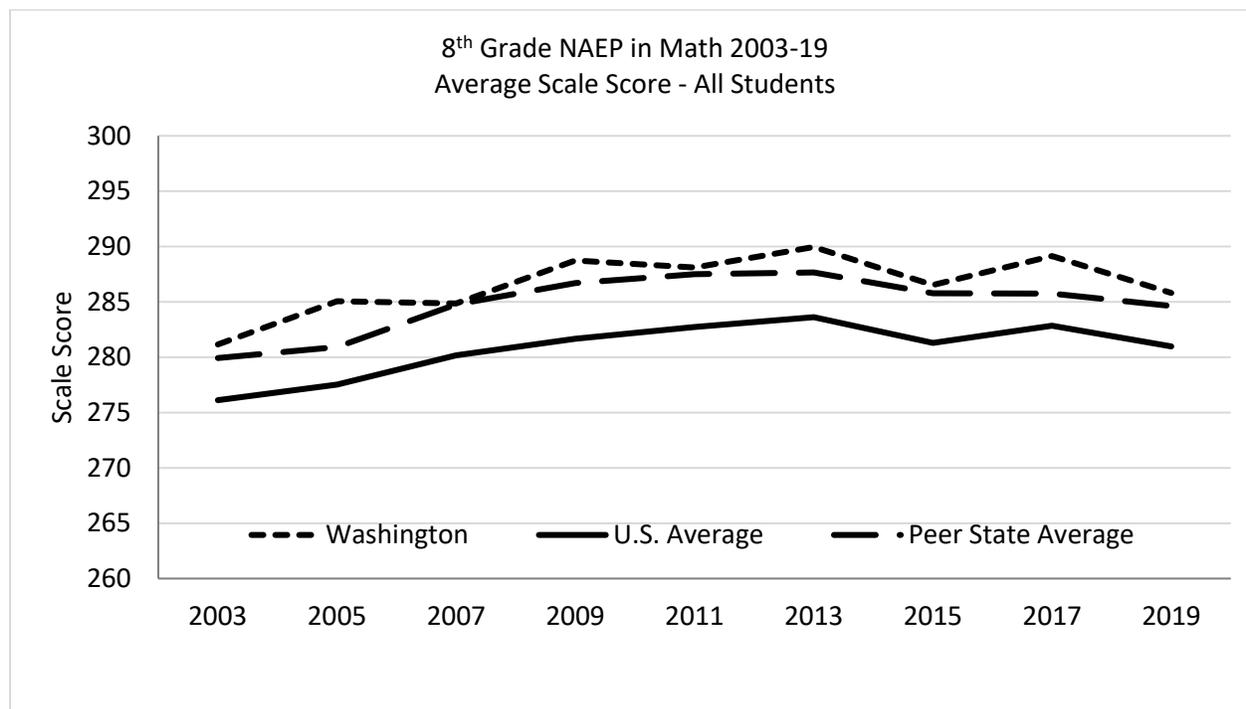


The Washington average scale score for the 8<sup>th</sup> grade NAEP in math of 285.8 was approximately 1.2 scale score points higher than the peer state average and approximately 4.8 scale score points higher than the U.S. average. In 2019, Washington’s average scale score decreased 3.3 scale score points, while the peer state average decreased 1.1 points and the U.S. average decreased by approximately 1.8 scale score points (Figure 3.5 and 3.6).

Figure 3.5: shows the estimated and average scale scores for the 8<sup>th</sup> grade NAEP in math for All Students for Washington, the peer states, and the U.S. for the previous nine NAEP administrations.

State	2003	2005	2007	2009	2011	2013	2015	2017	2019
California		268.6	270.4	270.4	272.8	275.9	275.3	276.6	275.6
Colorado	283.4	280.8	286.2	287.4	291.7	289.7	285.5	286.2	284.7
Connecticut	283.7	281.1	282.5	288.6	287.0	285.2	284.0	284.1	286.2
Delaware	277.2	281.0	283.0	283.8	282.8	282.3	279.8	278.0	276.7
Maryland	277.7	277.9	285.7	288.3	288.0	286.6	283.1	280.9	280.1
Massachusetts	286.5	291.5	297.9	298.9	298.5	300.6	296.9	297.0	294.5
New Jersey	281.4	283.9	288.6	292.7	294.1	296.1	293.4	291.7	291.8
Utah	280.6	279.2	281.1	284.1	283.3	284.3	286.1	286.8	284.9
Virginia	281.7	284.4	287.6	286.1	289.3	288.1	287.7	290.1	287.1
Washington	281.2	285.1	284.9	288.7	288.1	290.0	286.5	289.1	285.8
U.S. Average	276.1	277.5	280.2	281.7	282.7	283.6	281.3	282.8	281.0
Peer State Average	279.9	280.9	284.8	286.7	287.5	287.7	285.8	285.7	284.6

Figure 3.6: Shows the average scaled scores for the national and peer state comparisons using the 8<sup>th</sup> grade NAEP math results.

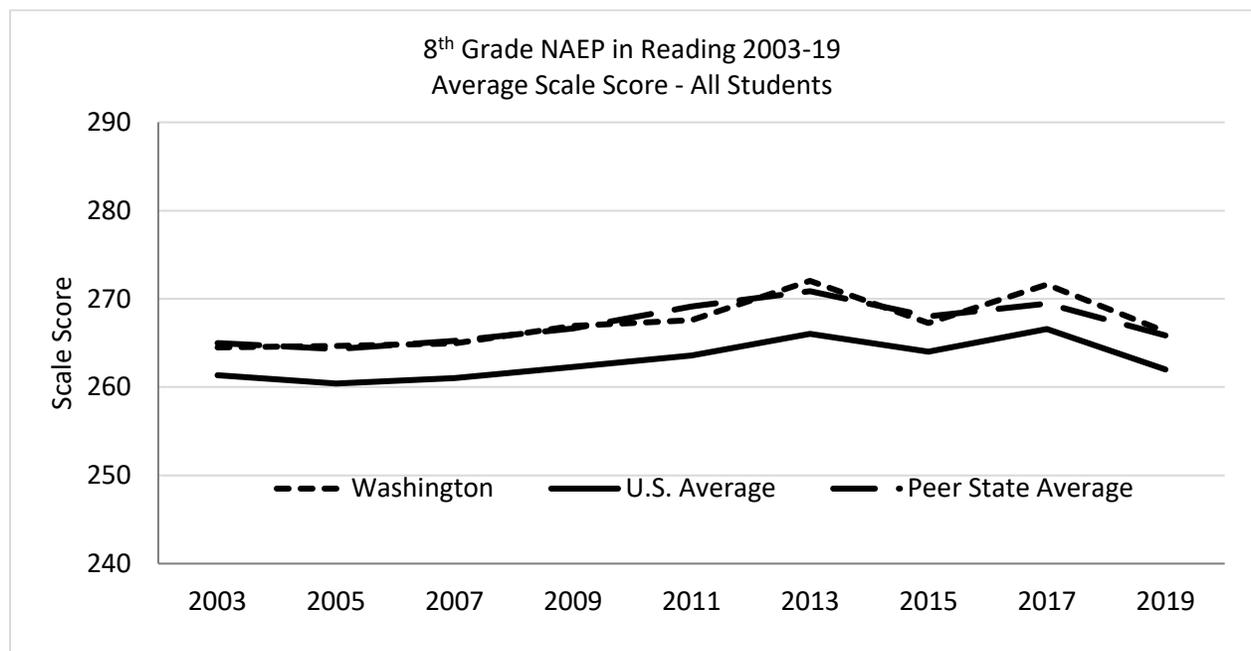


On the 8<sup>th</sup> grade NAEP in reading, the 2019 scale score for Washington (266.3) decreased 5.3 points from 2017, while the peer state average decreased 3.7 points and the U.S. average decreased 4.6 scale score points since the 2017 administration (Figure 3.7 and 3.8). Over the years, the Washington scale score has closely followed the peer state average and has mimicked the U. S trend (Figure 6.8).

Figure 3.7: shows the estimated and average scale scores for the 8<sup>th</sup> grade NAEP in reading for All Students for Washington, the peer states, and the U.S. for the previous nine NAEP administrations.

State	2003	2005	2007	2009	2011	2013	2015	2017	2019
California	251.0	250.4	251.3	252.6	254.9	261.5	259.0	262.5	258.8
Colorado	267.6	264.8	266.4	265.5	270.6	271.0	268.1	270.3	267.3
Connecticut	267.2	264.0	267.1	271.8	274.7	274.5	273.0	272.5	269.7
Delaware	264.5	266.0	264.5	265.0	265.8	266.0	262.6	263.1	259.7
Maryland	261.6	260.8	265.2	267.3	271.2	273.8	267.9	267.3	264.4
Massachusetts	272.9	273.7	273.3	273.6	275.4	277.0	274.5	277.8	273.1
New Jersey	267.8	269.4	270.1	272.8	275.2	276.4	270.9	275.0	270.4
Utah	264.3	261.9	262.2	265.6	267.1	270.0	269.4	268.8	267.4
Virginia	268.0	267.8	266.9	265.6	267.3	267.6	266.8	267.7	261.8
Washington	264.5	264.7	264.9	266.9	267.6	272.0	267.3	271.6	266.3
U.S. Average	261.3	260.4	261.0	262.3	263.6	266.0	264.0	266.6	262.0
Peer State Average	265.0	264.3	265.2	266.7	269.1	270.9	268.0	269.5	265.8

Figure 3.8: Shows the average scaled scores for the national and peer state comparisons using the 8<sup>th</sup> grade NAEP reading results.



## ***SUMMARY OF THE 2019 NAEP RESULTS***

The National Assessment of Educational Progress (NAEP) is a nationally representative measure of trends in academic achievement of U.S. elementary and secondary students in various subjects. The NAEP is administered every two years to a representative sampling of students in all fifty sites, the District of Columbia, and U.S. territories. The NAEP is the only assessment that allows comparison of results from state to state or to nationwide results.

The NAEP is intentionally designed in a manner to produce statewide results based on a sampling of students from representative schools across all jurisdictions. The NAEP is a large-group assessment, which means that each student completes only a portion of the overall assessment, and the portions are combined in a manner to yield a quantifiable result or score. The sample of students from any given school may not necessarily be representative of that school, but when the student results are combined and aggregated to the state level, the results are considered reliable and valid estimates of what students know and can do in a particular content area.

The NAEP Governing Board seeks to ensure that NAEP is fully representative of students with a disability and English learners. Inclusion in NAEP of a student with a disability or English learner is encouraged if that student participated in the regular state academic assessment in the subject being tested, and if that student can participate in NAEP with the accommodations NAEP allows. Students with disabilities and English learners are allowed to use most of the testing accommodations that they receive for state or district tests.

Because students with a disability and English learners typically score lower than students not categorized as a student with a disability or an English learner, jurisdictions that are more inclusive (those assessing greater percentages of these students) may have lower average scores than if they had a less inclusive policy. The evaluation of the computed results for students with a disability and English learner should take into account the percentage of student who assessed without accommodations when the students would have been provided accommodations on their regular statewide assessments (Appendix C).

With few exceptions, the performance of Washington students on the 4<sup>th</sup> NAEP in reading and the 8<sup>th</sup> grade NAEP in math is similar to the performance of the peer states and to the national averages (Figure 3.9). Figures 3.10 and 3.11 show similar performance comparisons on the other NAEP reading and math assessments for 4<sup>th</sup> and 8<sup>th</sup> graders. The performance of Washington students is not in the top ten percent nationally for either of the NAEP assessments. The following facts are noteworthy:

- The estimated scale score on the Washington 4<sup>th</sup> grade NAEP reading for the All Students group is not comparable (statistically lower) to the scores for six peer states.
- The estimated scale score on the 4<sup>th</sup> grade NAEP reading for students identifying as Hispanic/ Latinx is among the lowest 10 percent nationally,

- The estimated scale score on the 4<sup>th</sup> grade NAEP reading for English learners is among the lowest 10 percent of nationally and the lowest of the peer states, and
- The estimated scale score on the 8<sup>th</sup> grade NAEP math for the All Students group is a little higher than the U.S. average, is in the top 25 percent nationally, and is similar to peer states.

Figure 3.9: summary of student group performance on the 2019 4<sup>th</sup> grade NAEP in reading and 8<sup>th</sup> grade NAEP in math.

2019 NAEP Assessments	Comparison U.S. Average 4 <sup>th</sup> Grade Reading	Comparison Peer States 4 <sup>th</sup> Grade Reading	Comparison U.S. Average 8 <sup>th</sup> Grade Math	Comparison Peer States 8 <sup>th</sup> Grade Math
<b>All Students</b>	<b>Similar</b>	<b>WA Lower</b>	<b>WA Higher</b>	<b>Similar</b>
American Indian / Alaskan Native	Similar	WA Higher	Similar	N.D.
Asian	Similar	Similar	Similar	Similar
Black / African American	Similar	Similar	Similar	Similar
Hispanic / Latinx	WA Lower	Similar	Similar	Similar
Native Hawaiian / Pacific Islander	N.D.	N.D.	N.D.	N.D.
White	Similar	Similar	Similar	Similar
Two or More Races	Similar	Similar	Similar	Similar
Limited English	WA Lower	WA Lower	Similar	Similar
Low-Income*	Similar	Similar	Similar	Similar
Students with a Disability*	Similar	Similar	Similar	Similar

\*Note: U.S. and peer state comparisons are derived from the NAEP Data Explorer statistical test of significance (Appendix C). The peer state comparison is deemed similar if Washington's score is statistically similar to or better than four or more peer states. N.D. = No Data. The students with a disability group excludes students identified and served under a Section 504 plan. The Low income group is better described as the students qualifying for the Free and Reduced Price Lunch (FRL) program.

Figure 3.10: summary of student group performance on the 2019 4<sup>th</sup> grade NAEP in reading and math.

4 <sup>th</sup> Grade NAEP Assessments	Comparison U.S. Average Reading	Comparison Peer States Reading	Comparison U.S. Average Math	Comparison Peer States Math
<b>All Students</b>	<b>Similar</b>	<b>WA Lower</b>	<b>Similar</b>	<b>Similar</b>
American Indian / Alaskan Native	Similar	WA Higher	Similar	N.D.
Asian	Similar	Similar	Similar	Similar
Black / African American	Similar	Similar	Similar	Similar
Hispanic / Latinx	WA Lower	Similar	Similar	Similar
Native Hawaiian / Pacific Islander	N.D.	N.D.	N.D.	N.D.
White	Similar	Similar	Similar	WA Lower
Two or More Races	Similar	Similar	Similar	Similar
Limited English	WA Lower	WA Lower	WA Lower	Similar
Low-Income*	Similar	Similar	Similar	Similar
Students with a Disability*	Similar	Similar	Similar	Similar

\*Note: U.S. and peer state comparisons are derived from the NAEP Data Explorer statistical test of significance (Appendix C). The peer state comparison is deemed similar if Washington’s score is statistically similar to or better than four or more peer states. N.D. = No Data. The students with a disability group excludes students identified and served under a Section 504 plan. The Low income group is better described as the students qualifying for the Free and Reduced Price Lunch (FRL) program.

Figure 3.11: summary of student group performance on the 2019 8<sup>th</sup> grade NAEP in reading and math.

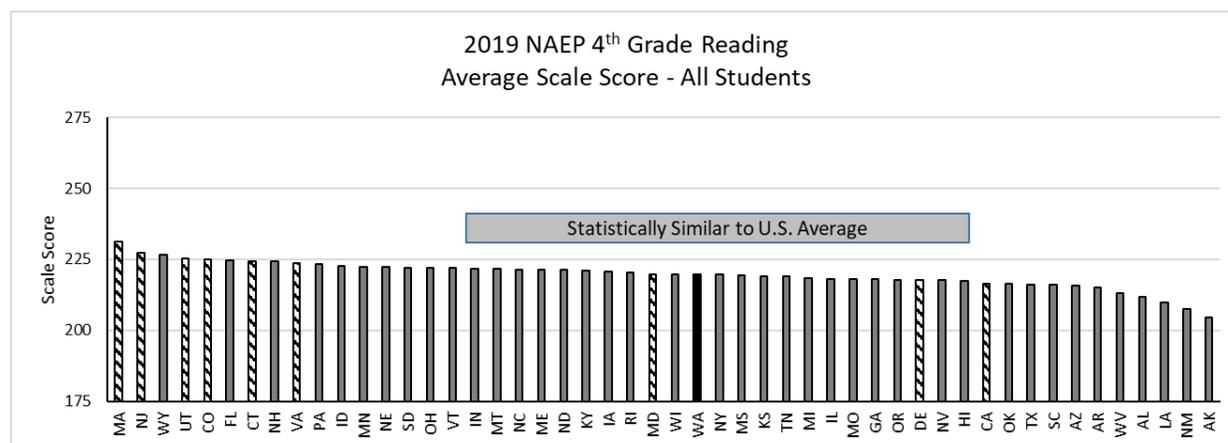
<b>8<sup>th</sup> Grade NAEP Assessments</b>	<b>Comparison U.S. Average Reading</b>	<b>Comparison Peer States Reading</b>	<b>Comparison U.S. Average Math</b>	<b>Comparison Peer States Math</b>
<b>All Students</b>	<b>Similar</b>	<b>Similar</b>	<b>WA Higher</b>	<b>Similar</b>
American Indian / Alaskan Native	Similar	N.D.	Similar	N.D.
Asian	Similar	Similar	Similar	Similar
Black / African American	Similar	Similar	Similar	Similar
Hispanic / Latinx	Similar	Similar	Similar	Similar
Native Hawaiian / Pacific Islander	N.D.	N.D.	N.D.	N.D.
White	WA Higher	Similar	Similar	Similar
Two or More Races	Similar	Similar	Similar	Similar
Limited English	WA Lower	Similar	Similar	Similar
Low-Income*	Similar	Similar	Similar	Similar
Students with a Disability*	Similar	Similar	Similar	Similar

\*Note: U.S. and peer state comparisons are derived from the NAEP Data Explorer statistical test of significance (Appendix C). The peer state comparison is deemed similar if Washington’s score is statistically similar to or better than four or more peer states. N.D. = No Data. The students with a disability group excludes students identified and served under a Section 504 plan. The Low income group is better described as the students qualifying for the Free and Reduced Price Lunch (FRL) program.

## WASHINGTON NAEP RESULTS – 4<sup>TH</sup> GRADE READING

For 4<sup>th</sup> grade students in Washington (All Students group), the average reading scale score of 219.7 is statistically similar to the U.S. average of 219.4. Washington's average scale score is statistically similar to the average scale scores of California, Delaware, and Maryland (Figure 3.12). The Washington scale score is statistically different and lower than six peer states Colorado, Connecticut, Massachusetts, New Jersey, Utah, and Virginia, all of which are statistically higher than the U.S. average.

Figure 3.12: Shows the average scale score by state for the All Students group on the 2019 4<sup>th</sup> grade NAEP in reading and whether a state's performance was statistically higher, lower, or similar to the average scale score for the United States public schools.



The 2020 version of the Washington Statewide Indicators of the Educational System report represents the second version in which the SBE reports on student group performance on the NAEP for Washington students and in comparison to the U.S. average and the peer state performance (Figure 3.13). Washington is not in the top ten percent nationally for any student group performance, but for the most part, the Washington groups' performance is similar to the U.S. average and comparable to the peer states. As noted above, the All Students group for Washington posted an average scale score statistically lower than six peer states. Also, the Hispanic student group in Washington performed lower than the comparable group for the peer states (Figure 3.13). The English Learner (EL) student group performed lower than the U.S. average and the peer states, but additional factors to consider are included earlier in this section and in Appendix C, where the English learner performance is discussed in more detail in the context of accommodations.

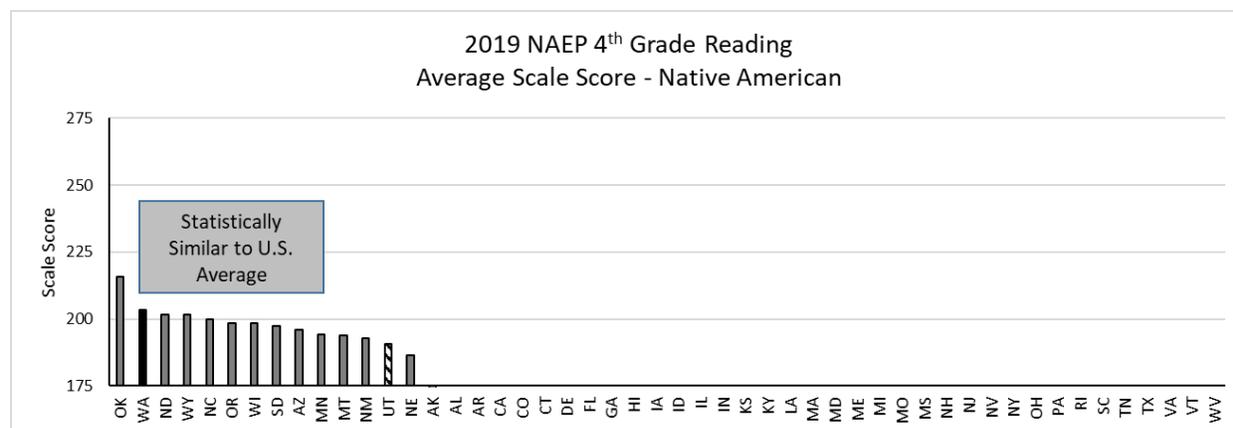
Figure 3.13: summary of student group performance on the 2019 4<sup>th</sup> grade NAEP in reading.

4 <sup>th</sup> Grade NAEP in Reading	WA Scale Score	U.S. Scale Score	U.S. Comparison*	Peer State Comparison*
<b>All Students</b>	<b>219.7</b>	<b>219.4</b>	<b>Similar</b>	<b>WA Lower</b>
American Indian / Alaskan Native	203.5	203.9	Similar	WA Higher
Asian	234.5	239.1	Similar	Similar
Black / African American	209.2	203.0	Similar	Similar
Hispanic / Latinx	201.7	208.3	WA Lower	Similar
Native Hawaiian / Pacific Islander	N.D.	209.4	N.D.	N.D.
White	228.3	229.3	Similar	Similar
Two or More Races	227.0	225.2	Similar	Similar
Limited English	179.6	191.0	WA Lower	WA Lower
Low-Income*	206.5	206.9	Similar	Similar
Students with a Disability*	180.0	179.9	Similar	Similar

\*Note: U.S. comparison is derived from the NAEP Data Explorer statistical test of significance (Appendix C) and the peer state comparison is deemed similar if Washington’s score is statistically similar to or better than four or more peer states. N.D. = No Data. The students with a disability group excludes students identified and served under a Section 504 plan. The Low income group is better described as the students qualifying for the Free and Reduced Price Lunch (FRL) program.

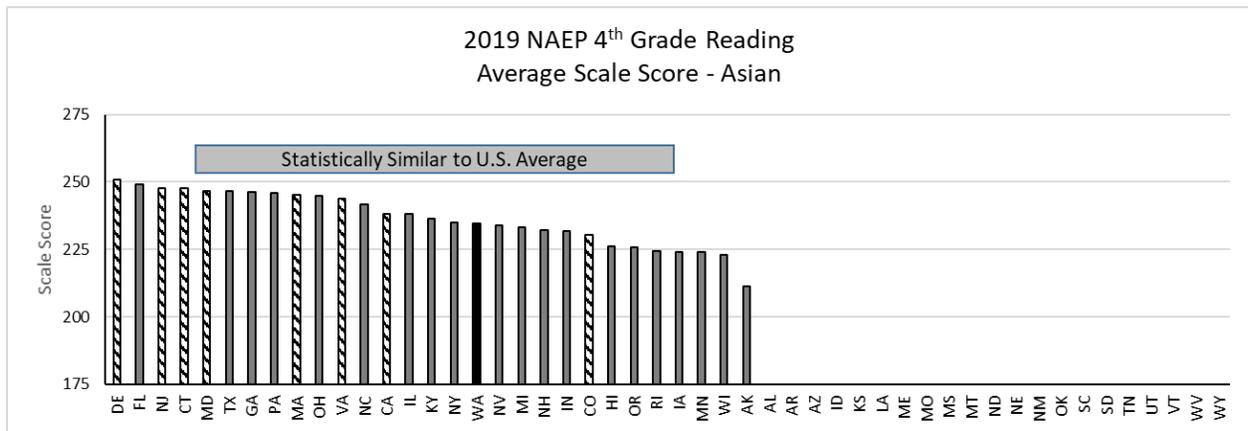
Washington is one of only 14 states for which an average scale score could be computed for the Native American/Alaska Native student group (Figure 3.14). The average scale score for Washington (203.5) is the second highest of the 14 states and is statistically similar to the U.S. average of 203.9.

Figure 3.14: shows the rank ordering of the performance of the Native American or Alaskan Native student group on the 2019 4<sup>th</sup> grade NAEP in reading for each of the states for which a score could be computed.



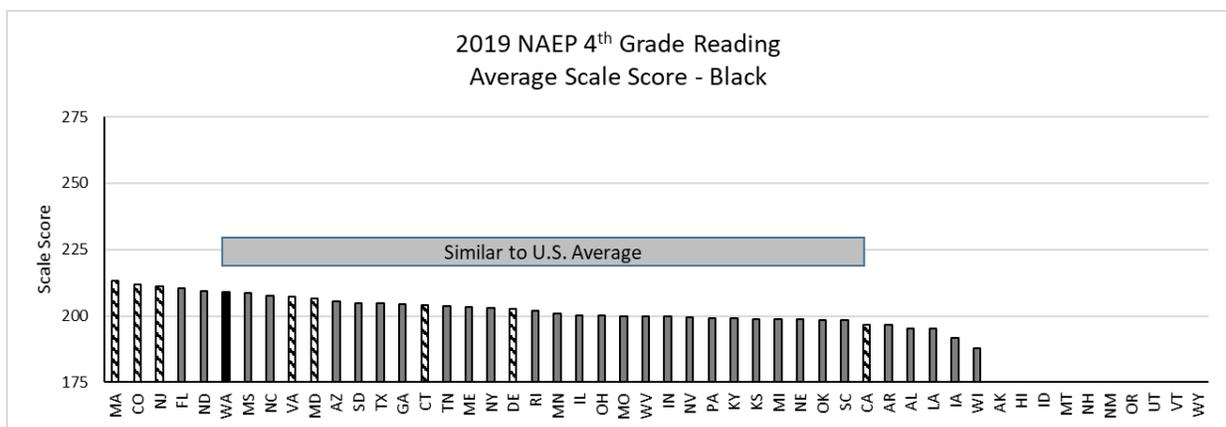
On the 2019 NAEP in reading, the Asian student group for Washington posted an average scale score of 234.5 which was statistically similar to the U.S. average of 239.1 and similar to five peer states (Figure 3.15). Three peer states (Connecticut, Delaware, and New Jersey) posted average scale scores for the Asian student group statistically different and higher than the Washington score. The Washington score was statistically similar to peer states.

Figure 3.15: shows the rank ordering of the performance of the Asian student group on the 2019 4<sup>th</sup> grade NAEP in reading for each of the states.



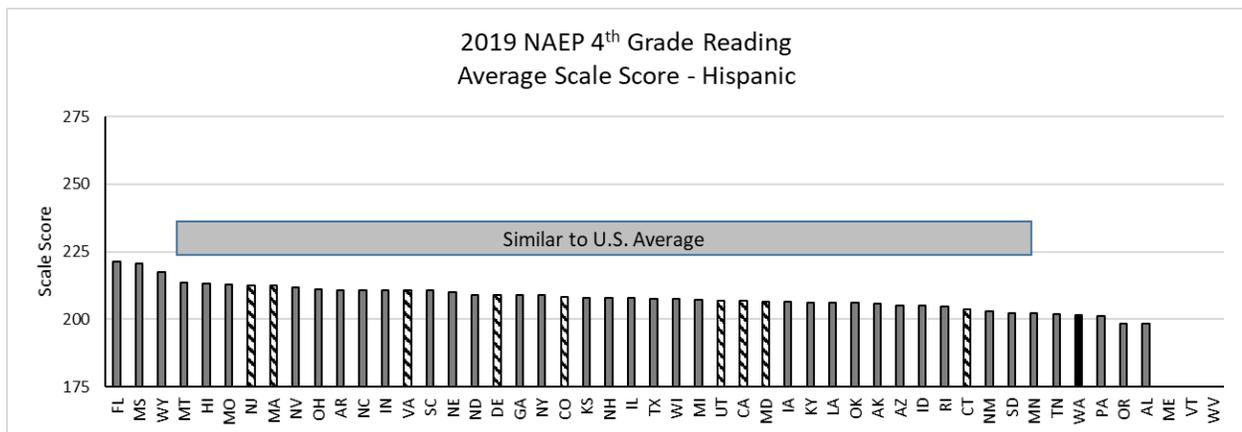
The Black or African American student group for Washington posted an average scale score of approximately 209.2 on the 2019 NAEP in reading, which was statistically similar to the U.S. average of 203.0 (Figure 3.16). The Washington score was statistically similar to the eight peer states for which a scale score was computed.

Figure 3.16: shows the rank ordering of the performance of the Black/African American student group on the 2019 4<sup>th</sup> grade NAEP in reading for each of the states.



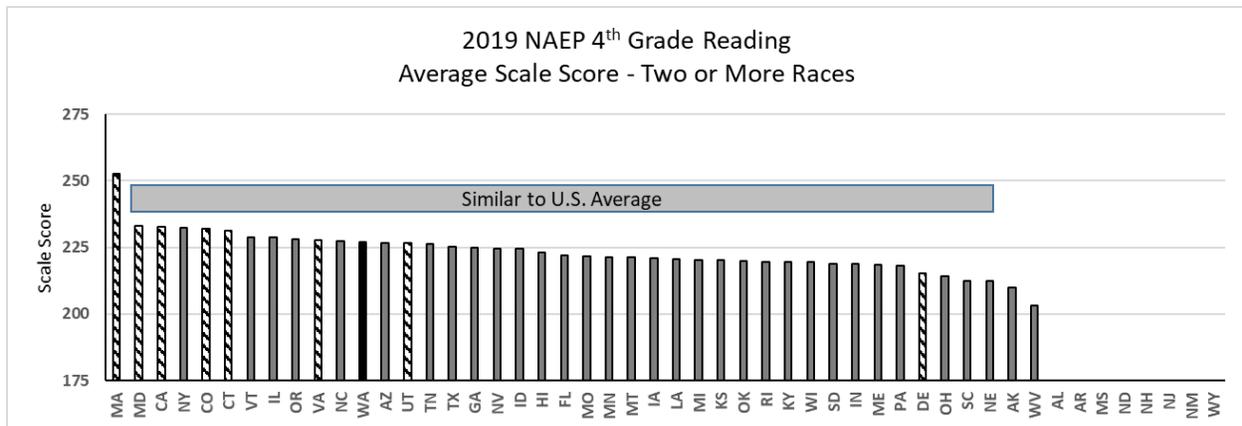
On the 2019 NAEP in reading, the Hispanic student group for Washington posted an average scale score of 201.7, which was statistically lower than the U.S. average of 208.3 (Figure 3.17). The Washington scale score is statistically similar to California, Connecticut, Maryland, and Utah, but is statistically lower than the other five peer states.

Figure 3.17: shows the rank ordering of the performance of the Hispanic student group on the 2019 4<sup>th</sup> grade NAEP in reading for each of the states.



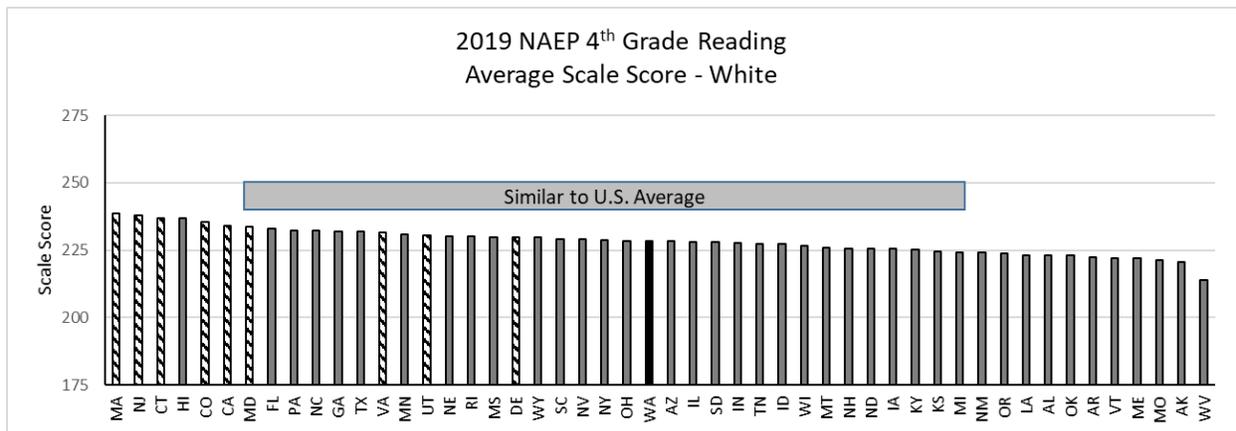
For students identifying with Two or More races, an average scale score of 227.0 was posted on the 2019 NAEP in reading for Washington. The scale scores for 35 of the 39 states were statistically similar to the U.S. average scale score of 225.2 (Figure 3.18). Massachusetts posted an average scale score statistically higher than the both the Washington score and the U.S. average score.

Figure 3.18: shows the rank ordering of the performance of the Two or More races student group on the 2019 4<sup>th</sup> grade NAEP in reading for each of the states.



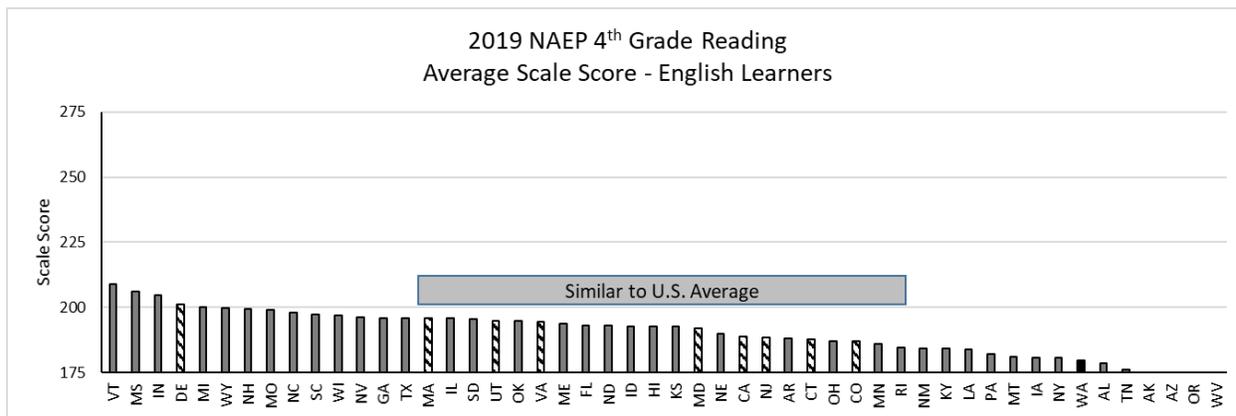
The White student group for Washington posted an average scale score of 228.3 on the 2019 NAEP in reading, which was similar to the U.S. average of 229.3 and statistically similar to five peer states (Figure 3.19). Four peer states (Connecticut, Colorado, Massachusetts, and New Jersey) posted average scale scores statistically higher than the Washington score and the U.S. average scale score.

Figure 3.19: shows the rank ordering of the performance of the White student group on the 2019 4<sup>th</sup> grade NAEP in reading for each of the states.



Washington students identified as English learners (EL) posted an average scale score of 179.6, which was statistically lower than the U.S. average of 191.0 (Figure 3.20). All of the peer states performed statistically similar to or better than the U.S. average. California, Delaware, Maryland, Massachusetts, Utah, and Virginia performed statistically different and higher than Washington.

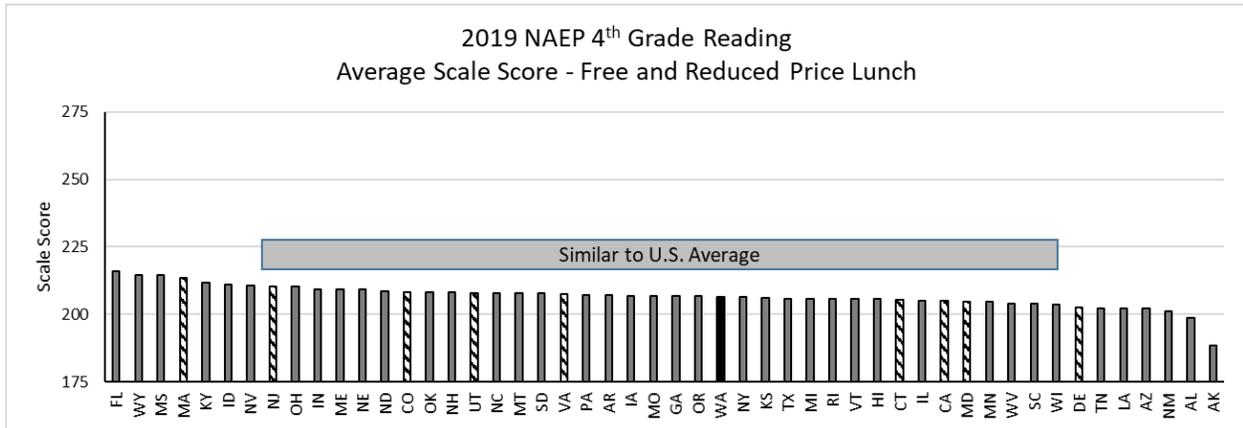
Figure 3.20: shows the rank ordering of the performance of the English learner student group on the 2019 4<sup>th</sup> grade NAEP in reading for each of the states.



The performance of English learner students on the NAEP is complicated by the fact that not all English learner students in all states are assessed with accommodations. The English learner students testing with accommodations might be expected to perform better than similar students not testing with accommodations, which means that the percentage of English learner students assessed with and without accommodations might have an impact on the group performance (Appendix C). Other factors that are known to influence testing outcomes for English learners are years in bilingual education, home language, years of formal education outside of the U.S., and others, so it might be inappropriate to conclude that the Washington English learners are underperforming.

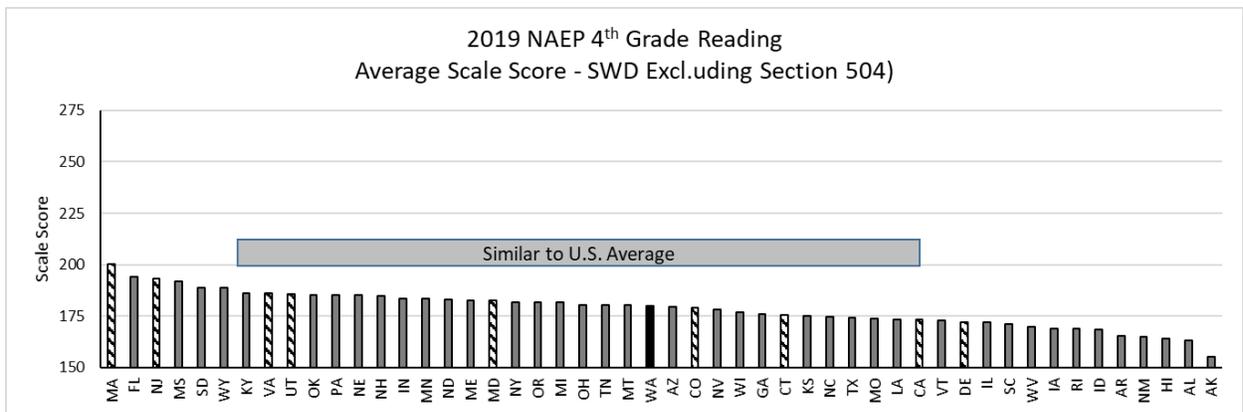
For students qualifying for the Free and Reduced Price program (FRL), the Washington 4<sup>th</sup> graders posted an average scale score of 206.5, which was statistically similar to the U.S. average of 206.9 (Figure 3.21). The Washington score was similar to six peer states, and Massachusetts was the only peer state to perform better than the U.S. average.

Figure 3.21: shows the rank ordering of the performance of the students qualifying for the FRL program student group on the 2019 4<sup>th</sup> grade NAEP in reading for each of the states.



For students with a disability (excluding those students served through a Section 504 plan), the Washington group posted an average scale score of 180.0, which was indistinguishable from the U.S. average of 179.9 (Figure 3.22). Massachusetts and New Jersey were the only peer states to perform better than the U.S. average. All the peer states performed statistically similar to Washington.

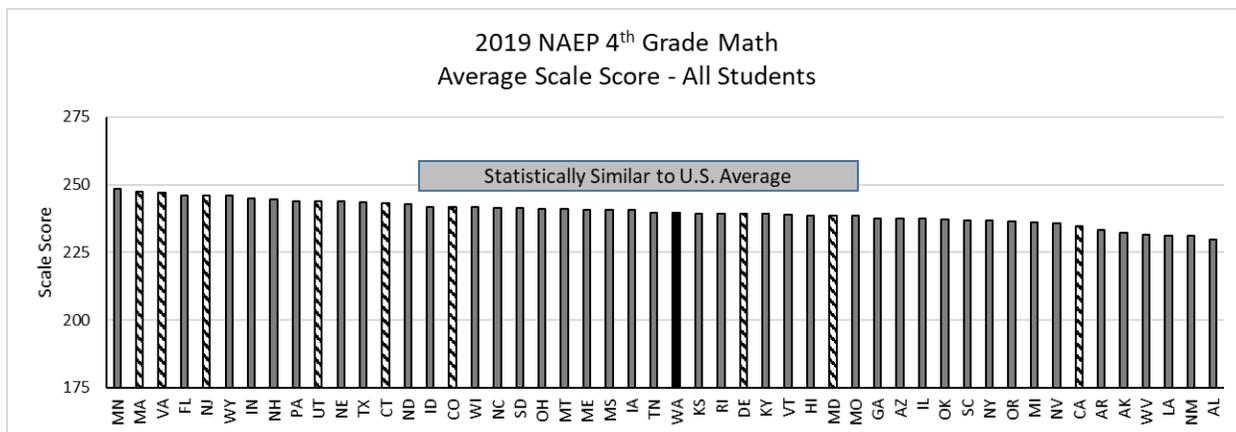
Figure 3.22: shows the rank ordering of the performance of the Students with a Disability student group on the 2019 4<sup>th</sup> grade NAEP in reading for each of the states.



## WASHINGTON NAEP RESULTS – 4<sup>TH</sup> GRADE MATH

For the All Students group, the Washington scale score of 239.5 was statistically similar to the U.S. average scale score of 240.0 (Figure 3.23) and was statistically similar to or higher than four peer states (California, Colorado, Delaware, and Maryland). The Washington scale score was statistically different and lower than five peer states (Connecticut, Massachusetts, New Jersey, Utah, and Virginia).

Figure 3.23: Shows the average scale score by state for the All Students group on the 2019 4<sup>th</sup> grade NAEP in math.



On the 2019 4<sup>th</sup> grade NAEP in math, student groups from Washington posted scale scores mostly similar to the U.S. average and similar to the peer states (Figure 3.24). Students identifying as White performed a little lower than the peer states, and English learners posted a scale score that was statistically lower than the U.S. average.

Figure 3.24: summary of student group performance on the 2019 4<sup>th</sup> grade NAEP in math.

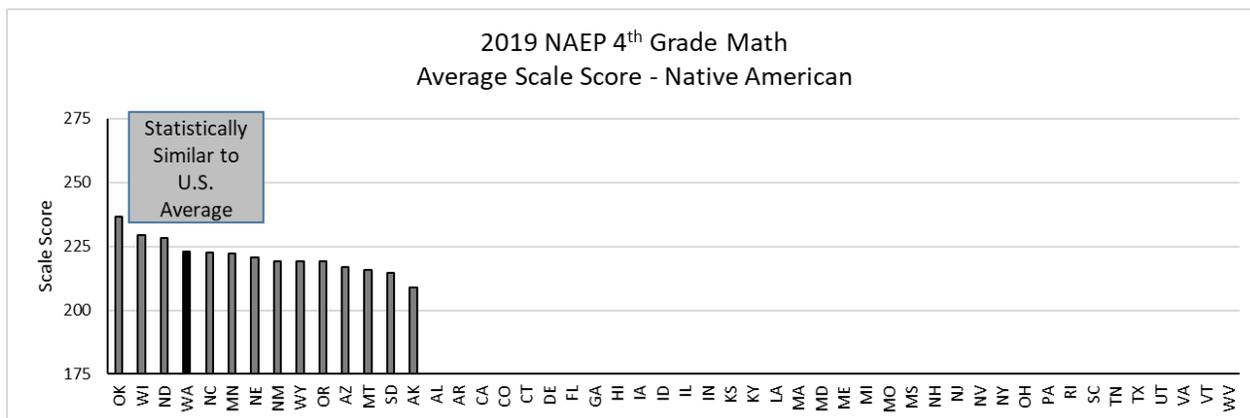
4 <sup>th</sup> Grade NAEP in Math	WA Scale Score	U.S. Scale Score	U.S. Comparison*	Peer State Comparison*
<b>All Students</b>	<b>239.5</b>	<b>240.0</b>	<b>Similar</b>	<b>Similar</b>
American Indian / Alaskan Native	223.0	227.7	Similar	N.D.
Asian	263.8	263.1	Similar	Similar
Black / African American	223.5	223.9	Similar	Similar
Hispanic / Latinx	227.0	230.6	Similar	Similar
Native Hawaiian / Pacific Islander	N.D.	209.4	N.D.	N.D.
White	245.8	248.6	Similar	WA Lower
Two or More Races	241.4	243.0	Similar	Similar
Limited English	212.1	219.4	WA Lower	Similar
Low-Income*	227.9	228.9	Similar	Similar
Students with a Disability*	211.5	211.0	Similar	Similar

\*Note: U.S. comparison is derived from the NAEP Data Explorer statistical test of significance (Appendix C) and the peer state comparison is deemed similar if Washington’s score is statistically similar to or better than four or more peer states. The students with a disability group excludes students identified and served

under a Section 504 plan. "N.D." = no data. The Low income group is better described as the students qualifying for the Free and Reduced Price Lunch (FRL) program.

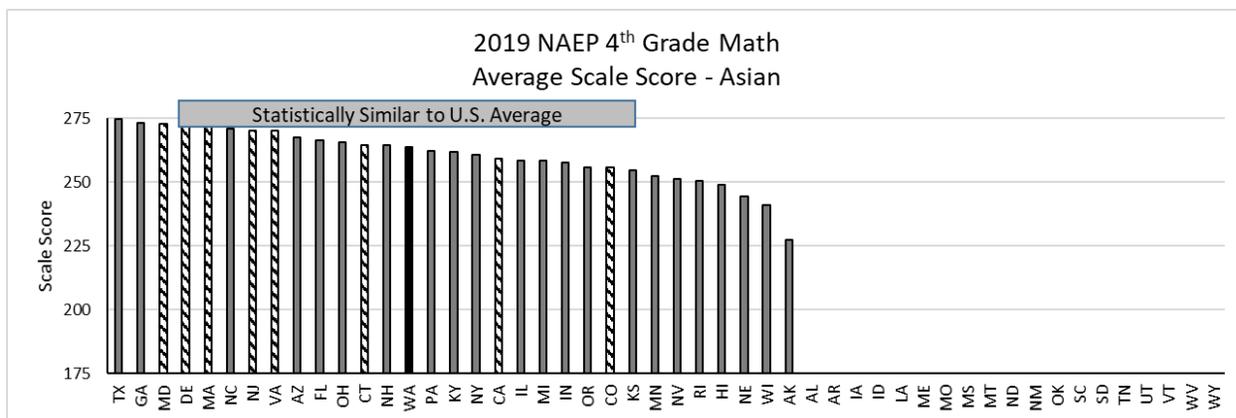
For students identifying as Native American or Alaskan Native, the Washington scale score of 223.0 was statistically similar to the U.S. average scale score of 227.7 (Figure 3.25). Average scale scores for the peer states were not computed by the NAEP team, due to the small sample sizes.

Figure 3.25: Shows the average scale score by state for the Native American or Alaskan Native student group on the 2019 4<sup>th</sup> grade NAEP in math.



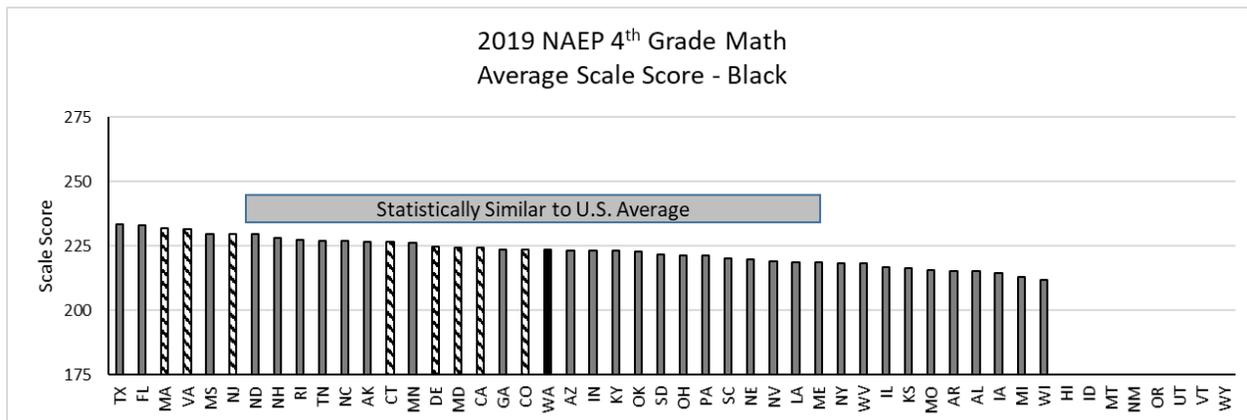
Washington 4<sup>th</sup> grade students identifying as Asian posted an average scale score of 263.8 which was statistically similar to the U.S. average scale score of 263.1 (Figure 3.26). The average scale scores for the eight peer states with a reportable score were statistically similar to the score for Washington students.

Figure 3.26: Shows the average scale score by state for the Asian student group on the 2019 4<sup>th</sup> grade NAEP in math.



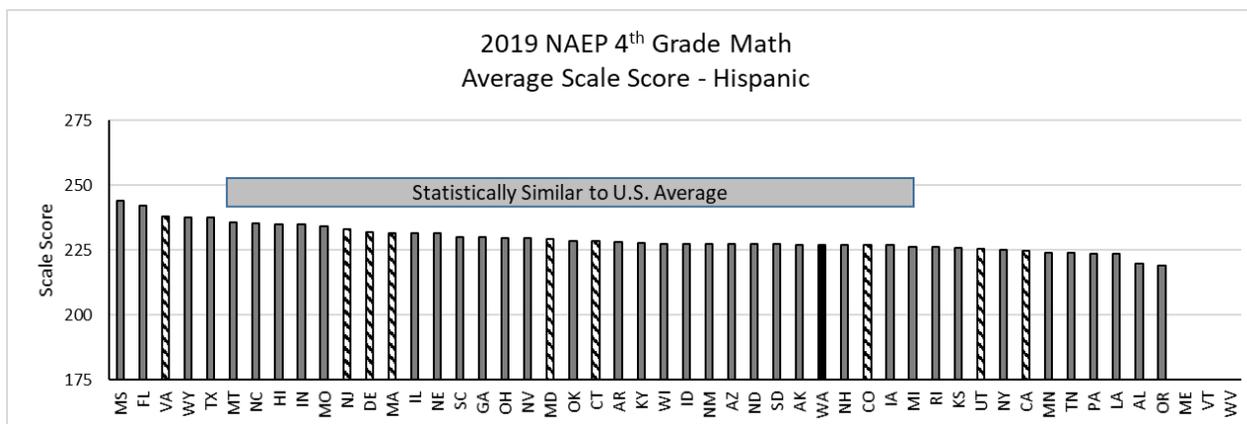
In Washington, the 4<sup>th</sup> graders identifying as Black or African American posted an average scale score of 223.5, which was statistically similar to the U.S. average scale score of 223.9 (Figure 3.27). The Washington scale score was statistically similar to the eight other peer states for which a score was computed.

Figure 3.27: Shows the average scale score by state for the Black or African American student group on the 2019 4<sup>th</sup> grade NAEP in math.



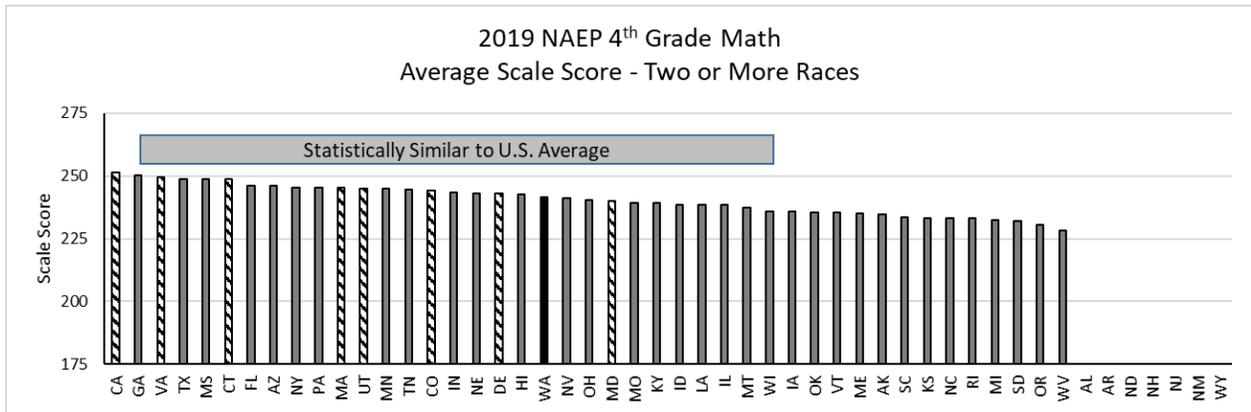
Students identifying as Hispanic in Washington posted an average scale score of 227.0 which was statistically similar to the U.S. average score of 230.6 (Figure 3.28). The Washington scale score is statistically different and lower than the Virginia score and statistically similar to the other eight peer states.

Figure 3.28: Shows the average scale score by state for the Hispanic or Latinx student group on the 2019 4<sup>th</sup> grade NAEP in math.



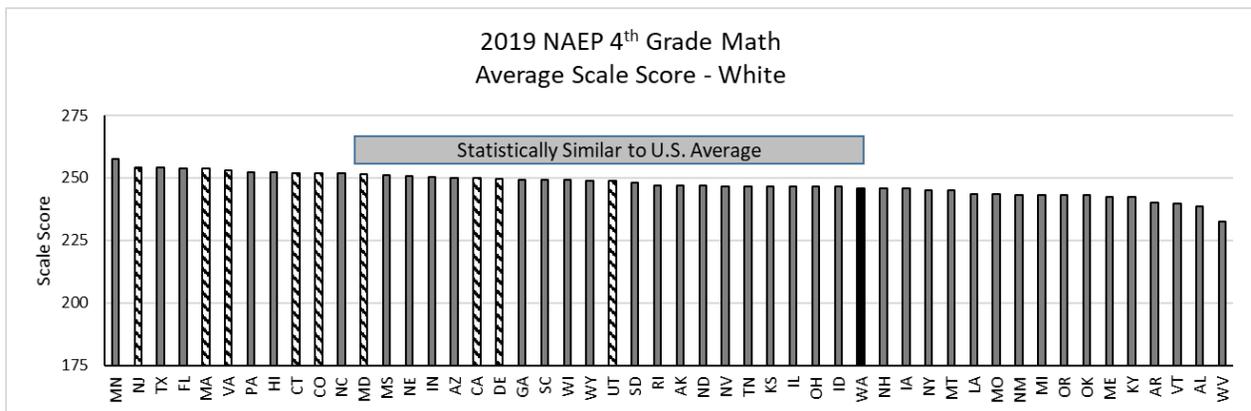
Students identifying with Two or More races in Washington posted an average scale score of 241.4, which is statistically similar to the U.S. average of 243.0 (Figure 3.29). The Washington scale score is statistically similar to the other eight states for which a score could be computed.

Figure 3.29: Shows the average scale score by state for the Two or More races student group on the 2019 4<sup>th</sup> grade NAEP in math.



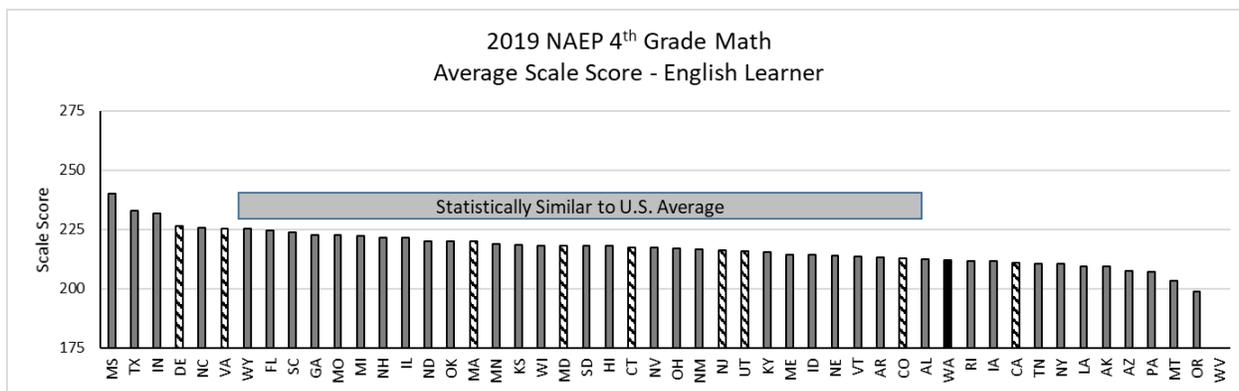
For students identifying as non-Hispanic White, an average scale score of 245.8 was computed, which is statistically similar to the U.S. average scale score of 248.6 (Figure 3.30). Seven of the peer states had a statistically different and higher average score than Washington, while California and Utah posted similar scale scores.

Figure 3.30: Shows the average scale score by state for the Non-Hispanic White student group on the 2019 4<sup>th</sup> grade NAEP in math.



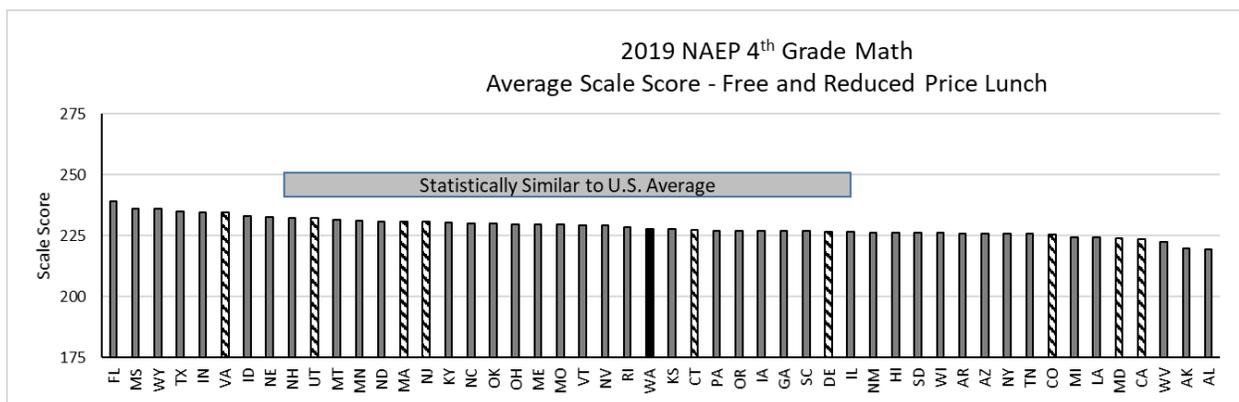
English learners in Washington posted an average scale score of 212.1, which is statistically lower than the U.S. average score of 219.4 (Figure 3.31). The scale score for Washington was similar to six peer states but statistically different and lower than the scores for Delaware, Massachusetts, and Virginia.

Figure 3.31: Shows the average scale score by state for the English learner student group on the 2019 4<sup>th</sup> grade NAEP in math.



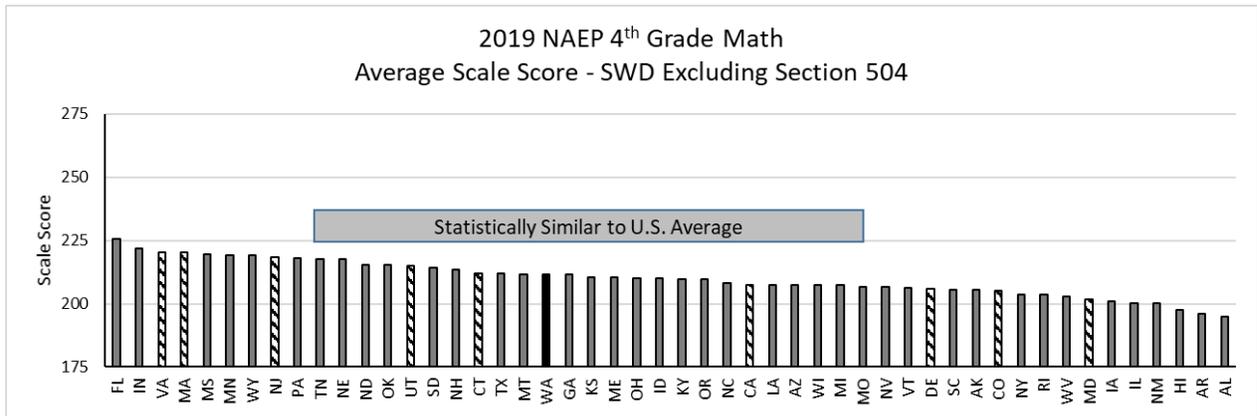
For the students qualifying for the Free and Reduced Price Lunch (FRL) program in Washington, the average scale score of 227.9 is statistically similar to the U.S. average of 228.9 (Figure 3.32). The score for Washington students is similar to or higher than seven peer states and is different and lower than the scores for Utah and Virginia.

Figure 3.32: Shows the average scale score by state for students qualifying for the Free and Reduced Price Lunch program (FRL) group on the 2019 4<sup>th</sup> grade NAEP in math.



The 4<sup>th</sup> grade students in Washington receiving special education services earned an average scale score of 211.5, which is statistically similar to the U.S. average of 211.0 (Figure 3.33). The score for Washington students is similar to or higher than seven peer states and is different and lower than the scores for Massachusetts and Virginia.

Figure 3.33: Shows the average scale score by state for the students with a disability group on the 2019 4<sup>th</sup> grade NAEP in math.



## WASHINGTON NAEP RESULTS – 8<sup>TH</sup> GRADE MATH

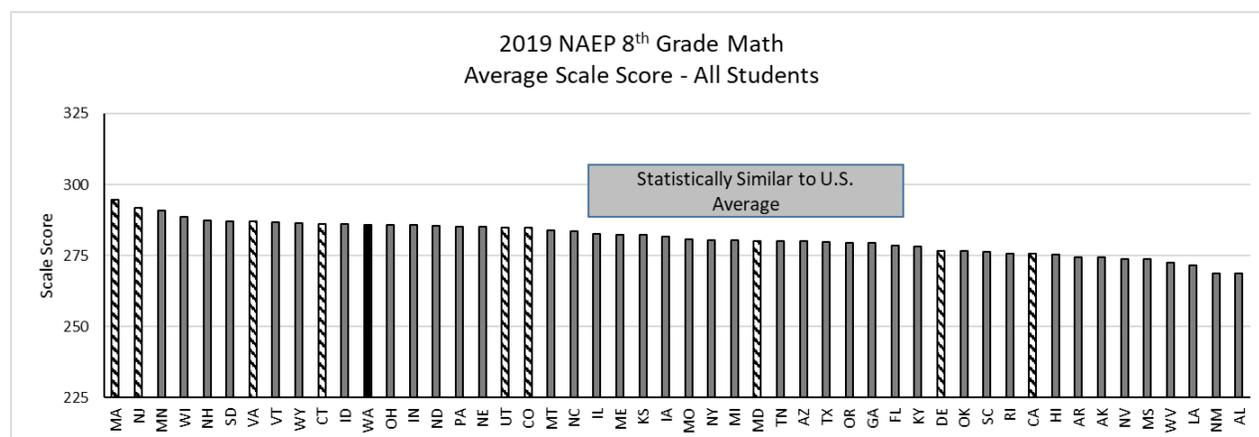
Figure 3.34: summary of student group performance on the 2019 8<sup>th</sup> grade NAEP in math.

8 <sup>th</sup> Grade NAEP in Math	WA Scale Score	U.S. Scale Score	U.S. Comparison*	Peer State Comparison*
<b>All Students</b>	<b>285.8</b>	<b>281.0</b>	<b>WA Higher</b>	<b>Similar</b>
American Indian / Alaskan Native	259.3	262.8	Similar	N.D.
Asian	315.3	312.6	Similar	Similar
Black / African American	258.7	259.2	Similar	Similar
Hispanic / Latinx	267.4	268.0	Similar	Similar
Native Hawaiian / Pacific Islander	N.D.	274.3	N.D.	N.D.
White	291.8	291.5	Similar	Similar
Two or More Races	291.8	285.0	Similar	Similar
Limited English	243.1	242.8	Similar	Similar
Low-Income*	268.3	266.1	Similar	Similar
Students with a Disability	235.1	242.1	Similar	Similar

\*Note: U.S. comparison is derived from the NAEP Data Explorer statistical test of significance (Appendix C) and the peer state comparison is deemed similar if Washington’s score is statistically similar to or better than four or more peer states. N.D. = No Data. The Low income group is better described as the students qualifying for the Free and Reduced Price Lunch (FRL) program.

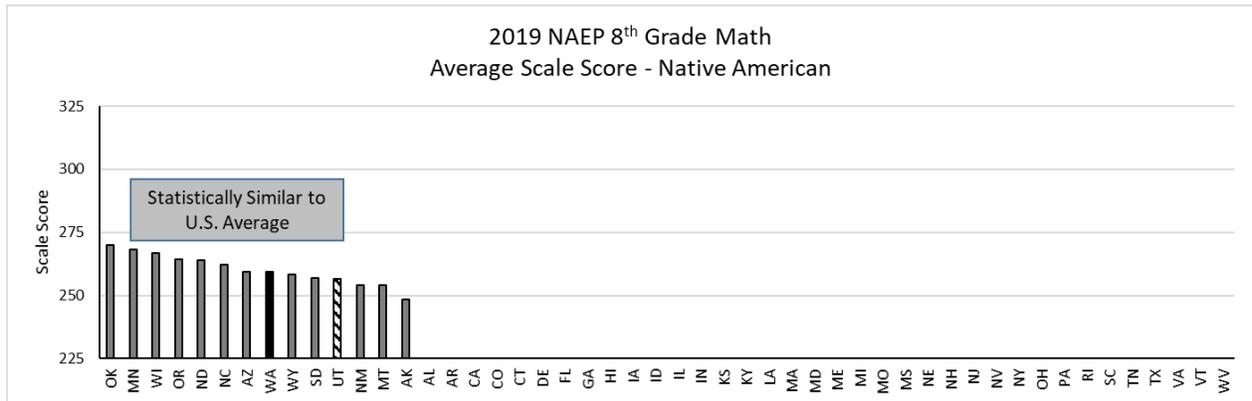
On the 2019 8<sup>th</sup> grade NAEP in math, the All Students group for Washington posted an average scale score of 285.8, which is statistically different and higher than the U.S. average of 281.0 (Figure 3.35). The Washington scale score was statistically higher than seven peer states, but was statistically lower than the computed scores for Massachusetts and New Jersey. An average scale score of 287.2 was necessary to be in the top 10 percent of states.

Figure 3.35: shows the rank ordering of the performance of the All Students group on the 2019 8<sup>th</sup> grade NAEP in math for each of the states.



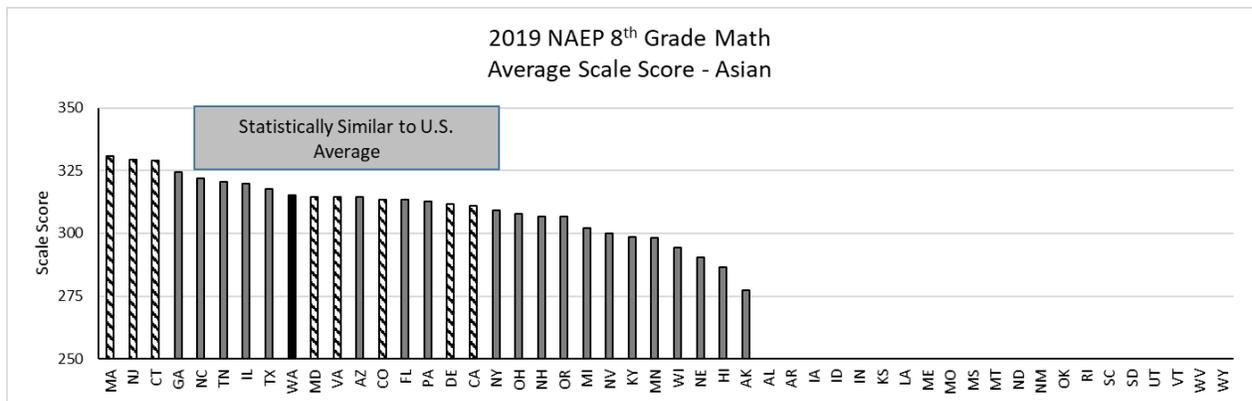
The Washington 8<sup>th</sup> graders identifying as Native American or Alaskan Native posted an average scale score of 259.3 is statistically similar to the U.S. average of 262.8 (Figure 3.36). Utah was the only peer state to have a reportable score for the student group. The Washington and Utah score are statistically similar.

Figure 3.36: shows the rank ordering of the performance of the Native American or Alaskan Native group on the 2019 8<sup>th</sup> grade NAEP in math for each of the states.



The Asian student group for Washington achieved a computed scale score of 315.3, which was similar to the U.S. average scale score of 312.6 and comparable to six of the peer states (Figure 3.37). New Jersey and Massachusetts posted statistically higher scale scores than that for Washington, but Washington performed statistically similar or higher than six peer states. A scale score of 328.9 was required for a state to be ranked in the top ten percent nationally on the measure.

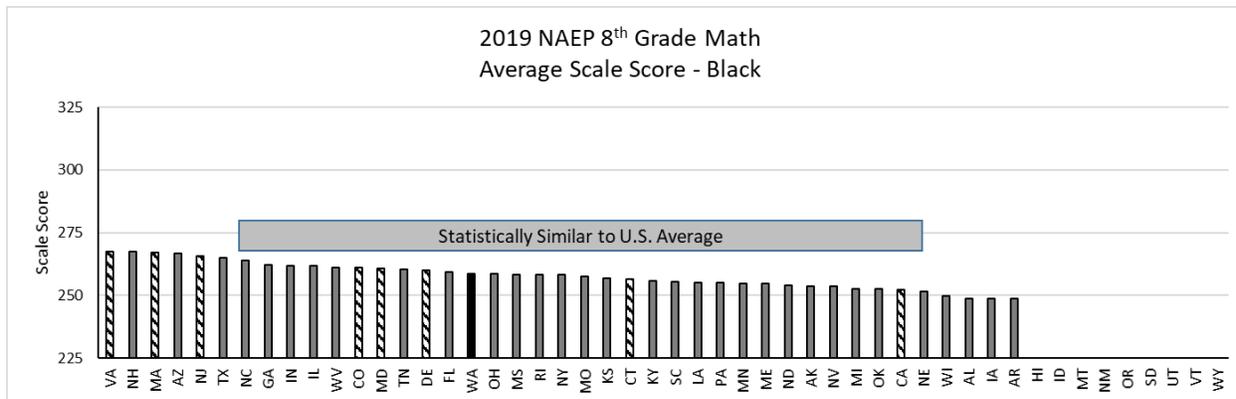
Figure 3.37: shows the rank ordering of the performance of the Asian student group on the 2019 8<sup>th</sup> grade NAEP in math for each of the states.



On the 2019 8<sup>th</sup> grade NAEP in math, the students identifying as Black or African American in Washington earned an estimated scale score of 258.7, which was statistically similar to the U.S. average scale score of 259.2 (Figure 3.38). The Washington African American student group performance was similar to the eight peer states for which a scale score could be computed. An

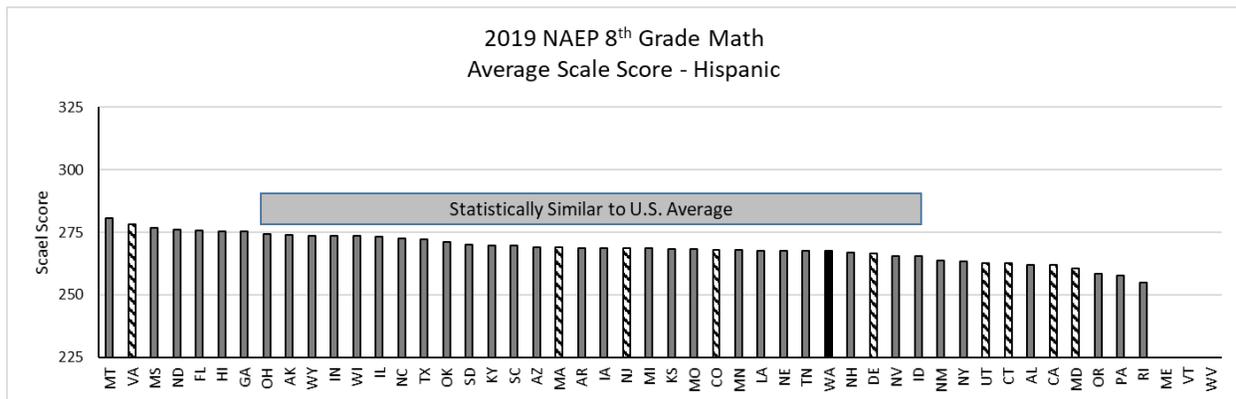
estimated scale score of 265.7 was required for a state to be ranked in the top ten percent nationally on the measure.

Figure 3.38: shows the rank ordering of the performance of the African American student group on the 2019 8<sup>th</sup> grade NAEP in math for each of the states.



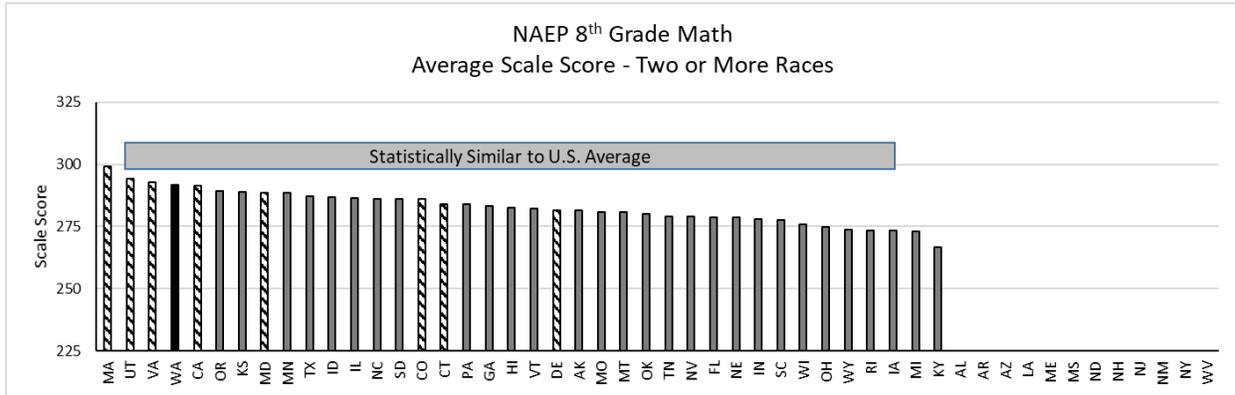
For the 8<sup>th</sup> grade students identifying as Hispanic/Latinx in Washington posted an estimated scale score of 267.4, which was statistically similar to the U.S. average of 268.0. The Washington Hispanic student group score was statistically similar to eight peer states, and Virginia was the only peer state to post a statistically different and higher scale score than Washington (Figure 3.39). A state needed to achieve an estimated scale score of 275.6 to be ranked in the top ten percent nationally.

Figure 3.39: shows the rank ordering of the performance of the Hispanic student group on the 2019 8<sup>th</sup> grade NAEP in math for each of the states.



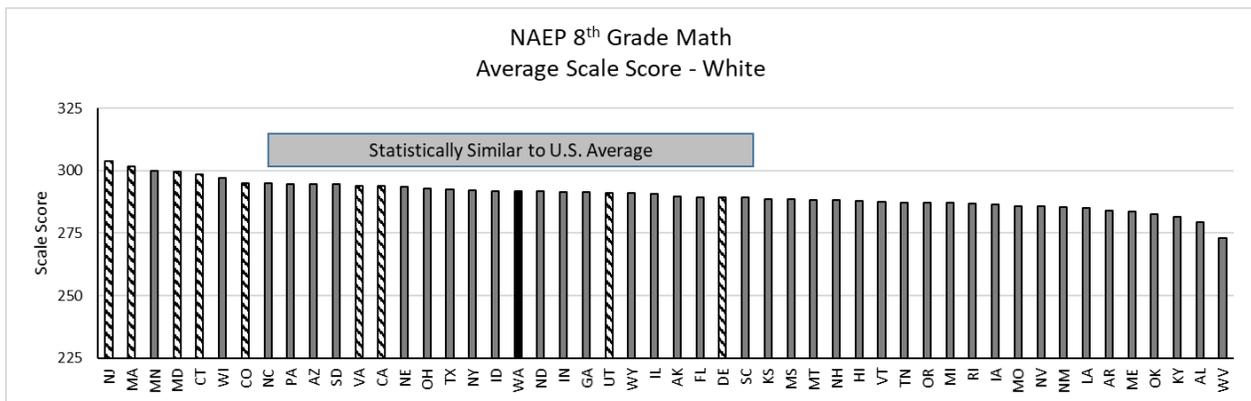
In Washington, the student group identifying with Two or More races achieved an estimated scale score of 291.8 on the 8<sup>th</sup> grade NAEP in math, which was the fourth highest in the nation (Figure 3.40). The performance of Washington on this measure was statistically similar to the U.S. average of 285.0, was statistically similar to or higher than seven peer states, and Massachusetts was the only state to post a statistically higher scale score than Washington. Washington’s estimated scale score of 291.8 placed the state in the top ten percent nationally.

Figure 3.40: shows the rank ordering of the performance of the Two or More Races student group on the 2019 8<sup>th</sup> grade NAEP in math for each of the states.



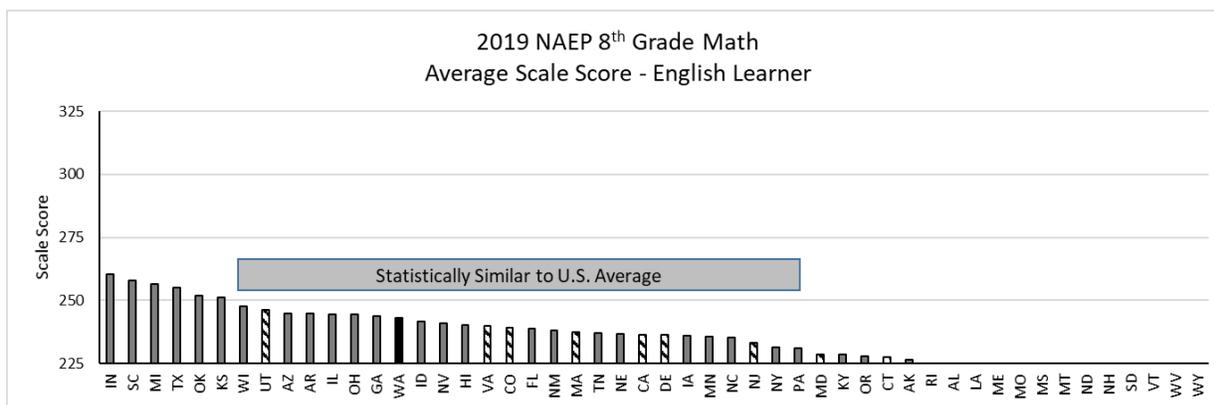
For Washington 8<sup>th</sup> grade students identifying as White, an estimated scale score of 291.8 was computed, which was statistically similar to the U.S. average of 291.5 (Figure 3.41). The Washington scale score was statistically similar to four peer states, but was statistically different and lower than five peer states (Colorado, Connecticut, Massachusetts, New Jersey, and Maryland). An estimated scale score of 298.5 or higher was required for a state to be ranked in the top ten percent nationally.

Figure 3.41: shows the rank ordering of the performance of the White student group on the 2019 8<sup>th</sup> grade NAEP in math for each of the states.



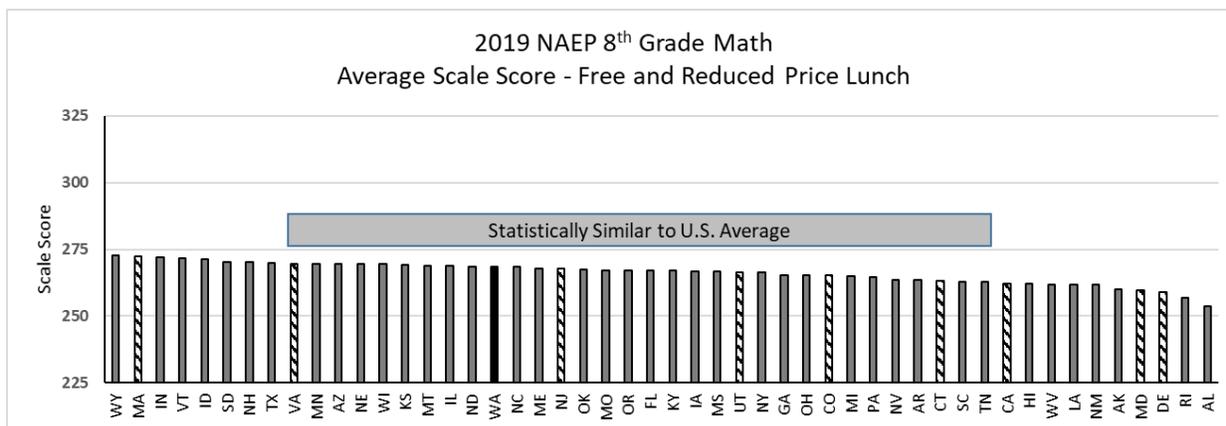
The Washington EL student group posted an estimated scale score of 243.1, which was statistically similar to the U.S. average scale score of 242.8 (Figure 3.42). Washington’s estimated scale score was statistically similar to seven peer states and statistically higher than two peer states. To be ranked in the top ten percent of states nationally, an estimated scale score of 251.8 or higher was required.

Figure 3.42: shows the rank ordering of the performance of the English learner (EL) student group on the 2019 8<sup>th</sup> grade NAEP in math for each of the states.



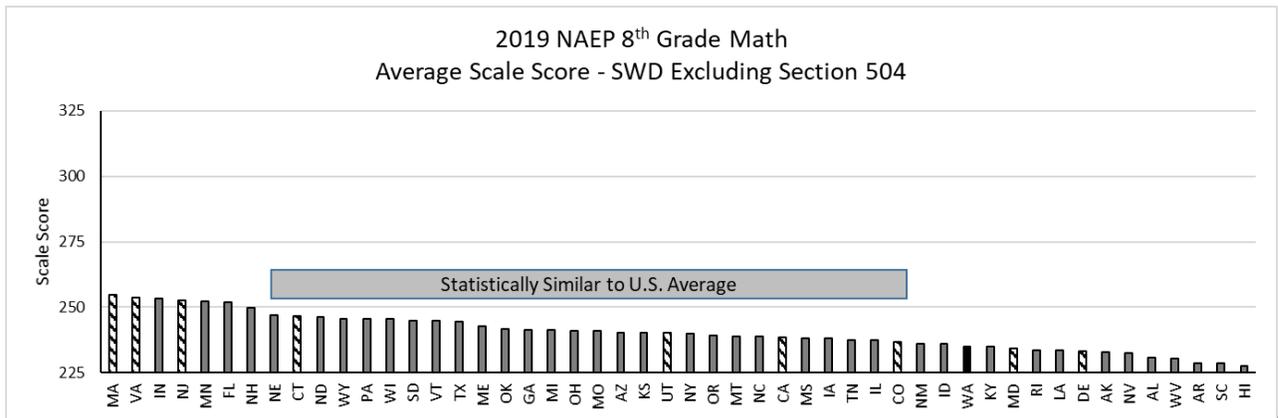
In Washington, students qualifying for the Free and Reduced Price Lunch (FRL) program on the 8<sup>th</sup> grade NAEP in math posted an estimate scale score of 268.3, which was statistically higher than the U.S. average of 266.1 (Figure 3.43). Washington’s estimated scale score was statistically similar to seven peer states and statistically higher than two peer states.. To be ranked in the top ten percent of states nationally, an estimated scale score of 271.4 or higher was required.

Figure 3.43: shows the rank ordering of the performance of the FRL student group on the 2019 8<sup>th</sup> grade NAEP in math for each of the states.



Washington students participating in special education posted an average scale score of 235.1, which was statistically similar to the U.S. average of 242.1 (Figure 3.44). The Washington scale score was statistically similar to peer states, and four peer states (Connecticut, Massachusetts, New Jersey, and Virginia) posted scale scores statistically higher than Washington. An estimated scale score of 252.4 was required to be in the top ten percent nationally.

Figure 3.44: shows the rank ordering of the performance of the Students with a Disability (SWD) student group on the 2019 8<sup>th</sup> grade NAEP in math for each of the states.



## WASHINGTON NAEP RESULTS – 8<sup>TH</sup> GRADE READING

For the most part, the 8<sup>th</sup> grade students in Washington earn scale scores statistically similar to the peer states and similar to the U. average (Figure 3.45). However, The All Students group and the White student group posted scale scores just above the threshold cut identifying the higher performing states. The English learner group posted a scale score just below the threshold cut identifying the lower performing states.

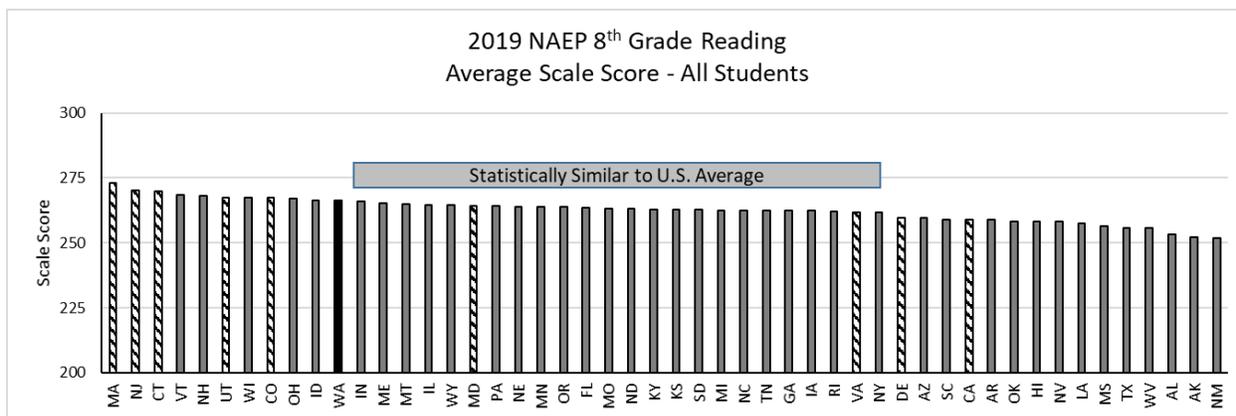
Figure 3.45: summary of student group performance on the 2019 8<sup>th</sup> grade NAEP in reading.

8 <sup>th</sup> Grade NAEP in Reading	WA Scale Score	U.S. Scale Score	U.S. Comparison*	Peer State Comparison*
<b>All Students</b>	<b>266.3</b>	<b>262.0</b>	<b>WA Higher</b>	<b>Similar</b>
American Indian / Alaskan Native	237.0	249.2	Similar	N.D.
Asian	285.3	283.5	Similar	Similar
Black / African American	235.7	243.8	Similar	Similar
Hispanic / Latinx	248.2	251.1	Similar	Similar
Native Hawaiian / Pacific Islander	N.D.	251.6	N.D.	N.D.
White	274.7	271.2	WA Higher	Similar
Two or More Races	262.9	265.7	Similar	Similar
Limited English	210.6	220.5	WA Lower	Similar
Low Income*	268.3	249.4	Similar	Similar
Students with a Disability	221.8	223.7	Similar	Similar

\*Note: U.S. comparison is derived from the NAEP Data Explorer statistical test of significance (Appendix C) and the peer state comparison is deemed similar if Washington’s score is statistically similar to or better than four or more peer states. N.D. = No Data. The Low Income group is better described as the students qualifying for the Free and Reduced Price Lunch (FRL) program.

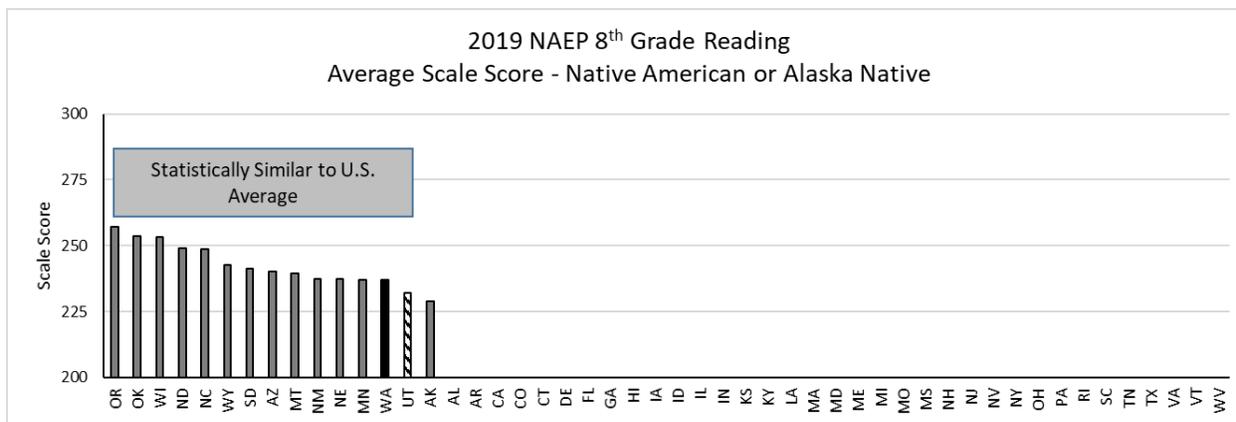
On the 8<sup>th</sup> grade NAEP in reading, the Washington students posted an average scale score of 266.3, which was statistically similar to the U.S. average score of 262.0 (Figure 3.46). The Washington scale score was statistically similar to or higher than seven peer states, but Massachusetts and New Jersey posted scale score statistically higher than Washington. A scale score of 268.0 was required to be in the top ten percent nationally.

Figure 3.46: shows the rank ordering of the performance of the All Students group on the 2019 8<sup>th</sup> grade NAEP in reading for each of the states.



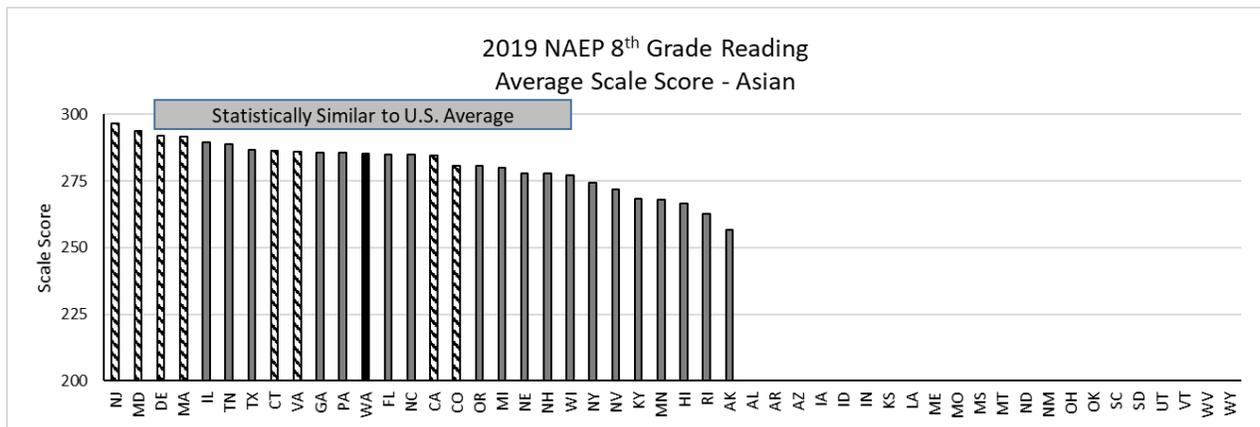
The 8<sup>th</sup> grade students identifying as Native American or Alaskan Native in Washington posted an average scale score of 237.0 which was statistically similar to the U.S. average of 249.2 (Figure 3.47). The Washington scale score was statistically similar to the Utah scale score, the only peer state with a calculated value.

Figure 3.47: shows the rank ordering of the performance of the Native American or Alaskan Native student group on the 2019 8<sup>th</sup> grade NAEP in reading for each of the states.



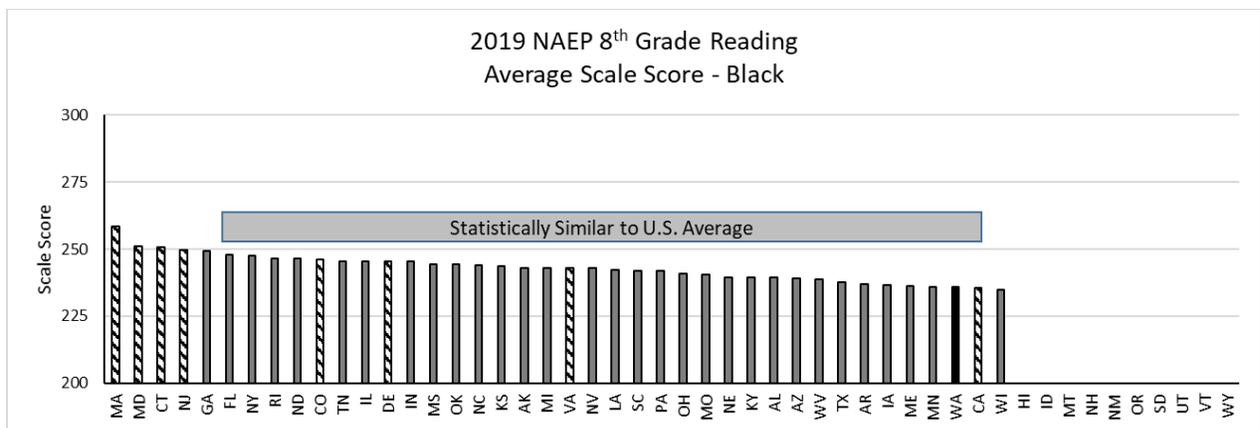
For students identifying as Asian, an average scale score of 285.3 was calculated for Washington which was statistically similar to the U.S. average score of 283.5 (Figure 3.48). The scale scores for the eight peer states with a computed score were statistically similar to the scores posted by the Washington Asian students. A score of 292.9 was required for a state to be in the top ten percent nationally.

Figure 3.48: shows the rank ordering of the performance of the Asian student group on the 2019 8<sup>th</sup> grade NAEP in reading for each of the states.



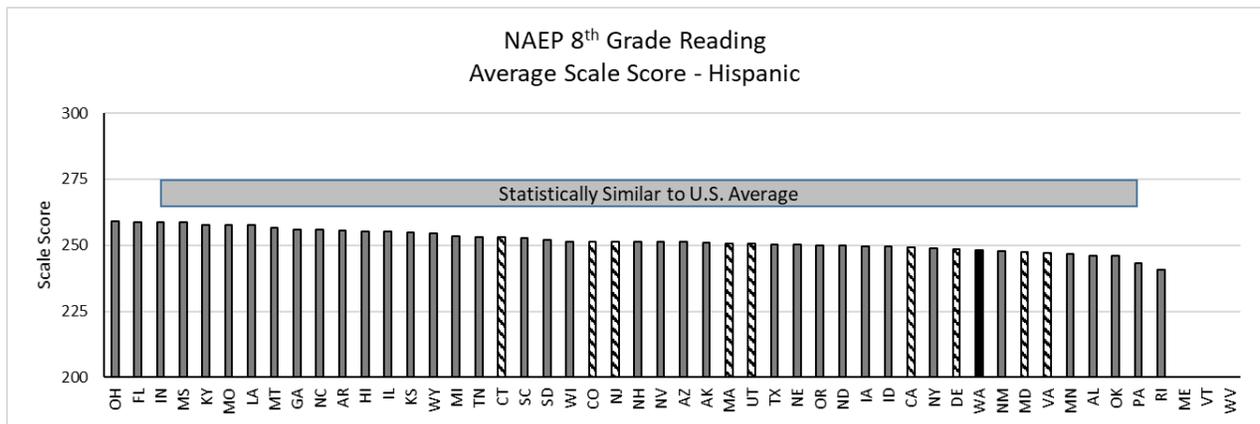
Students identifying as Black or African American in Washington posted an average scale score of 235.7 which was statistically similar to the U.S. average of 243.8 (Figure 3.49). Washington’s scale score is statistically similar to seven peer states and Massachusetts is the only peer state with a statistically higher scale score. A scale score of 246.6 was required for a state to be placed in the top ten percent nationally.

Figure 3.49: shows the rank ordering of the performance of the Black or African American student group on the 2019 8<sup>th</sup> grade NAEP in reading for each of the states.



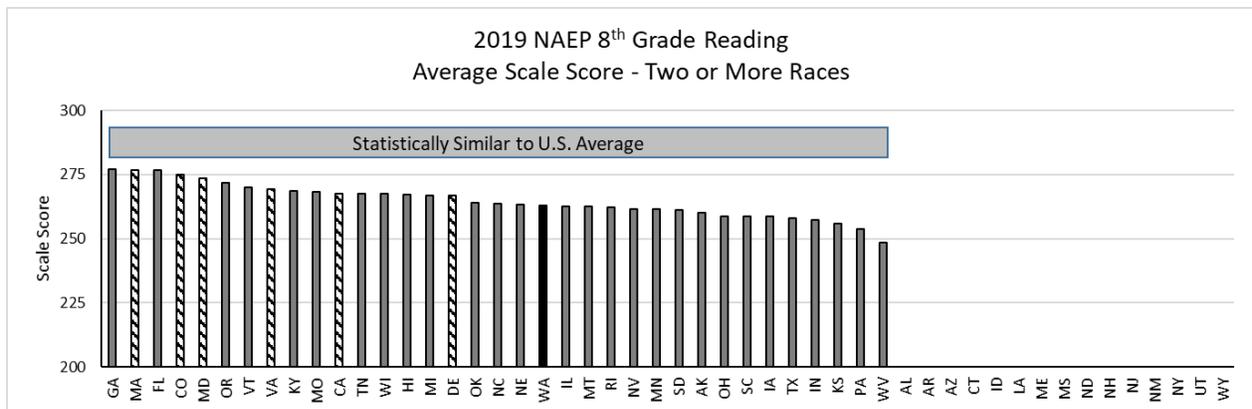
Students identifying as Hispanic or Latinx posted an average scale score of 248.2, which was statistically similar to the U.S. average of 251.1 (Figure 3.50). The Washington score was statistically similar to the computed scores for the nine other peer states. A score of 255.9 was required for a state to be placed in the top ten percent nationally.

Figure 3.50: shows the rank ordering of the performance of the Hispanic or Latinx student group on the 2019 8<sup>th</sup> grade NAEP in reading for each of the states.



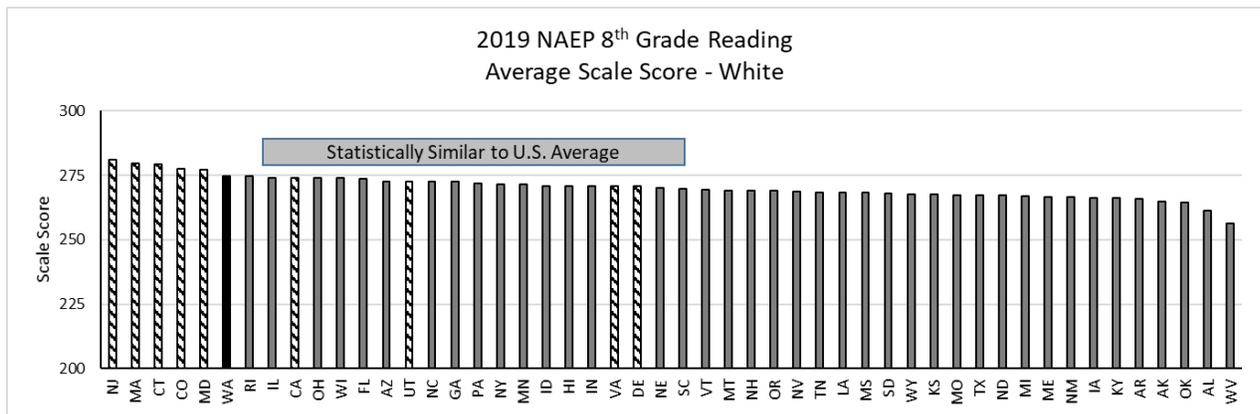
Students identifying with Two or More races posted an average scale score of 262.9, which was statistically similar to the U.S. average of 265.7 (Figure 3.51). The Washington score was statistically similar to the six peer states for which a score was computed. A score of 269.2 was required for a state to be placed in the top ten percent nationally.

Figure 3.51: shows the rank ordering of the performance of the Two or More races student group on the 2019 8<sup>th</sup> grade NAEP in reading for each of the states.



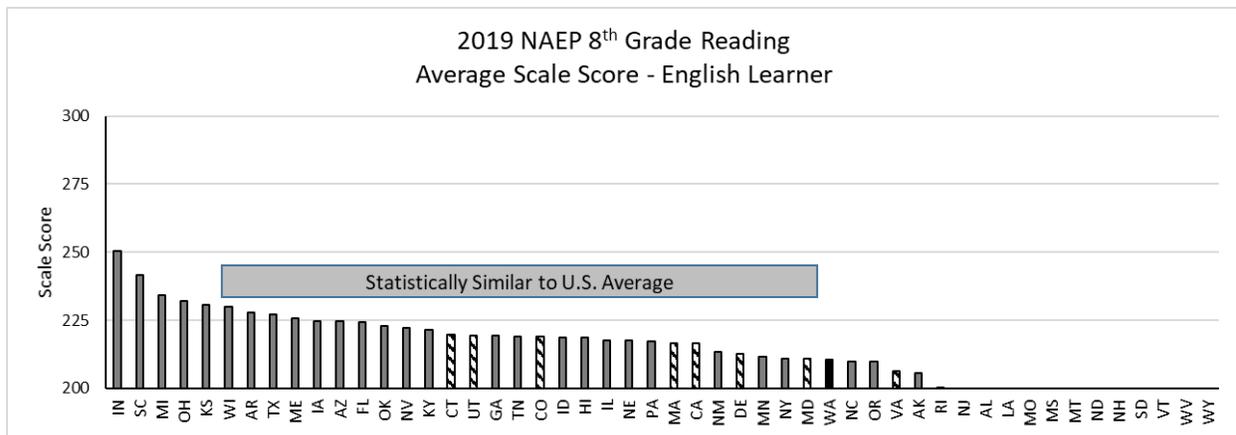
For Washington, students identifying as White posted an average scale score of 274.7 which was statistically higher than the U.S. average of 271.2 (Figure 3.52). The Washington scale score is statistically higher than or similar to the score for six peer states, but the scores for Connecticut, Massachusetts, and New Jersey are statistically different and higher than the Washington score. To be in the top ten percent nationally, an average scale score of 277.2 was required.

Figure 3.52: shows the rank ordering of the performance of the White student group on the 2019 8<sup>th</sup> grade NAEP in reading for each of the states.



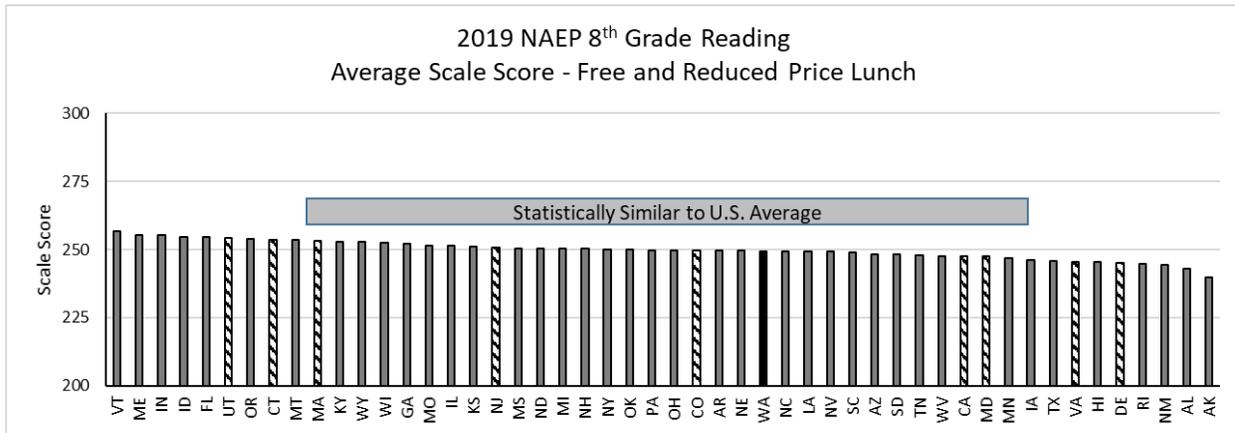
English learners participating in the 2019 NAEP in reading posted an average scale score of 210.6, which is statistically different and lower than the U.S. average scale score of 220.5 (Figure 3.53). The scale scores posted by all nine peer states are statistically similar to the Washington score. A scale score of 232.1 was required for a state to be placed in the top ten percent nationally.

Figure 3.53: shows the rank ordering of the performance of the English learner student group on the 2019 8<sup>th</sup> grade NAEP in reading for each of the states.



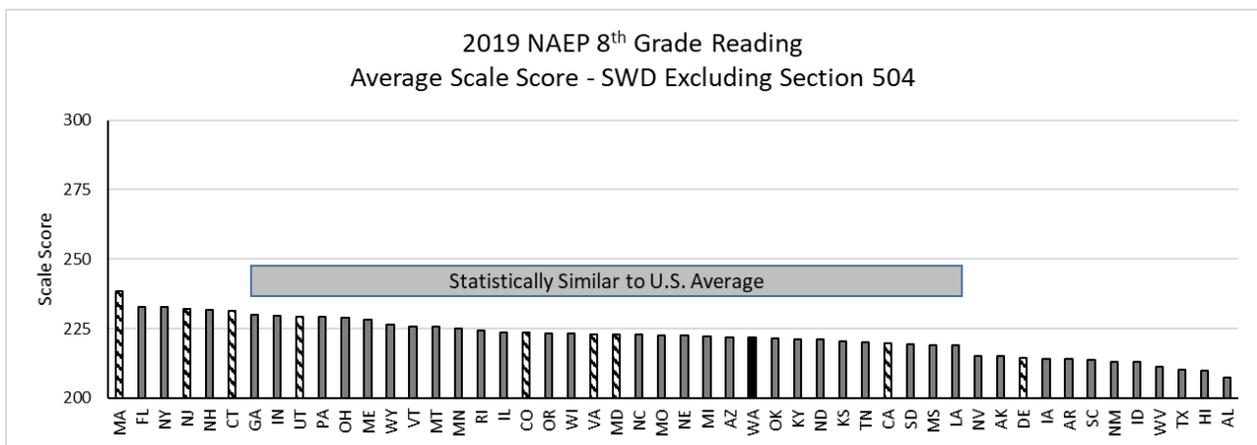
For the 8<sup>th</sup> grade students qualifying for the FRL program in Washington, a scale score of 249.3 was computed, which is statistically similar to the U.S. average of 249.4 (Figure 3.54). The scale scores posted by all nine peer states are statistically similar to the Washington score. A scale score of 254.6 was required for a state to be placed in the top ten percent nationally.

Figure 3.54: shows the rank ordering of the performance of the students qualifying for the FRL program on the 2019 8<sup>th</sup> grade NAEP in reading for each of the states.



For the 8<sup>th</sup> grade students in Washington receiving special education services, a scale score of 221.8, which is statistically similar to the U.S. average of 223.7 (Figure 3.55). The scale scores posted by eight peer states are statistically similar to the Washington score and Massachusetts is the only peer state to post a scale score statistically higher than the Washington score. To perform in the top ten percent of states nationally, a score of 231.7 was required.

Figure 3.55: shows the rank ordering of the performance of the students receiving special education services on the 2019 8<sup>th</sup> grade NAEP in reading for each of the states.



## WASHINGTON NAEP RESULTS – BY GENDER

### SUMMARY

On the 4<sup>th</sup> grade assessments, the average scale scores for Washington female and male students are statistically similar to the corresponding scale scores for the U.S. and are mostly statistically similar to the scale scores for the peer states (Figure 3.56). On the reading assessment, female students perform a little higher than the male students, and on the math assessment, male students perform a little higher than the female students.

On the 8<sup>th</sup> grade math assessments, both female and male student groups performed higher than the U.S. average and similar to the peer states (Figure 3.56). On the reading assessment, Washington female students scored higher than the U.S. average and similar to peer states, while the male students performed statistically similar to the U.S. average and the peer states. In Washington, female students scored a little higher than males on the math assessment and substantially higher on the reading assessment.

Figure 3.56: summary of scale score performance by gender on the 2019 4<sup>th</sup> and 8<sup>th</sup> grade NAEP in reading and math.

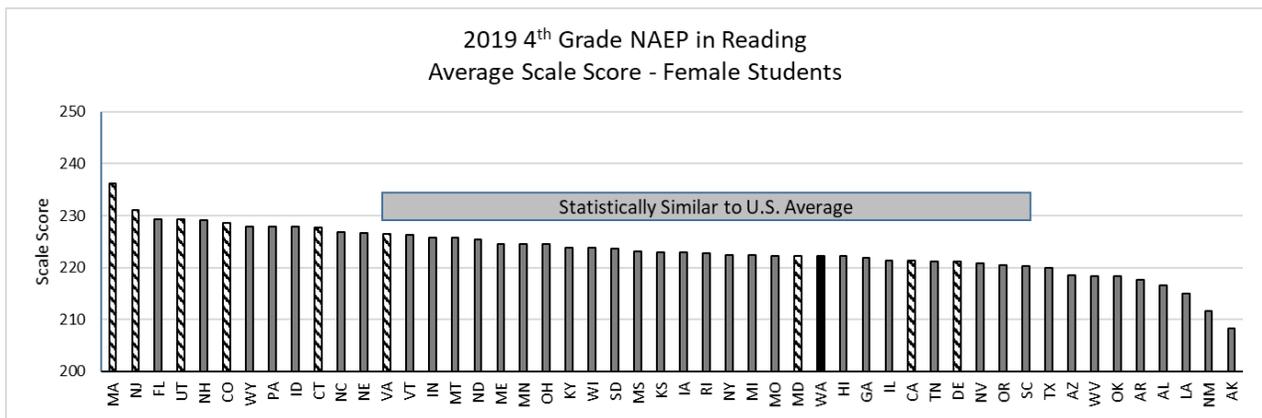
<b>4<sup>th</sup> Grade NAEP in Reading</b>	<b>WA Scale Score</b>	<b>U.S. Scale Score</b>	<b>U.S. Comparison*</b>	<b>Peer State Comparison*</b>
Female	222.3	223.3	Similar	Similar
Male	217.2	215.8	Similar	Similar
Female-Male Score Gap*	5.0	7.5	Similar	Similar
<b>4<sup>th</sup> Grade NAEP in Math</b>	<b>WA Scale Score</b>	<b>U.S. Scale Score</b>	<b>U.S. Comparison*</b>	<b>Peer State Comparison*</b>
Female	236.8	238.4	Similar	Similar
Male	242.1	241.6	Similar	Similar
Female-Male Score Gap*	-5.3	-3.1	Similar	Similar
<b>8<sup>th</sup> Grade NAEP in Math</b>	<b>WA Scale Score</b>	<b>U.S. Scale Score</b>	<b>U.S. Comparison*</b>	<b>Peer State Comparison*</b>
Female	286.1	281.5	WA Higher	Similar
Male	285.6	280.5	WA Higher	Similar
Female-Male Score Gap*	0.5	1.0	Similar	Similar
<b>8<sup>th</sup> Grade NAEP in Reading</b>	<b>WA Scale Score</b>	<b>U.S. Scale Score</b>	<b>U.S. Comparison*</b>	<b>Peer State Comparison*</b>
Female	273.2	267.7	WA Higher	Similar
Male	259.8	256.5	Similar	Similar
Female-Male Score Gap*	13.4	12.8	Similar	Similar

\*Note: the gap is the female scale score minus the male scale score and is shown in scale score points. A positive value for the gap indicates that the score for the female students was higher than the score for the male students. The U.S. comparison is derived from the NAEP Data Explorer statistical test of significance (Appendix C) and the peer state comparison is deemed similar if Washington's score is statistically similar to or better than four or more peer states

#### 4<sup>TH</sup> GRADE NAEP IN READING

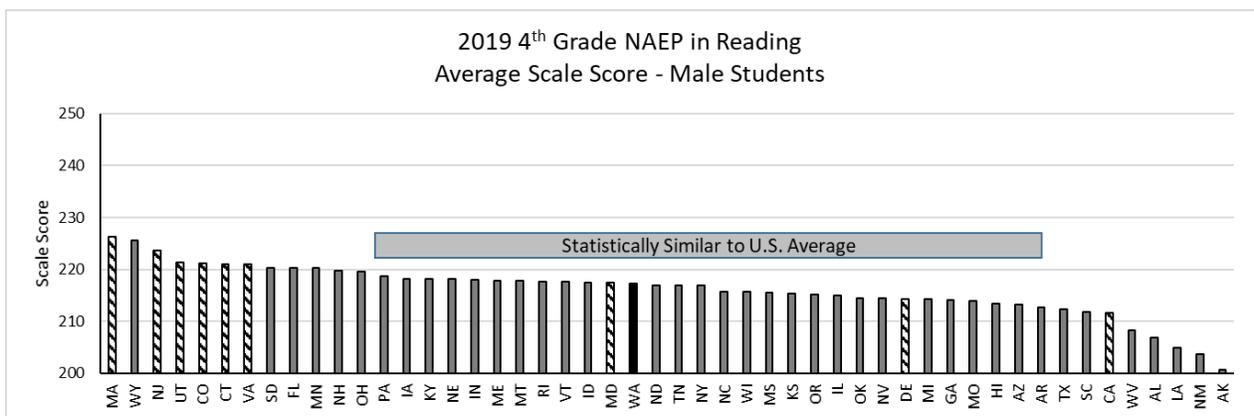
On the 4<sup>th</sup> grade NAEP in reading, female students in Washington posted an average scale score of 222.3, which was statistically similar to the U.S. average of 223.3 (Figure 3.57). The Washington scale score is statistically similar to four peer states but is statistically lower than the scores for Colorado, Connecticut, Massachusetts, New Jersey, and Utah.

Figure 3.57: shows the rank ordering of the performance of female students on the 2019 4<sup>th</sup> grade NAEP in reading for each of the states.



A scale score of 217.2 was computed for Washington male students on the 4<sup>th</sup> grade NAEP in reading, which was statistically similar to the U.S. average of 215.8 (Figure 3.58). The Washington scale score was statistically similar to or higher than seven peer states and Massachusetts and New Jersey were the only peer states to score statistically higher than Washington.

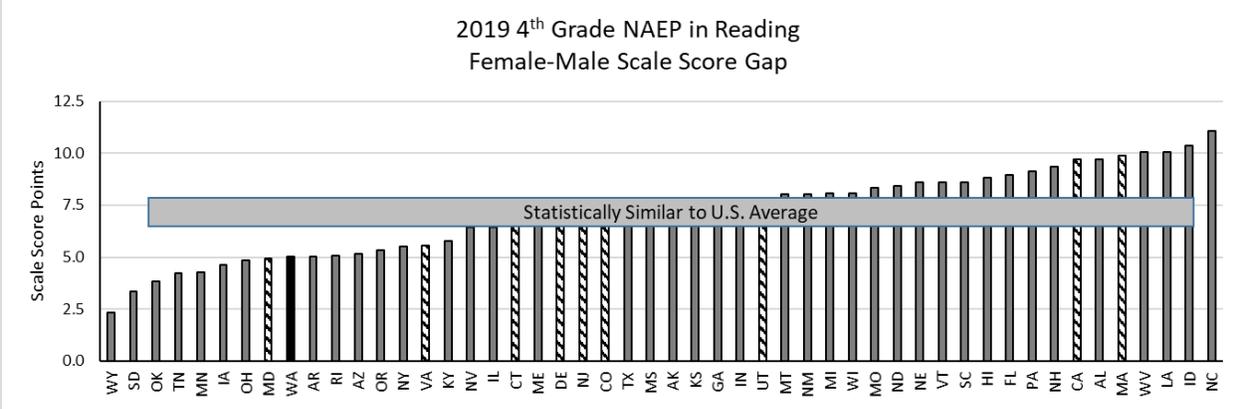
Figure 3.58: shows the rank ordering of the performance of male students on the 2019 4<sup>th</sup> grade NAEP in reading for each of the states.



On the 4<sup>th</sup> grade NAEP in reading, female students scored 5.0 scale score points higher than male students, which was statistically similar to the U.S. average of 1.0 and all other states

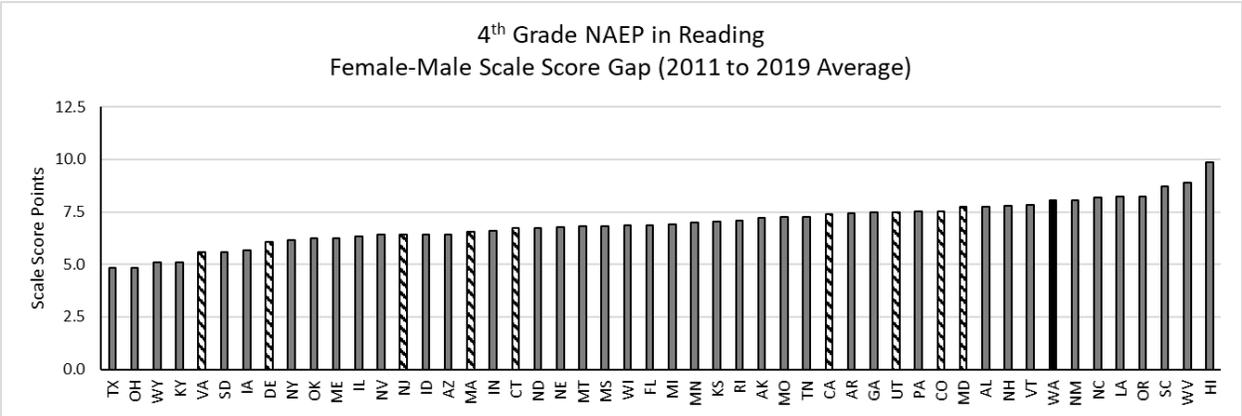
(Figure 3.59). For Washington, the average female-male scale score gap over the last five NAEP administrations was 8.1 scale score points (Figure 3.60), meaning that on average over the five most recent administrations, female students scored higher than male students.

Figure 3.59: shows the rank ordering of female-male scale score point gap on the 2019 4<sup>th</sup> grade NAEP in reading for each of the states.



Note: the gap is the value for the Female student group minus the value for the Male student group. A positive value means that the value for the Female student group is higher than the value for the Male student group.

Figure 3.60: shows the rank ordering of the five-administration average of female-male scale score point gap on the 4<sup>th</sup> grade NAEP in reading for each of the states.

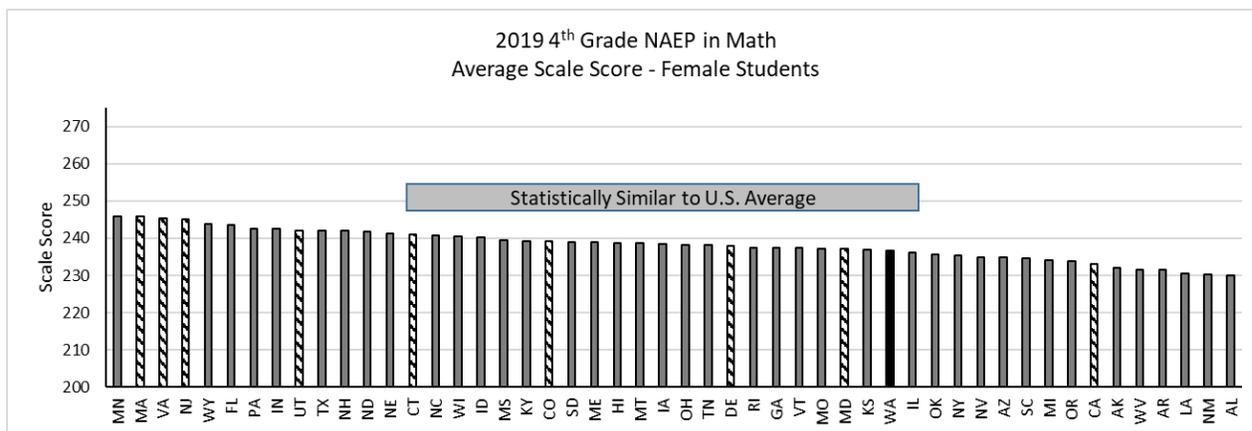


Note: the gap change is the 2019 value for the Female-Male gap minus the 2012 value for the Female-Male gap. A positive value means that the 2019 Female-Male gap higher than the value for the 2011 Female-Male student gap.

**4<sup>TH</sup> GRADE NAEP IN MATH**

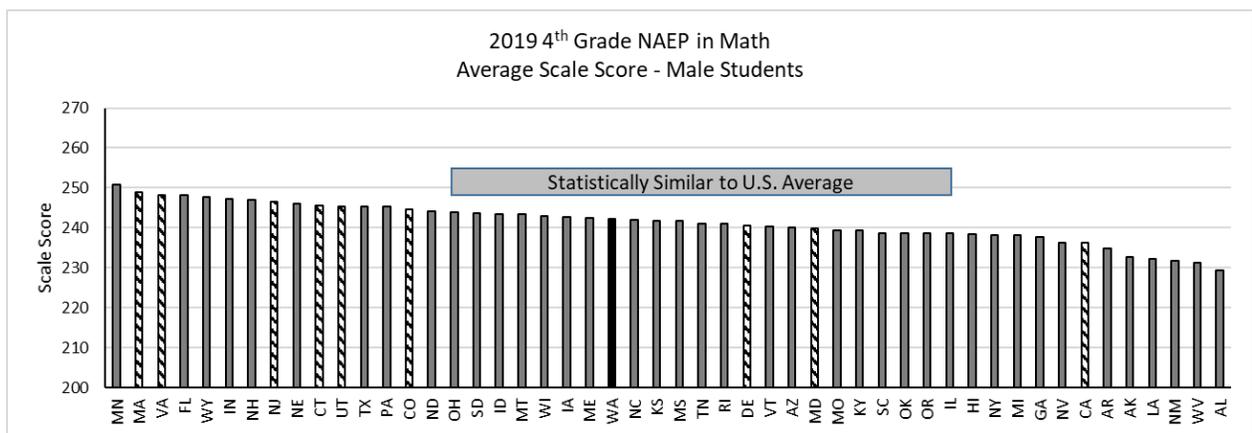
Female students in Washington earned a scale score of 236.8 on the 4<sup>th</sup> grade NAEP in math, which was statistically similar to the U.S. average scale score of 238.4 (Figure 3.61). The Washington score was statistically similar to or higher than four peer states.

Figure 3.61: shows the rank ordering of the performance of female students on the 2019 4<sup>th</sup> grade NAEP in math for each of the states.



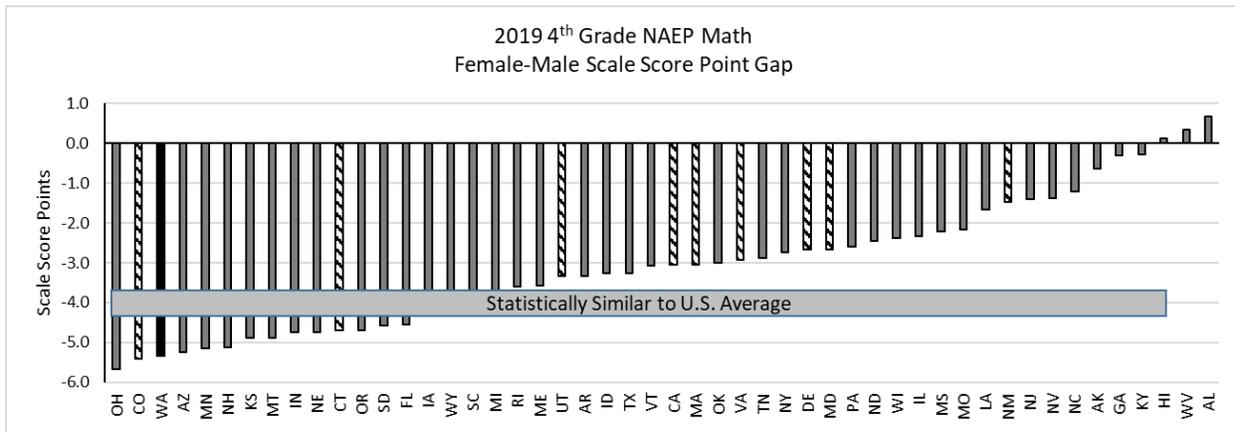
The male students in Washington posted an average scale score of 242.1, which was statistically similar to the U.S. average of 241.6 (Figure 3.62). The Washington score was statistically similar to or higher than six peer states.

Figure 3.62: shows the rank ordering of the performance of male students on the 2019 4<sup>th</sup> grade NAEP in math for each of the states.



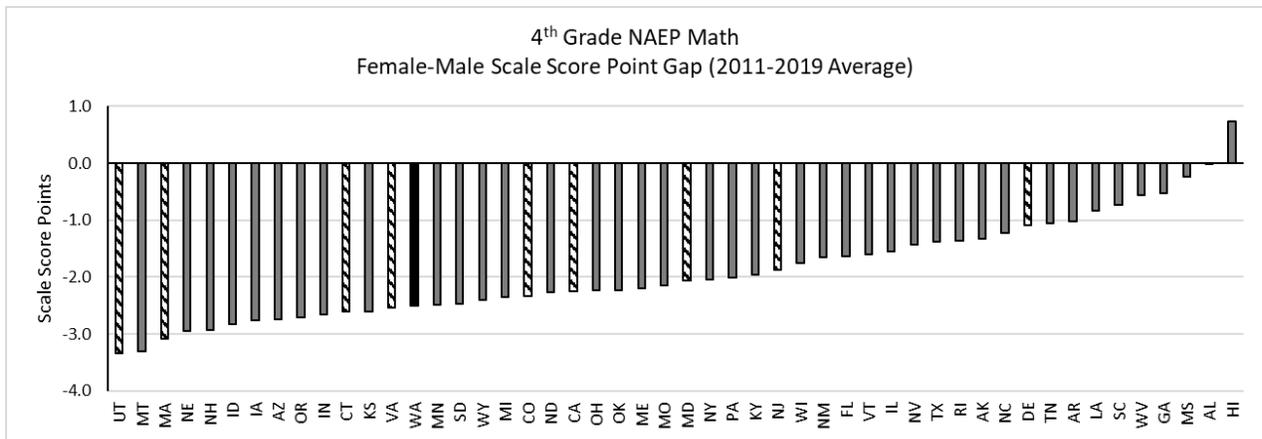
On the 4<sup>th</sup> grade NAEP in math, female students scored 5.3 scale score points lower than male students, which was statistically similar to the U.S. average of -3.1 and all other states (Figure 3.63) but was the third largest gap in the nation. For Washington, the average female-male scale score gap over the last five NAEP administrations was -2.5 scale score points (Figure 3.64), meaning that on average over the five most recent administrations, female students scored lower than male students.

Figure 3.63: shows the rank ordering of female-male scale score point gap on the 2019 4<sup>th</sup> grade NAEP in math for each of the states.



Note: the gap is the value for the Female student group minus the value for the Male student group. A positive value means that the value for the Female student group is higher than the value for the Male student group.

Figure 3.64: shows the rank ordering of the five-administration average of female-male scale score point gap on the 4<sup>th</sup> grade NAEP in math for each of the states.

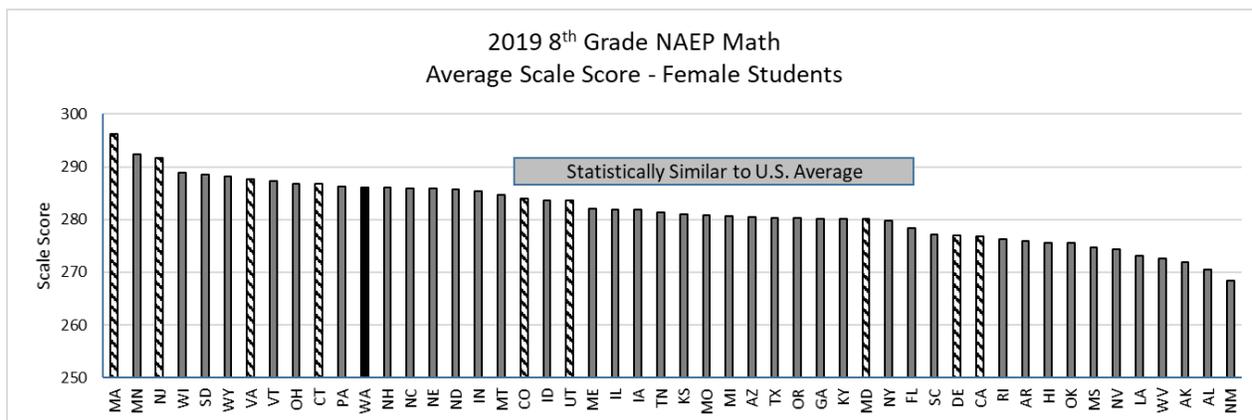


Note: the gap change is the 2019 value for the Female-Male gap minus the 2012 value for the Female-Male gap. A positive value means that the 2019 Female-Male gap higher than the value for the 2011 Female-Male student gap.

### 8<sup>TH</sup> GRADE NAEP IN MATH

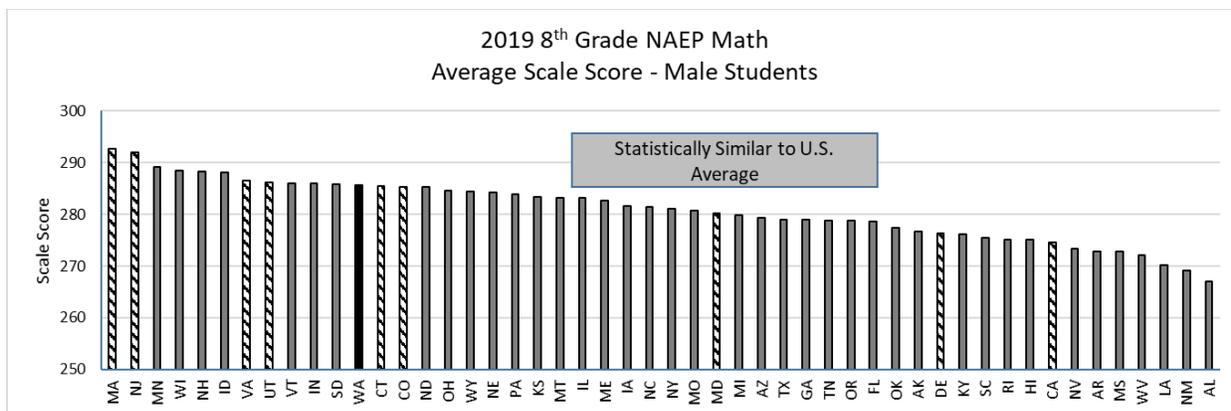
On the 8<sup>th</sup> grade NAEP in math, female students in Washington earned an average scale score of 286.1 which was statistically higher than the U.S. average of 281.5 (Figure 3.65). Washington female students' score was statistically similar to or higher than seven peer states but was statistically lower than the scores from Massachusetts and New Jersey.

Figure 3.65: shows the rank ordering of the performance of female students on the 2019 8<sup>th</sup> grade NAEP in math for each of the states.



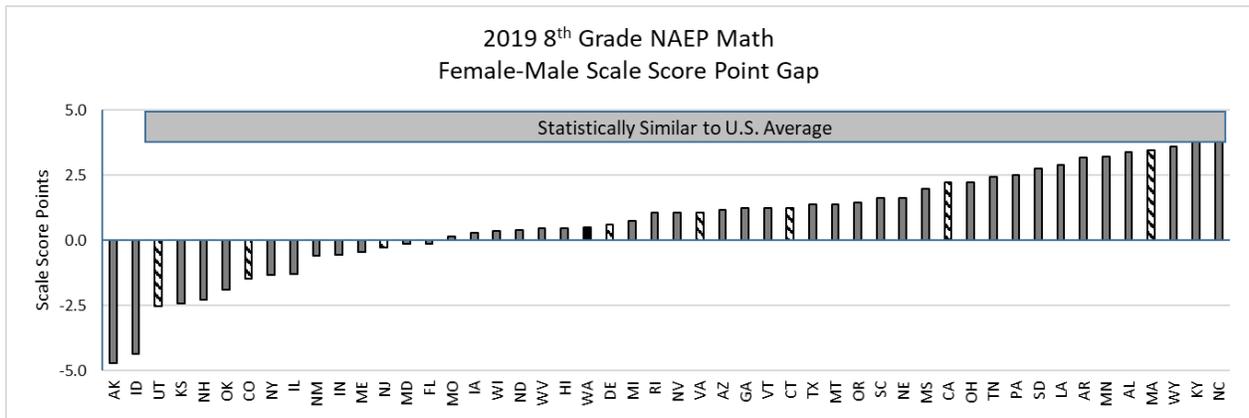
Male students in Washington posted an average score of 285.6 on the 8<sup>th</sup> grade NAEP in math, which was statistically higher than the U. S average of 280.5 (Figure 3.66). Washington male students’ score was statistically similar to or higher than seven peer states but was statistically lower than the scores from Massachusetts and New Jersey.

Figure 3.66: shows the rank ordering of the performance of male students on the 2019 8<sup>th</sup> grade NAEP in math for each of the states.



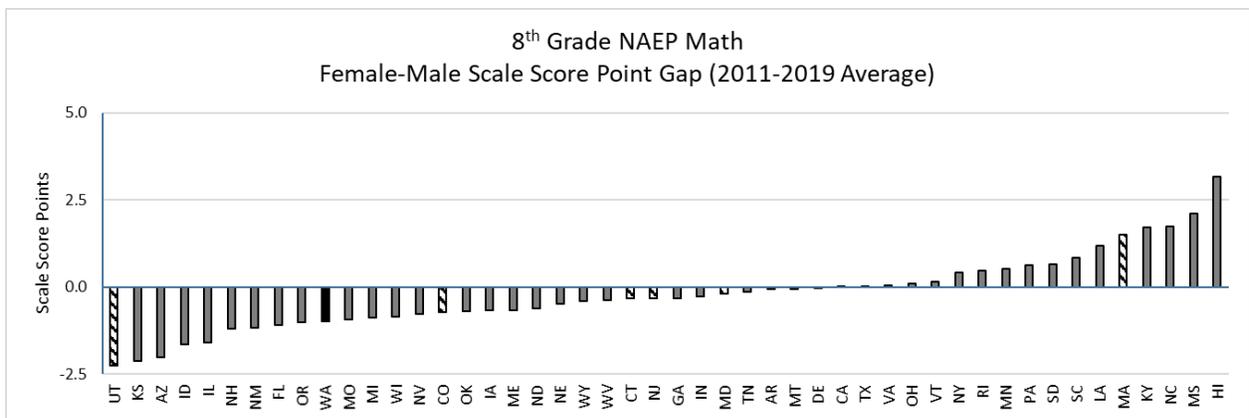
On the 8<sup>th</sup> grade NAEP in math, female students scored 0.5 scale score points higher than male students, which was statistically similar to the U.S. average of 1.0 and all other states (Figure 3.67). The average female-male scale score gap over the last five NAEP administrations was -1.0 scale score points (Figure 3.68), meaning that on average over the five most recent administrations, male students score just a little higher than female students.

Figure 3.67: shows the rank ordering of female-male scale score point gap on the 2019 8<sup>th</sup> grade NAEP in math for each of the states.



Note: the gap is the value for the Female student group minus the value for the Male student group. A positive value means that the value for the Female student group is higher than the value for the Male student group.

Figure 3.68: shows the rank ordering of the five-administration average of female-male scale score point gap on the 8<sup>th</sup> grade NAEP in math for each of the states.

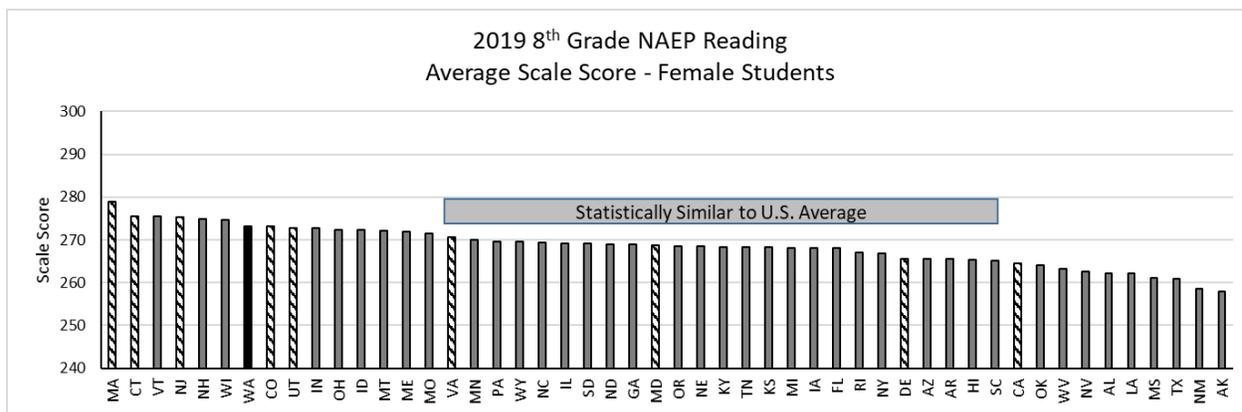


Note: the gap change is the 2019 value for the Female-Male gap minus the 2012 value for the Female-Male gap. A positive value means that the 2019 Female-Male gap higher than the value for the 2011 Female-Male student gap.

### 8<sup>TH</sup> GRADE NAEP IN READING

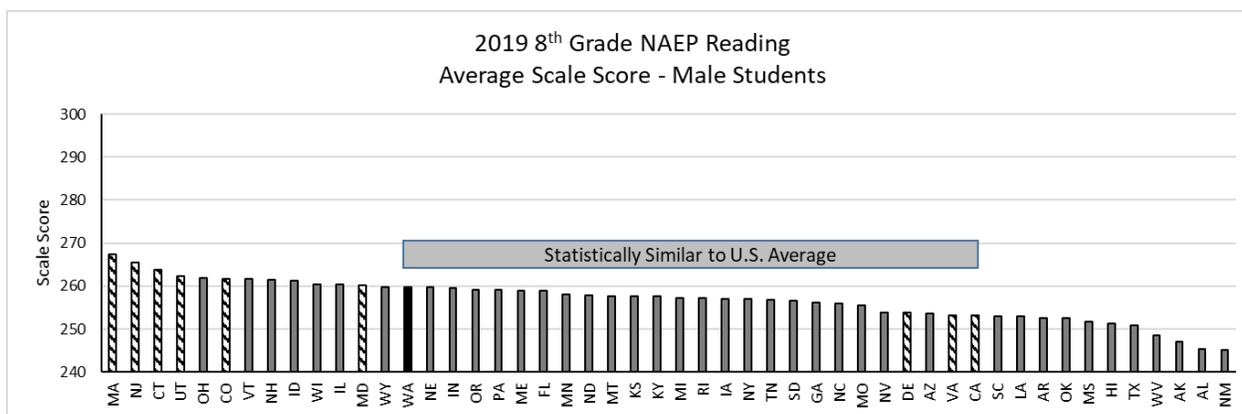
In Washington, female 8<sup>th</sup> graders posted an average scale score of 273.2 which was statistically higher than the U.S. average of 267.7 (Figure 3.69). Washington’s scale score was statistically similar to or better than eight peer states, as Massachusetts was the only state to post a score statistically higher than the corresponding score for Washington.

Figure 3.69: shows the rank ordering of the performance of female students on the 2019 8<sup>th</sup> grade NAEP in reading for each of the states.



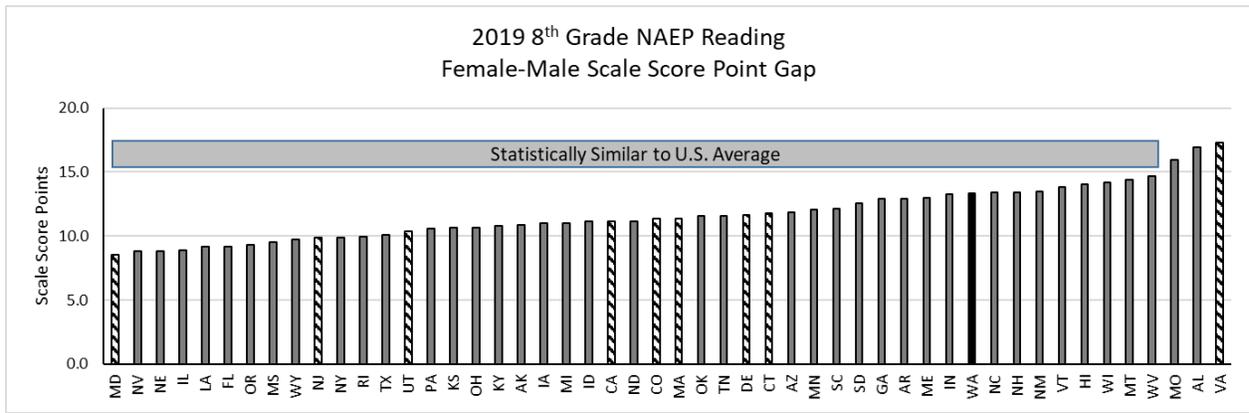
The male students in Washington posted a scale score (259.8) which was similar to the U.S. average of 256.5 (Figure 3.70). Washington’s scale score was statistically similar to or better than seven peer states, as Massachusetts and New Jersey the only peer states to post a score statistically higher than the score for Washington.

Figure 3.70: shows the rank ordering of the performance of male students on the 2019 8<sup>th</sup> grade NAEP in reading for each of the states.



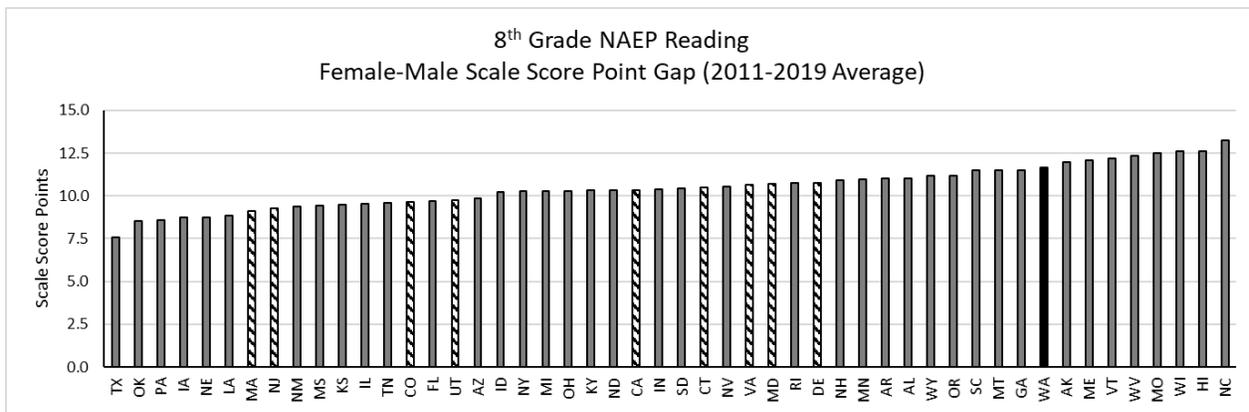
On the 2019 NAEP in reading, the female-male scale score gap was 13.4 scale points (meaning that female students scored substantially higher than male students) which was similar to the U.S. average and similar to or higher than all nine peer states (Figure 3.71). The average female-male scale score gap over the last five NAEP administrations was 11.7 scale score points (Figure 3.72), which is the largest average gap of the peer states.

Figure 3.71: shows the rank ordering of female-male scale score point gap on the 2019 8<sup>th</sup> grade NAEP in reading for each of the states.



Note: the gap is the value for the Female student group minus the value for the Male student group. A positive value means that the value for the Female student group is higher than the value for the Male student group.

Figure 3.72: shows the rank ordering of the five-administration average of female-male scale score point gap on the 8<sup>th</sup> grade NAEP in reading for each of the states.



Note: the gap change is the 2019 value for the Female-Male gap minus the 2012 value for the Female-Male gap. A positive value means that the 2019 Female-Male gap higher than the value for the 2011 Female-Male student gap.

## **Section 4: Disparate Educational Outcomes**

### SBE Equity Statement

The Washington State Board of Education equity statement is currently published on the SBE website as follows:

The Washington State Board of Education uses equity as a guiding principle in carrying out its statutory charges, strategic planning, and policymaking.

The Board believes that the state's school system exists to empower all students and assure they are ready to become productive, caring, and civically engaged community members.

The Board is committed to successful academic attainment for all students. It will require narrowing opportunity and academic achievement gaps between the highest and lowest performing students, and eliminating predictability and disproportionality in student outcomes by race, ethnicity, and socioeconomic conditions.

To accomplish this, the Board will work collaboratively and transparently with educational and community partners to:

- Ensure that equity in education is understood as a process to identify and eliminate institutional policies, practices, and barriers that reinforce and contribute to predictably disparate educational outcomes;
- Honor and actively engage Washington's underserved communities as partners in developing and advocating for equity-driven policies, practices, and resources that meet the needs of all students; and
- Use equity as a lens to continuously assess and improve the collective process of policymaking to ensure our school system's commitment and ability to meet the needs of all students today and into the future.

### ***KINDERGARTEN READINESS***

The Kindergarten Readiness indicator is the percentage of students demonstrating the characteristics of kindergarteners on all six domains of the Washington Kindergarten Inventory of Developmental Skills (WaKIDS). After four years of nearly 100 percent participation on the WaKIDS, the opportunity gaps are large, persistent, and there is little evidence indicating that the opportunity gaps are being reduced in any meaningful manner (Figure 4.1). The following statements can be made:

- The Native American-White, Black-White, and SWD-Not SWD gaps increased by 0.4 to 2.2 percentage points,
- The Hispanic-White gap is virtually unchanged,

- The Pacific Islander-White, FRL-Not FRL, and EL-Not EL gaps decreased by 0.7 to 2.6 percentage points, and
- If only the two most administrations are considered, five of the six referenced gaps increased by 0.4 to 3.8 percentage points, with the EL-Not EL gap virtually unchanged.

Figure 4.1: shows the changes in gaps (in percentage points) over the most recent years for the Kindergarten Readiness indicator.

Kindergarten Readiness	2016-17	2017-18	2018-19	2019-20	Four-Year Trend
Native American-White Gap*	20.7	22.2	21.3	22.9	Gap Increased
Black-White Gap*	11.4	12.7	11.4	13.4	Gap Increased
Hispanic-White Gap*	22.0	21.8	21.8	22.1	Gap Unchanged
Pacific Islander-White Gap*	25.1	23.6	20.6	24.4	Gap Decreased
FRL-Not FRL Gap**	28.1	26.2	26.0	26.4	Gap Decreased
SWD-Not SWD Gap**	31.7	31.1	30.6	32.1	Gap Increased
EL-Not EL Gap**	21.9	20.0	19.4	19.3	Gap Decreased

\*Note: the gaps is computed as the value for the White student group minus the value for the xxx student group, resulting in a positive value and meaning that the value for the White student group is higher than the value for the comparison group. \*\*Note: shows where the gap is computed as the value for the Not XXX group minus the value for the XXX group.

#### **4<sup>TH</sup> GRADE READING**

The 4<sup>th</sup> Grade Reading indicator is the percentage of students meeting standard on the Smarter Balanced 4<sup>th</sup> grade ELA assessment. Over the four most recent administrations, the opportunity gaps are large, persistent, and there is little evidence demonstrating that the achievement gaps are being reduced in any meaningful manner (Figure 4.2). The following statements can be made:

- The Native American-White, Pacific Islander-White, and EL-Not EL gaps increased by 2.4 to 5.2 percentage points,
- The Black-White, Hispanic-White, FRL-Not FRL, and SWD-Not SWD gaps decreased by 0.6 to 2.0 percentage points, and
- If only the two most administrations are considered, the gaps for:
  - The Native American-White, Pacific Islander-White, and EL-Not EL gaps increased by 0.8 to 1.8 percentage points,
  - The Black-White, FRL-Not FRL, and SWD-Not SWD gaps decreased by 0.6 to 3.3 percentage points, and
  - The Hispanic-White gap was virtually unchanged.

Figure 4.2: shows the changes in gaps (in percentage points) over the most recent years for the 4<sup>th</sup> Grade Reading indicator.

4 <sup>th</sup> Grade Reading	2015-16	2016-17	2017-18	2018-19	Four-Year Trend
<b>Female-Male Gap</b>	<b>8.5</b>	<b>7.7</b>	<b>7.0</b>	<b>6.7</b>	<b>Gap Decreased</b>
Native American-White Gap*	34.9	35.6	36.9	37.7	Gap Increased
<b>Black-White Gap*</b>	<b>26.2</b>	<b>27.3</b>	<b>27.6</b>	<b>24.3</b>	<b>Gap Decreased</b>
<b>Hispanic-White Gap*</b>	<b>26.2</b>	<b>26.1</b>	<b>25.4</b>	<b>25.3</b>	<b>Gap Decreased</b>
Pacific Islander-White Gap*	28.6	30.3	29.2	31.0	Gap Increased
<b>FRL-Not FRL Gap**</b>	<b>32.0</b>	<b>32.4</b>	<b>32.0</b>	<b>31.4</b>	<b>Gap Decreased</b>
<b>SWD-Not SWD Gap**</b>	<b>40.0</b>	<b>40.0</b>	<b>39.2</b>	<b>38.0</b>	<b>Gap Decreased</b>
EL-Not EL Gap**	42.1	45.6	46.4	47.3	Gap Increased

\*Note: the gaps is computed as the value for the White student group minus the value for the xxx student group, resulting in a positive value and meaning that the value for the White student group is higher than the value for the comparison group. \*\*Note: shows where the gap is computed as the value for the Not XXX group minus the value for the XXX group.

### SUMMARY-4<sup>TH</sup> GRADE NAEP IN READING

For most of the scale score gap measures, students in Washington perform statistically similar to the U.S average and similar to the peer states (Figure 4.3). However, the Hispanic-White and the English learner (EL)-Not EL scale score gaps for Washington are statistically larger than the U.S. average but are similar to the peer states.

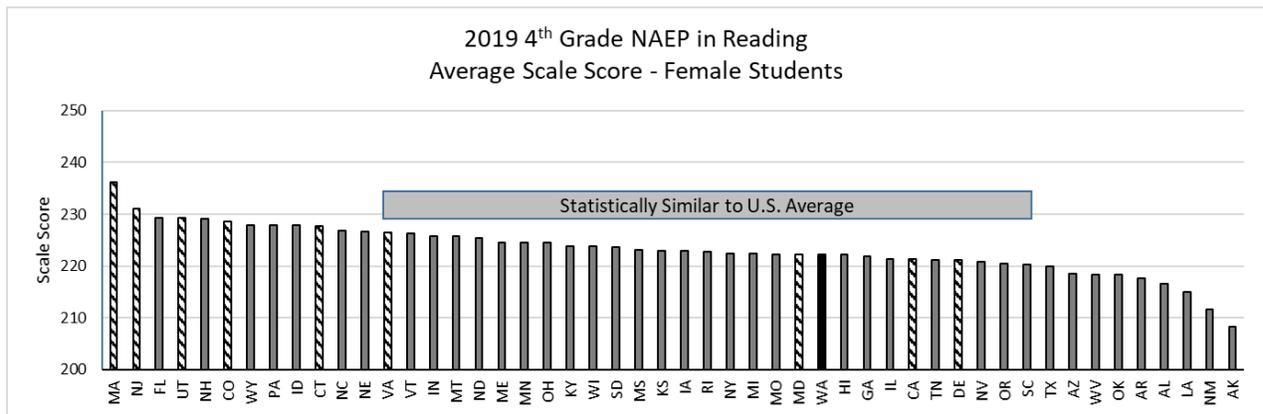
Figure 4.3: summarizes the scale score gaps in Washington as compared to the U.S. averages and the gaps for the peer states.

4 <sup>th</sup> Grade NAEP in Reading	WA Scale Score	U.S. Scale Score	U.S. Comparison*	Peer State Comparison*
Female-Male Gap	5.0	7.5	Similar	Similar
Black-White Gap	19.2	26.4	Similar	Similar
Hispanic-White Gap	26.6	21.0	WA Gap Larger	Similar
FRL-Not FRL Gap	28.1	27.8	Similar	Similar
SWD-Not SWD Gap	45.2	45.2	Similar	Similar
EL-Not EL Gap	46.5	32.5	WA Gap Larger	Similar

### GAP BASED ON GENDER

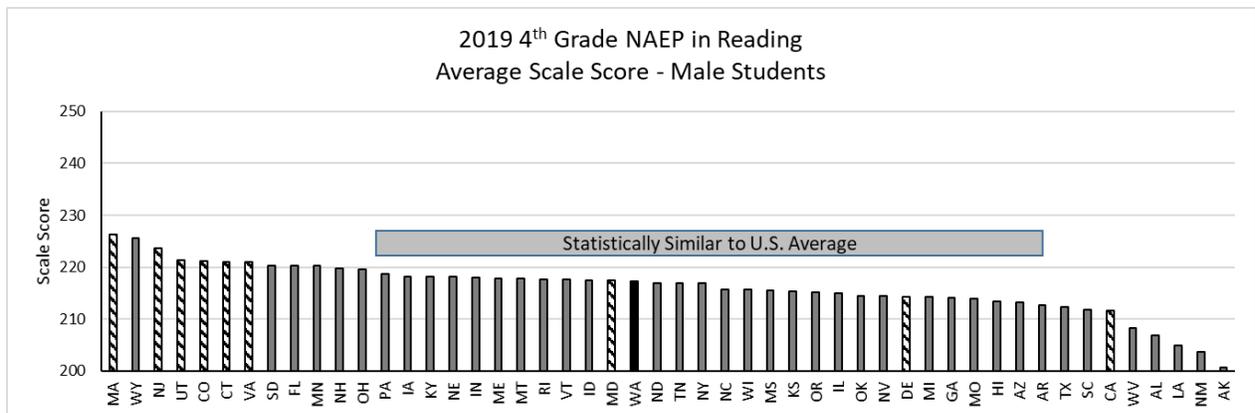
On the 4<sup>th</sup> grade NAEP in reading, female students in Washington posted an average scale score of 222.3 which was statistically similar to the U.S. average of 223.3 (Figure 4.4). The Washington scale score is statistically similar to four peer states but is statistically lower than the scores for Colorado, Connecticut, Massachusetts, New Jersey, and Utah.

Figure 4.4: shows the rank ordering of the performance of female students on the 2019 4<sup>th</sup> grade NAEP in reading for each of the states.



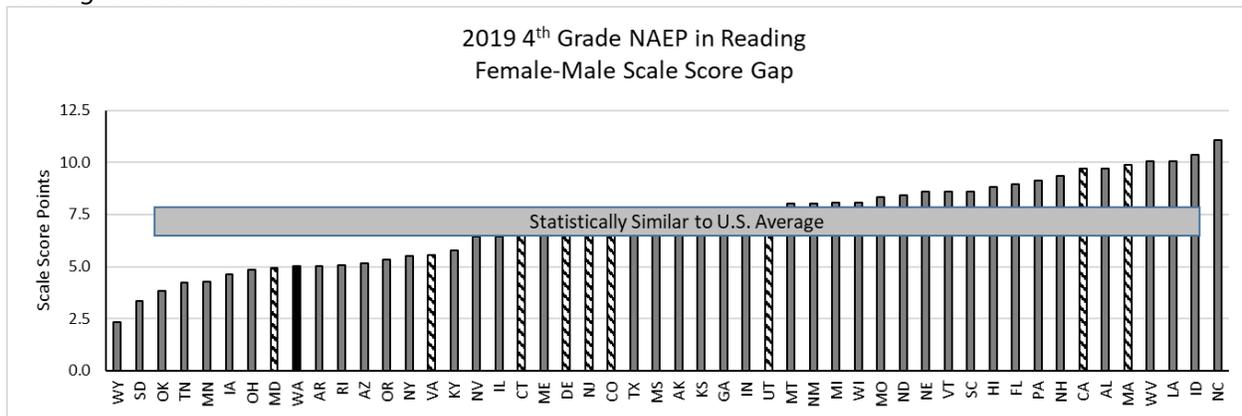
A scale score of 217.2 was computed for Washington male students on the 4<sup>th</sup> grade NAEP in reading, which was statistically similar to the U.S. average of 215.8 (Figure 4.5). The Washington scale score was statistically similar to or higher than seven peer states and Massachusetts and New Jersey were the only peer states to score statistically higher than Washington.

Figure 4.5: shows the rank ordering of the performance of male students on the 2019 4<sup>th</sup> grade NAEP in reading for each of the states.



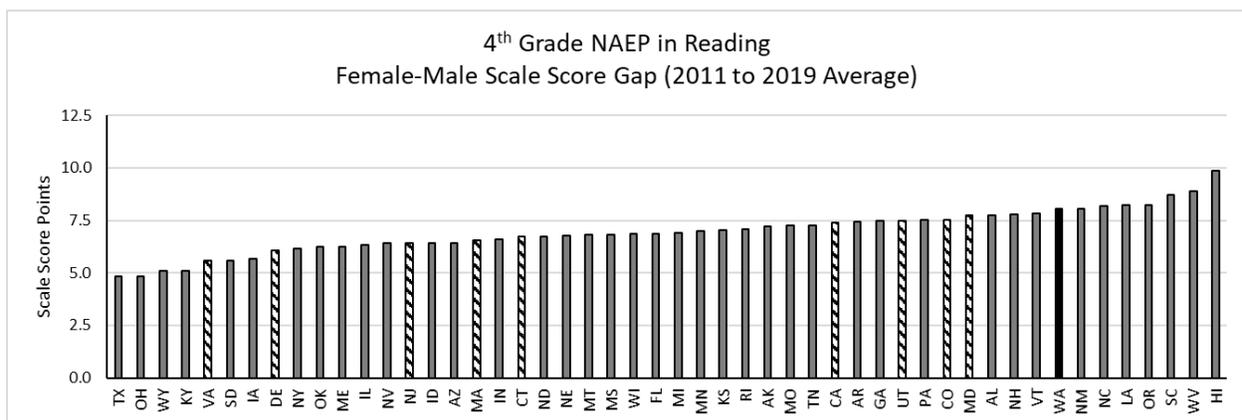
On the 4<sup>th</sup> grade NAEP in reading, female students scored 5.0 scale score points higher than male students, which was statistically similar to the U.S. average of 1.0 and all other states (Figure 4.6). For Washington, the average female-male scale score gap over the last five NAEP administrations was 8.1 scale score points (Figure 4.7), meaning that on average over the five most recent administrations, female students scored higher than male students.

Figure 4.6: shows the rank ordering of female-male scale score point gap on the 2019 4<sup>th</sup> grade NAEP in reading for each of the states.



Note: the gap is the value for the Female student group minus the value for the Male student group. A positive value means that the value for the Female student group is higher than the value for the Male student group.

Figure 4.7: shows the rank ordering of the five-administration average of female-male scale score point gap on the 4<sup>th</sup> grade NAEP in reading for each of the states.



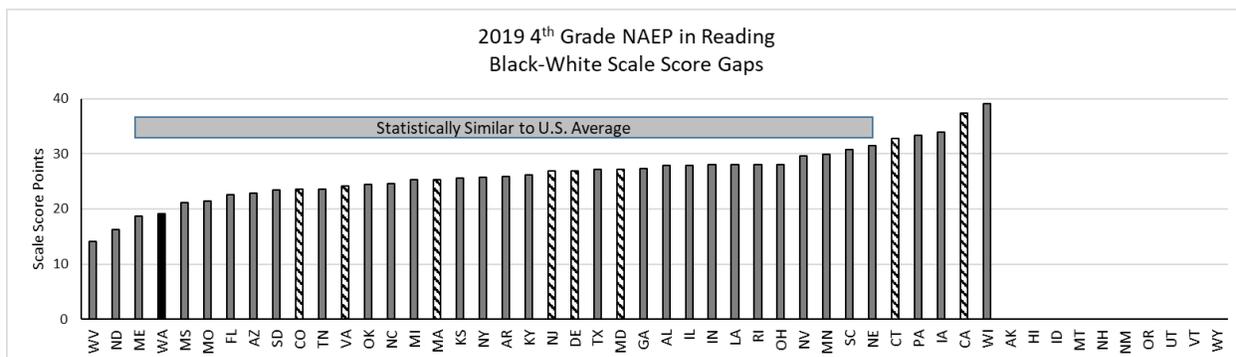
Note: the gap change is the 2019 value for the Female-Male gap minus the 2012 value for the Female-Male gap. A positive value means that the 2019 Female-Male gap higher than the value for the 2011 Female-Male student gap.

### BLACK-WHITE GAP

On the 2019 NAEP in reading, the scale score gap between Black and White student groups was 19.2 scale score points which was statistically similar to the U.S. average of 26.4 scale score points (Figure 4.8). The Washington Black-White gap is statistically similar to or lower than the peer states for which a gap could be computed. From the 2011 to the 2019 administration, the

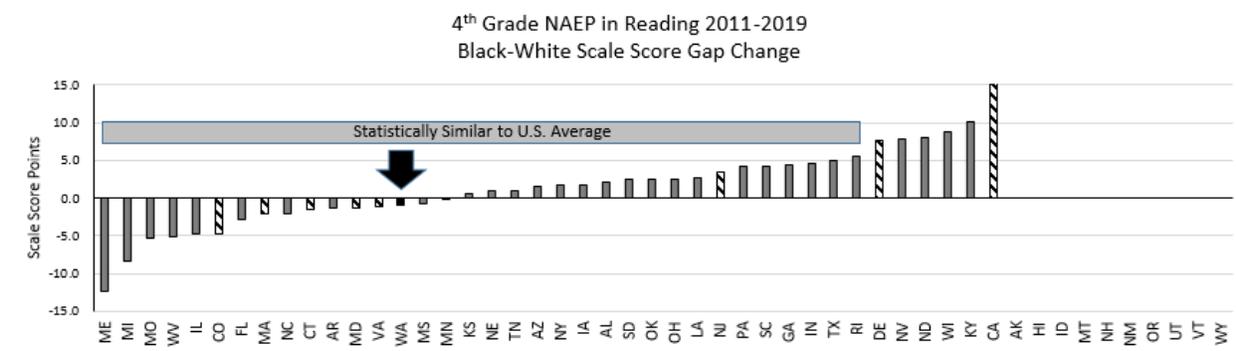
Black-White scale score gap is virtually unchanged, having declined by less than one (0.9) scale score point (Figure 4.9). The Washington gap change is similar to the U.S. average gap change and is statistically similar to six peer states and statistically better than two peer states (California and Delaware).

Figure 4.8: shows the rank ordering of the 2019 Black-White scale score gap for the states in which a scale score gap could be computed.



Note: the gap is the scale score for the White group minus the scale score for the Black group. A positive value means the scale score for White group is greater than the score for the Black group.

Figure 4.9: shows the rank ordering of the 2011 to 2019 Black-White scale score gap change for the states in which a scale score gap could be computed.

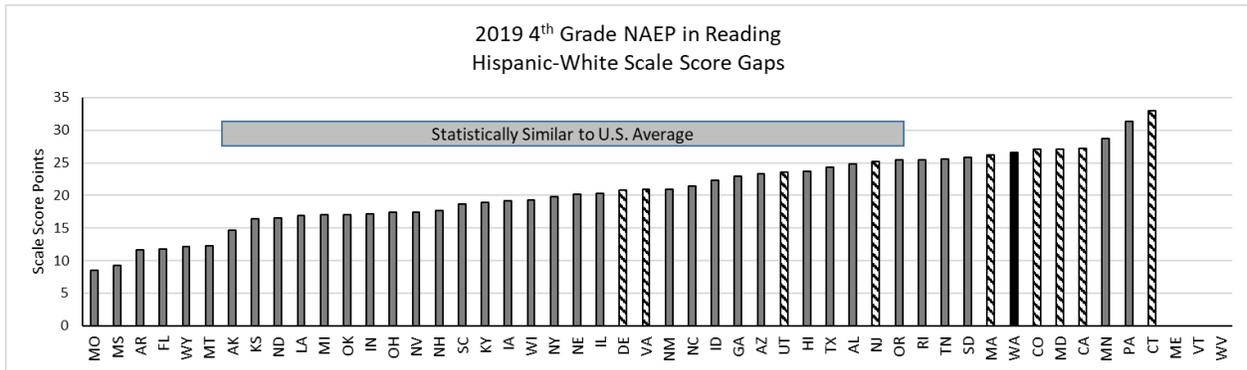


Note: the gap change is the 2019 scale score gap minus the 2011 scale score gap. A positive value means the scale score gap increased, while a negative value means the scale score gap decreased.

### HISPANIC-WHITE GAP

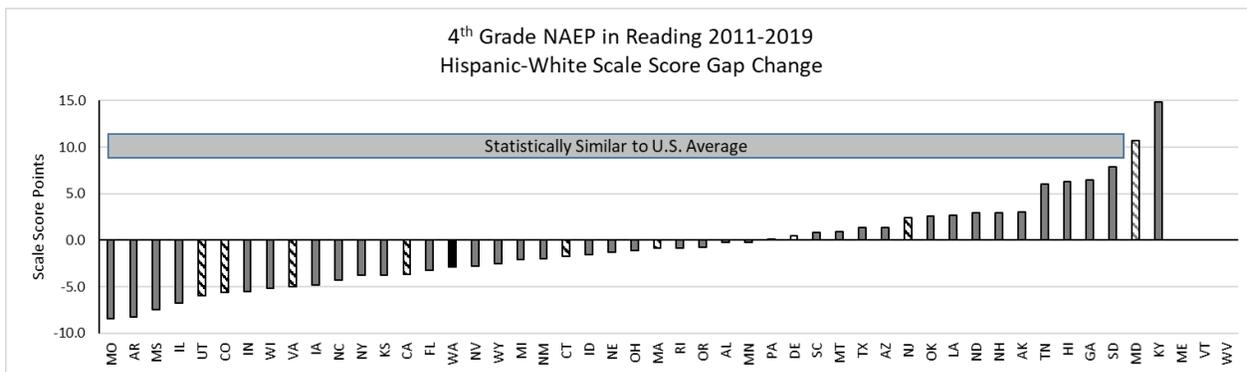
On the 2019 NAEP in reading, the scale score gap between Hispanic and White student groups was 26.6 points, which was statistically different and higher than the U.S. average of 21.0 scale score points (Figure 4.10). The Washington gap is statistically similar to all of the peer states. From the 2011 to the 2019 administrations, the Hispanic-White gap for Washington decreased by 2.9 scale score points, which was statistically similar to the U.S. average gap decline of 3.2 points and statistically similar to eight peer states (Figure 4.11).

Figure 4.10: shows the rank ordering of the 2019 Hispanic-White scale score gap for the states in which a scale score gap could be computed.



Note: the gap is the scale score for the White group minus the scale score for the Hispanic group. A positive value means the scale score for White group is greater than the score for the Hispanic group.

Figure 4.11: shows the rank ordering of the 2011 to 2019 Hispanic-White scale score gap change for the states in which a scale score gap could be computed.



Note: the gap change is the 2019 scale score gap minus the 2011 scale score gap. A positive value means the scale score gap increased, while a negative value means the scale score gap decreased.

### GAP BASED ON POVERTY (FRL) STATUS

On the 4<sup>th</sup> grade NAEP in reading, students qualifying for the Free and Reduced Price Lunch (FRL) program posted an average scale score of 206.6, which was statistically similar to the U.S. average of 206.9 (Figure 4.12). Students not qualifying for FRL (Not FRL) posted an average scale score of 234.6, which was also statistically similar to the U.S. average of 234.7 (Figure 4.13). The scale scores for the groups result in a FRL-Not FRL scale score gap of 28.1 points which is statistically similar to the U.S. average of 27.8 points. The gap for Washington students is

statistically similar to the gap for eight peer states, with only Connecticut posting a statistically different and larger scale score point gap (Figure 4.14).

Figure 4.12: shows the rank ordering of states by average scale score for the FRL student group on the 2019 4<sup>th</sup> grade NAEP in reading.

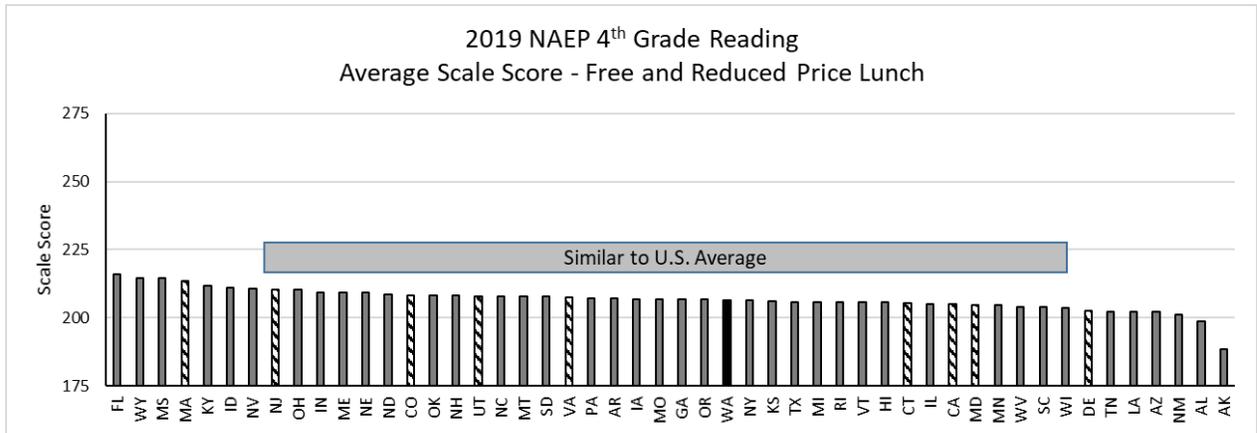


Figure 4.13: shows the rank ordering of states by average scale score for the Not FRL student group on the 2019 4<sup>th</sup> grade NAEP in reading.

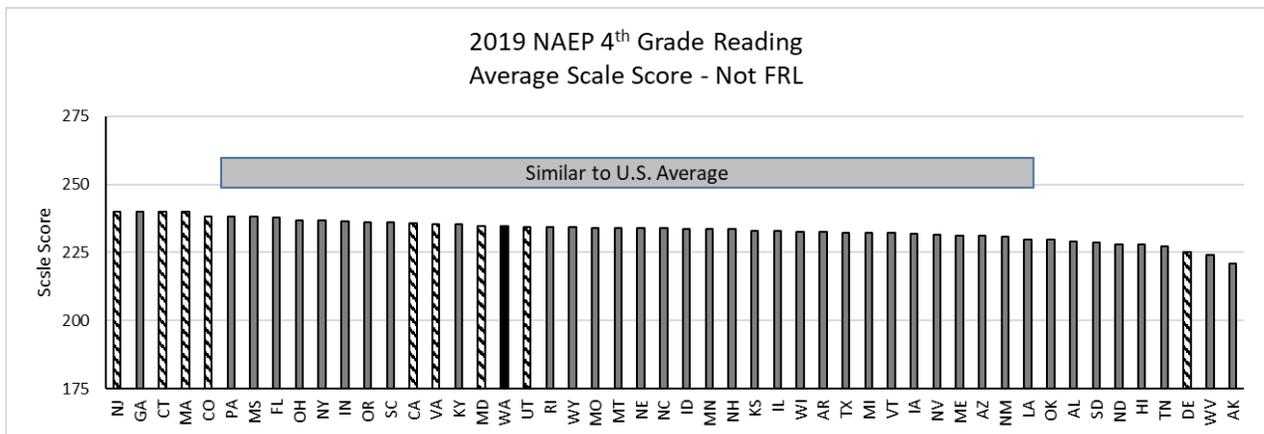
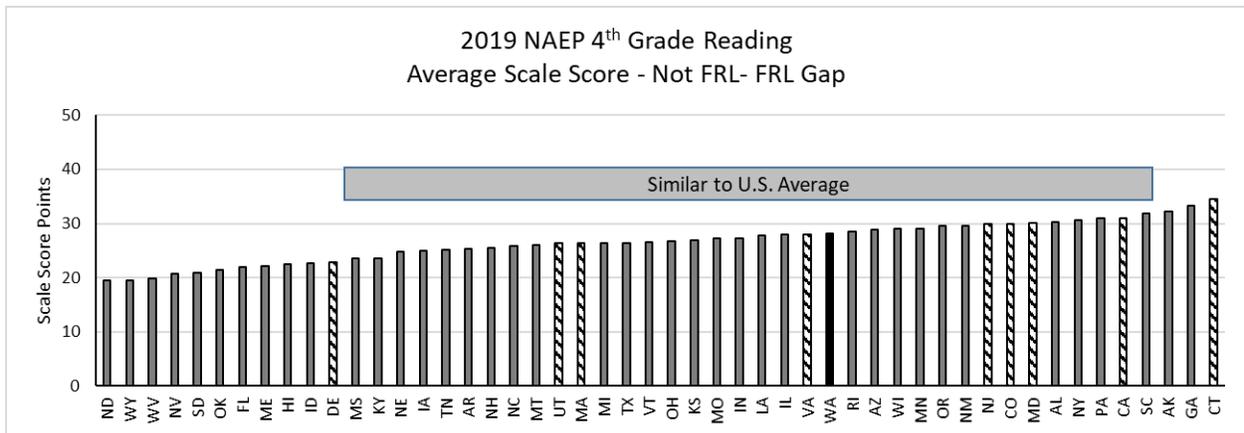


Figure 4.14: shows the rank ordering of states by average scale score gap for the FRL-Not FRL student groups on the 2019 4<sup>th</sup> grade NAEP in reading.



Note: the gap is the scale score for the Not-FRL group minus the scale score for the FRL group. A positive value means the scale score for Not-FRL group is greater than the score for the FRL group.

### GAP BASED ON SPECIAL EDUCATION (SWD) STATUS

On the 4<sup>th</sup> grade NAEP in reading, students receiving special education services (SWD) in Washington posted an average scale score of 180.0 which was statistically similar to the U.S. average of 179.9 (Figure 4.15). Students not receiving special education services (not SWD) posted an average scale score of 225.2 which was nearly identical to the U.S average scale score of 225.1 (Figure 4.16). The scale scores for the groups resulted in a scale score point gap of 45.2 points which was indistinguishable from the U.S. average of 45.2 points (Figure 4.17). The gap for Washington students is statistically similar to the gap for eight peer states, with only Connecticut posting a statistically different and larger scale score point gap.

Figure 4.15: shows the rank ordering of states by average scale score for the special education (SWD) student group on the 2019 4<sup>th</sup> grade NAEP in reading.

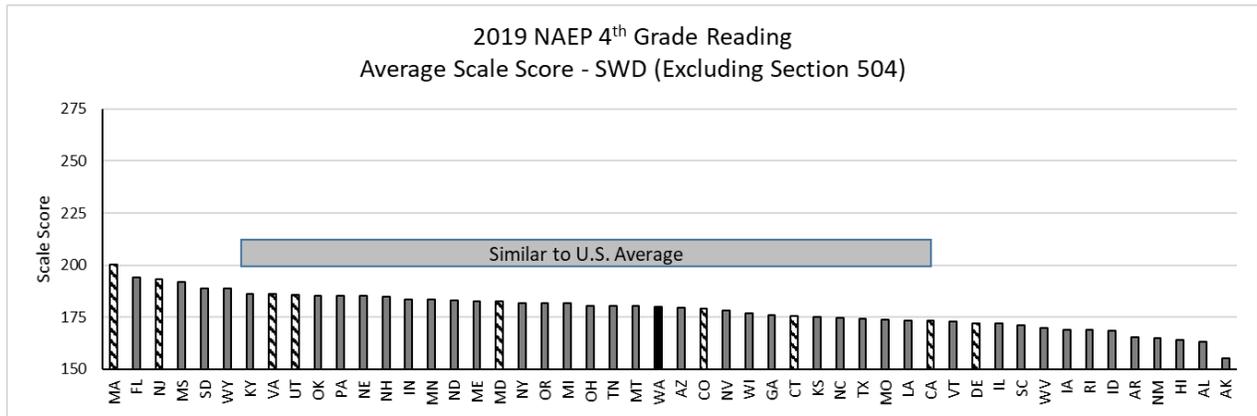


Figure 74.16: shows the rank ordering of states by average scale score for the Not SWD student group on the 2019 4<sup>th</sup> grade NAEP in reading.

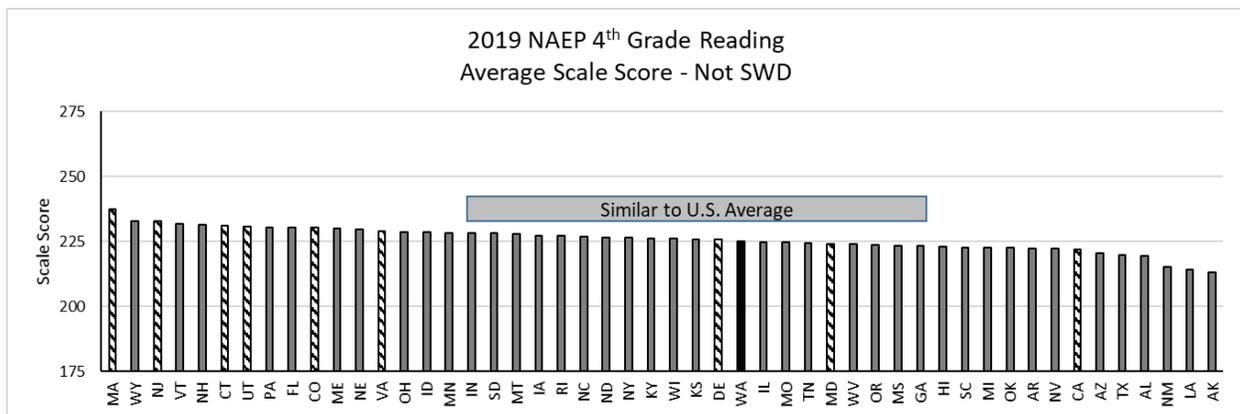
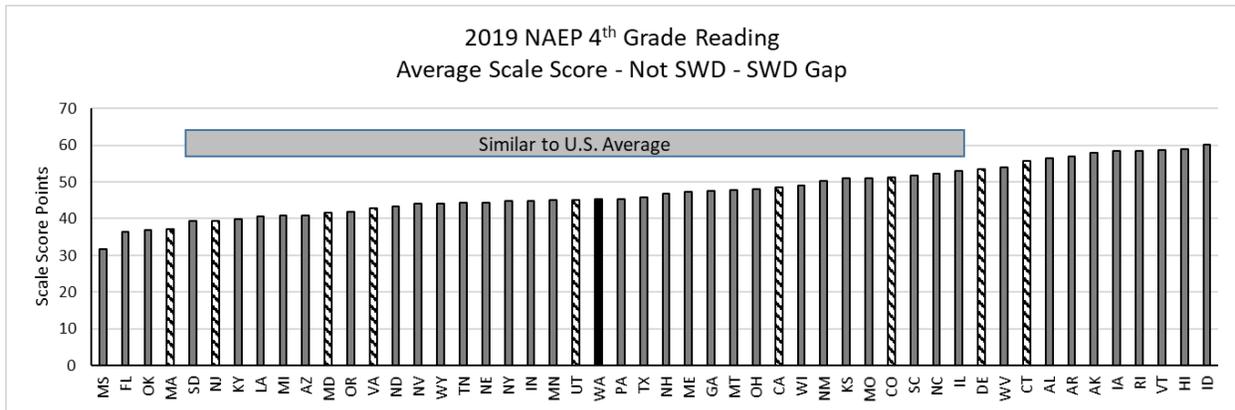


Figure 4.17: shows the rank ordering of states by average scale score gap for the SWD-Not SWD student groups on the 2019 4<sup>th</sup> grade NAEP in reading.



Note: the gap is the scale score for the Not-SWD group minus the scale score for the SWD group. A positive value means the scale score for Not-SWD group is greater than the score for the SWD group.

### GAP BASED ON ENGLISH LEARNER (EL) STATUS

On the 2019 4<sup>th</sup> grade NAEP in reading, the English learner (EL) student group in Washington posted an average scale score of 179.6, which was statistically lower than the U.S. average of 191.0 (Figure 4.18). Students who are not English learners (Not EL), posted an average scale score of 226.1, which was statistically similar to the U.S. average of 223.5 (Figure 4.19). The scores for the two groups resulted in a scale score gap of 46.5 points, which was statistically different and larger than the U.S. average of 32.5 points (Figure 4.20). The Washington EL-Not EL gap is the fourth largest in the nation, the largest of the peer states, but is statistically similar to four peer states (Colorado, Connecticut, Massachusetts, and New Jersey).

Figure 4.18: shows the rank ordering of states by average scale score for the English learner (EL) student group on the 2019 4<sup>th</sup> grade NAEP in reading.

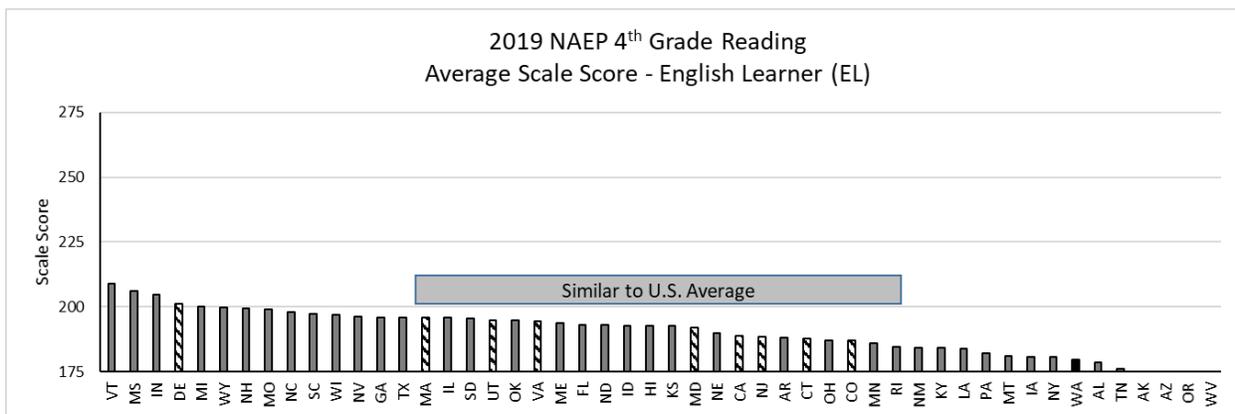


Figure 4.19: shows the rank ordering of states by average scale score for the Not EL student group on the 2019 4<sup>th</sup> grade NAEP in reading.

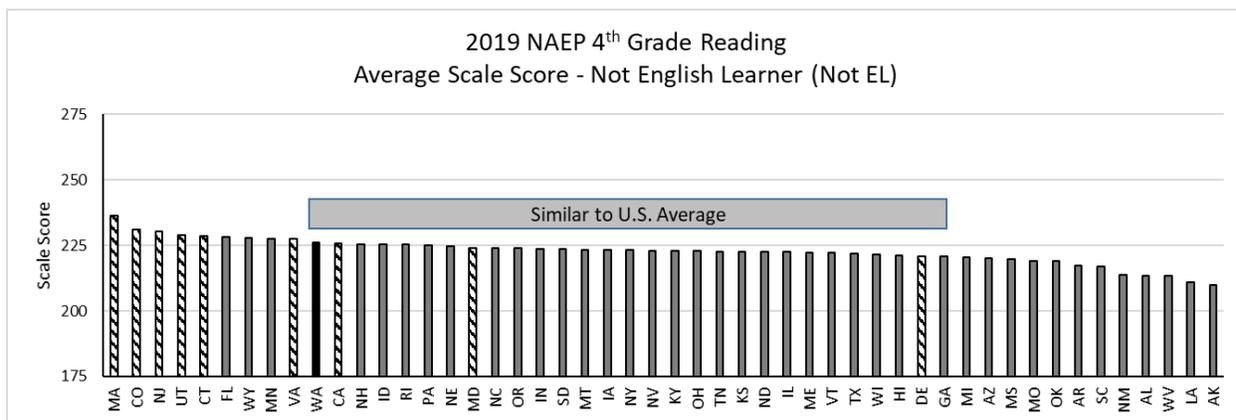
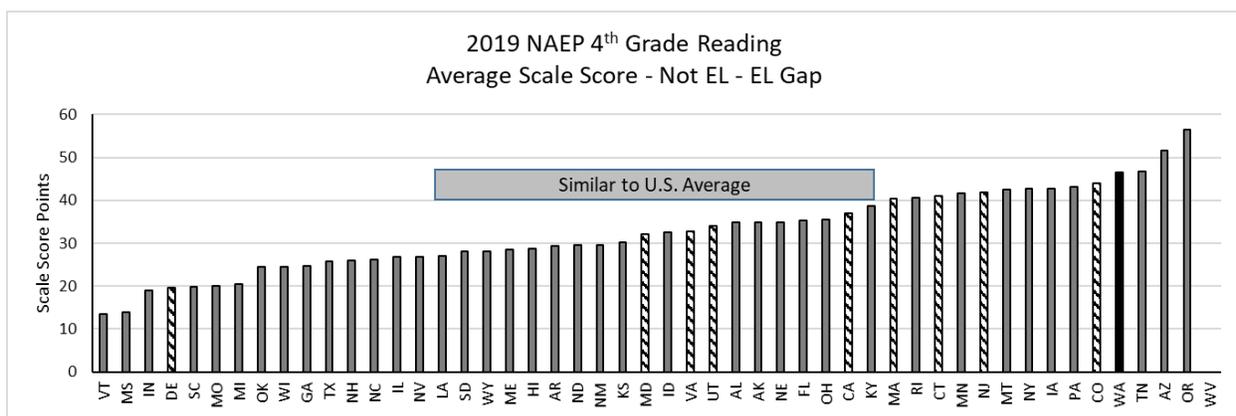


Figure 4.20: shows the rank ordering of states by average scale score gap for the EL-Not EL student groups on the 2019 4<sup>th</sup> grade NAEP in reading.



Note: the gap is the scale score for the Not-EL group minus the scale score for the EL group. A positive value means the scale score for Not-EL group is greater than the score for the EL group.

## 8<sup>TH</sup> GRADE MATH

The 8<sup>th</sup> Grade Math indicator is the percentage of students meeting standard on the Smarter Balanced 8<sup>th</sup> grade math assessment. Over the four most recent administrations, the opportunity gaps are large, persistent, and there is little evidence demonstrating that the opportunity gaps are being reduced in any meaningful manner (Figure 4.21). The following statements can be made:

- The Native American-White, Black-White, Pacific Islander-White, FRL-Not FRL, and EL-Not EL gaps increased by 0.9 to 4.1 percentage points,
- The SWD-Not SWD gap decreased by 2.5 percentage points, and
- The Hispanic-White gap was virtually unchanged.

Figure 4.21: shows the changes in gaps (in percentage points) over the most recent years for the 8<sup>th</sup> Grade Math indicator.

8 <sup>th</sup> Grade Math	2015-16	2016-17	2017-18	2018-19	Four-Year Trend
<b>Female-Male Gap</b>	<b>3.6</b>	<b>3.1</b>	<b>4.1</b>	<b>3.0</b>	<b>Gap Decreased</b>
Native American-White Gap*	31.4	29.9	32.6	34.4	Gap Increased
Black-White Gap*	26.4	27.1	28.3	28.8	Gap Increased
Hispanic-White Gap*	24.0	23.5	23.5	24.1	Gap Unchanged
Pacific Islander-White Gap*	26.9	31.1	27.7	31.0	Gap Increased
FRL-Not FRL Gap**	30.9	30.6	31.8	32.2	Gap Increased
<b>SWD-Not SWD Gap**</b>	<b>44.2</b>	<b>43.9</b>	<b>44.2</b>	<b>41.7</b>	<b>Gap Decreased</b>
EL-Not EL Gap**	38.8	39.9	40.5	39.7	Gap Increased

\*Note: the gaps is the value for the White student group minus the value for the xxx student group, resulting in a positive value and meaning that the value for the White student group is higher than the value for the comparison group. \*\*Note: shows where the gap is computed as the value for the Not XXX group minus the value for the XXX group.

### SUMMARY-8<sup>TH</sup> GRADE NAEP IN MATH

For most of the scale score gap measures, students in Washington perform statistically similar to the U.S average and similar to the peer states (Figure 4.22). However, the gap based on special education (SWD) status for Washington is statistically larger than the U.S. average but is similar to the peer states.

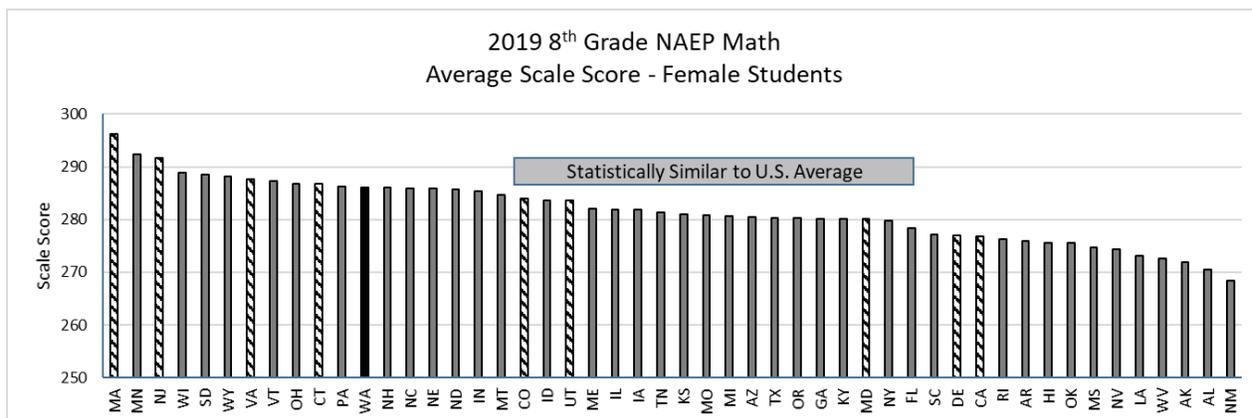
Figure 4.22: summarizes the scale score gaps in Washington as compared to the U.S. averages and the gaps for the peer states.

8 <sup>th</sup> Grade NAEP in Math	WA Scale Score	U.S. Scale Score	U.S. Comparison*	Peer State Comparison*
Female-Male Gap	0.5	1.0	Similar	Similar
Black-White Gap	33.0	32.2	Similar	Similar
Hispanic-White Gap	24.4	23.5	Similar	Similar
FRL-Not FRL Gap	34.0	29.9	Similar	Similar
SWD-Not SWD Gap	57.4	44.1	WA Gap Larger	Similar
EL-Not EL Gap	46.7	41.2	Similar	Similar

### GAP BASED ON GENDER

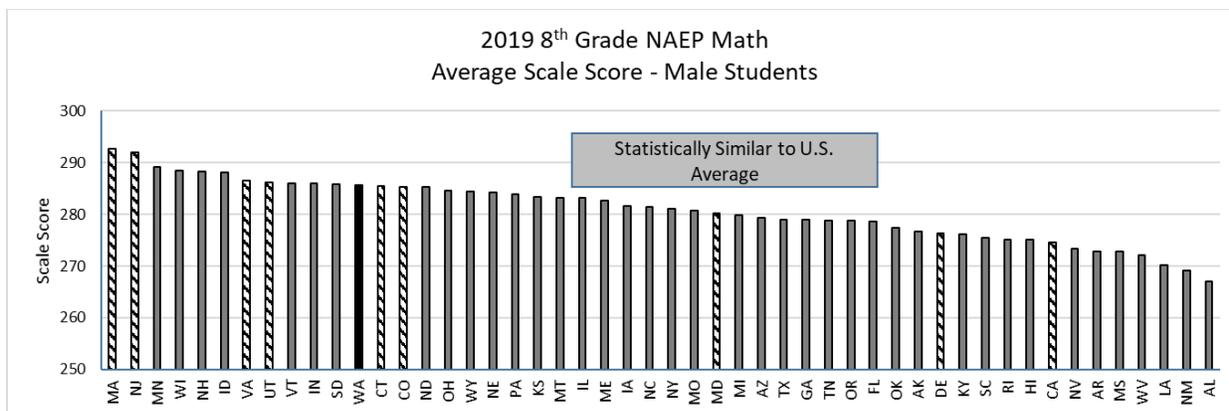
On the 8<sup>th</sup> grade NAEP in math, female students in Washington earned an average scale score of 286.1 which was statistically higher than the U.S. average of 281.5 (Figure 4.23). Washington female students' score was statistically similar to or higher than seven peer states but was statistically lower than the scores from Massachusetts and New Jersey.

Figure 4.23: shows the rank ordering of the performance of female students on the 2019 8<sup>th</sup> grade NAEP in math for each of the states.



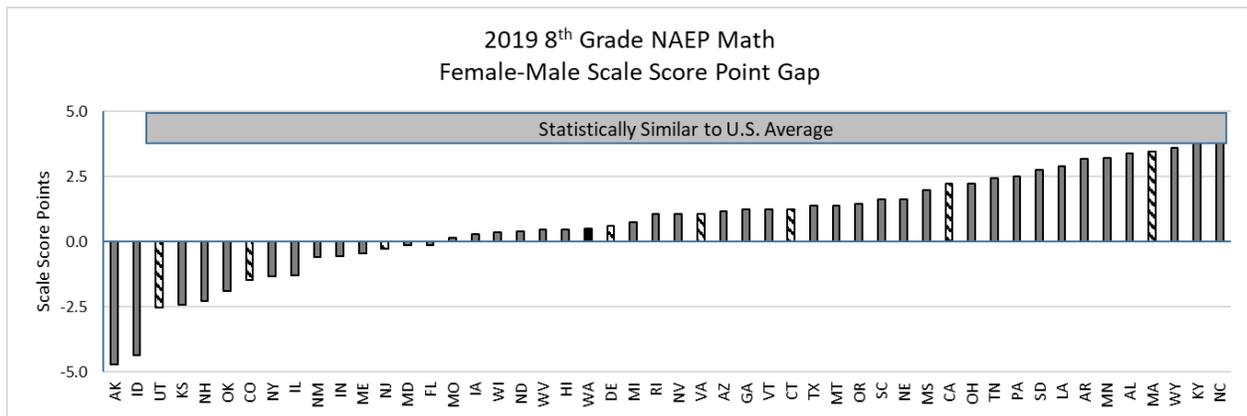
Male students in Washington posted an average score of 285.6 on the 8<sup>th</sup> grade NAEP in math, which was statistically higher than the U. S average of 280.5 (Figure 4.24). Washington male students’ score was statistically similar to or higher than seven peer states but was statistically lower than the scores from Massachusetts and New Jersey.

Figure 4.24: shows the rank ordering of the performance of male students on the 2019 8<sup>th</sup> grade NAEP in math for each of the states.



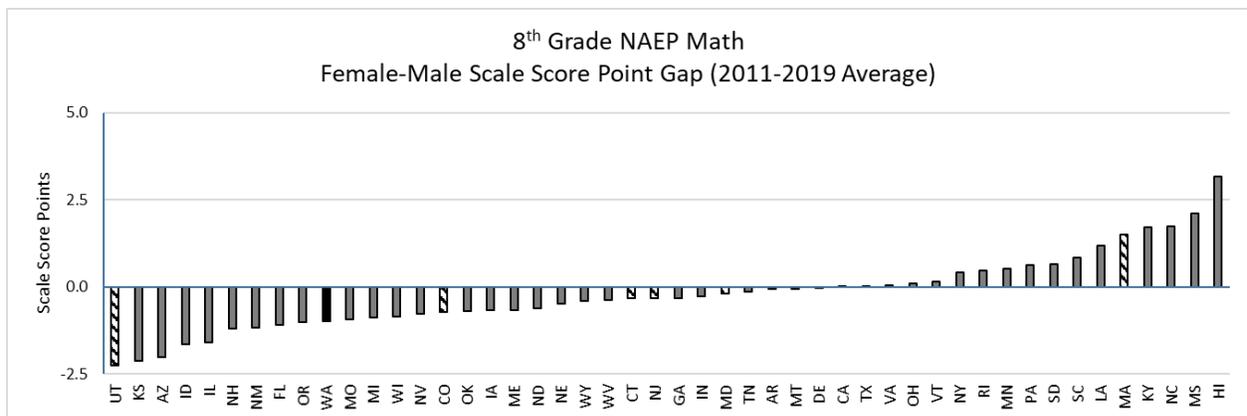
On the 8<sup>th</sup> grade NAEP in math, female students scored 0.5 scale score points higher than male students, which was statistically similar to the U.S. average of 1.0 and all other states (Figure 4.25). The average female-male scale score gap over the last five NAEP administrations was -1.0 scale score points (Figure 4.26), meaning that on average over the five most recent administrations, male students score just a little higher than female students.

Figure 4.25: shows the rank ordering of female-male scale score point gap on the 2019 8<sup>th</sup> grade NAEP in math for each of the states.



Note: the gap is the scale score for the Female group minus the scale score for the Male group. A positive value means the scale score for Female group is greater than the score for the Male group.

Figure 4.26: shows the rank ordering of the five-administration average of female-male scale score point gap on the 8<sup>th</sup> grade NAEP in math for each of the states.

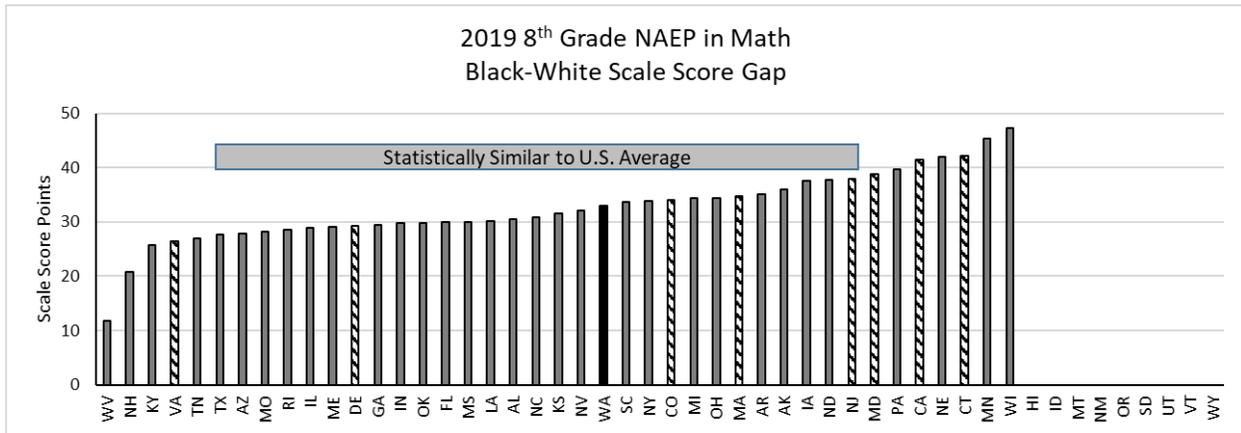


Note: the gap change is the 2019 scale score gap minus the 2011 scale score gap. A positive value means the scale score gap increased, while a negative value means the scale score gap decreased.

## BLACK-WHITE GAP

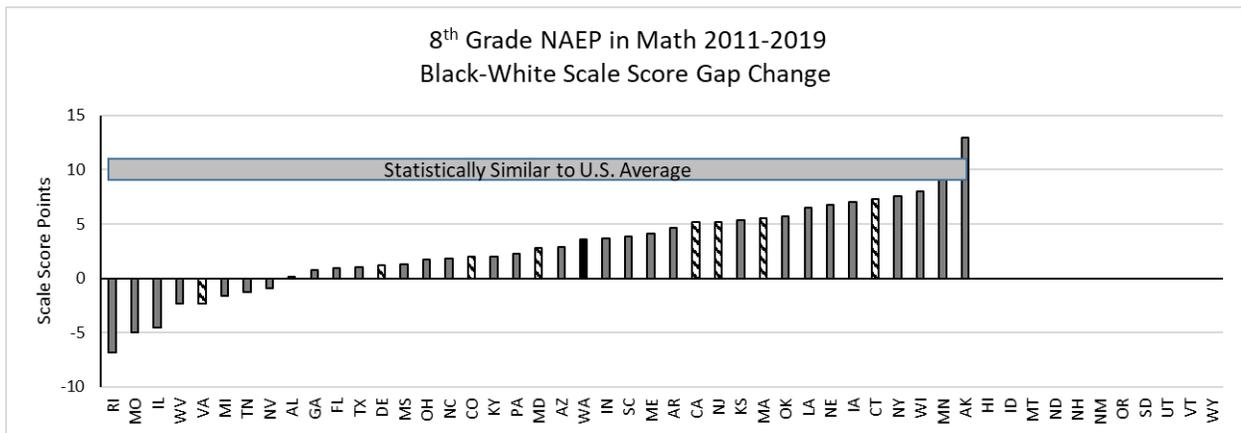
On the 2019 NAEP in math, the scale score gap between Black and White student groups was 33.0 scale score points, which was similar to the U.S. average of 32.2 points (Figure 4.27). The Washington Black-White gap was statistically similar to the eight peer states for which a gap could be computed. From the 2011 to 2019 administrations, the Black White gap increased by 3.6 scale score points (Figure 4.28), which was statistically similar to the U.S. average of 1.5 points and similar to all the peer states.

Figure 4.27: shows the rank ordering of the 2019 Black-White scale score gap for the states in which a scale score gap could be computed.



Note: the gap is the scale score for the White group minus the scale score for the Black group. A positive value means the scale score for White group is greater than the score for the Black group.

Figure 4.28: shows the rank ordering of the 2011 to 2019 Black-White scale score gap change for the states in which a scale score gap could be computed.



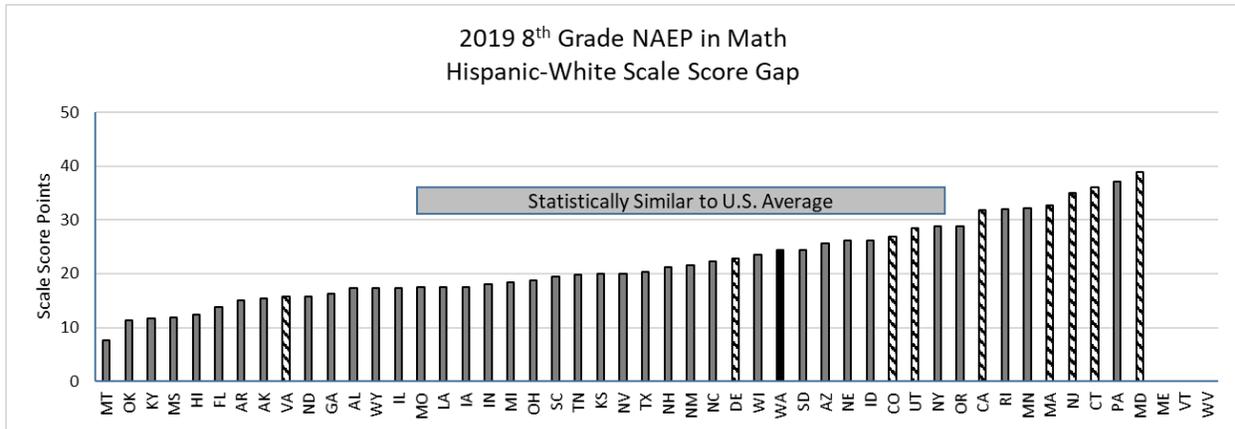
Note: the gap change is the 2019 scale score gap minus the 2011 scale score gap. A positive value means the scale score gap increased, while a negative value means the scale score gap decreased.

### HISPANIC-WHITE GAP

On the 2019 NAEP in reading, the scale score gap between Hispanic and White student groups, a gap of 24.4 scale score points was computed, which is statistically similar to the U.S. average of 23.5 points (Figure 4.29). The Hispanic-White gap for Washington was statistically similar to or lower than eight peer states and Virginia was the only peer state with a smaller gap. From the

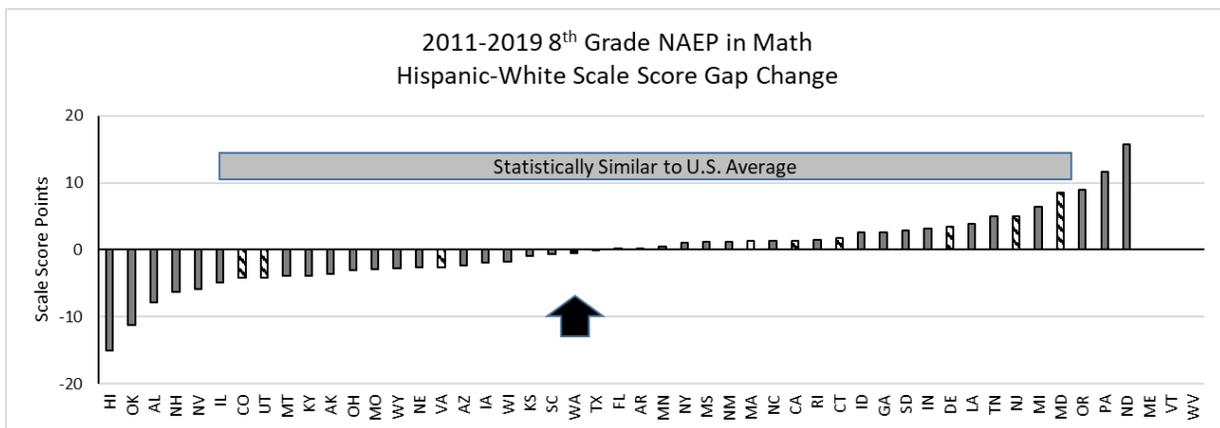
2011 to the 2019 administrations, the Hispanic-White scale score point gap declined by less than one (0.6) scale score points, which was statistically similar to the U.S. average gain of 0.4 points (Figure 4.30). The Washington gap change was statistically similar to the nine peer states.

Figure 4.29: shows the rank ordering of the 2019 Hispanic-White scale score gap for the states in which a scale score gap could be computed.



Note: the gap is the scale score for the White group minus the scale score for the Hispanic group. A positive value means the scale score for White group is greater than the score for the Hispanic group.

Figure 4.30: shows the rank ordering of the 2011 to 2019 Hispanic-White scale score gap change for the states in which a scale score gap could be computed.



Note: the gap change is the 2019 scale score gap minus the 2011 scale score gap. A positive value means the scale score gap increased, while a negative value means the scale score gap decreased.

### GAP BASED ON POVERTY (FRL) STATUS

On the 2019 8<sup>th</sup> grade NAEP in math, students qualifying for the free and Reduced Price Lunch (FRL) program in Washington posted an average scale score of 268.3, which was statistically similar to the U.S. average of 266.1 (Figure 4.31). Students not qualifying for the free and Reduced Price Lunch (Not FRL) program in Washington posted an average scale score of 302.3, which was the fourth highest in the nation and statistically higher than the U.S. average of 296.0 (Figure 4.32).

Figure 4.31: shows the rank ordering of states by average scale score for the FRL student group on the 2019 8<sup>th</sup> grade NAEP in math.

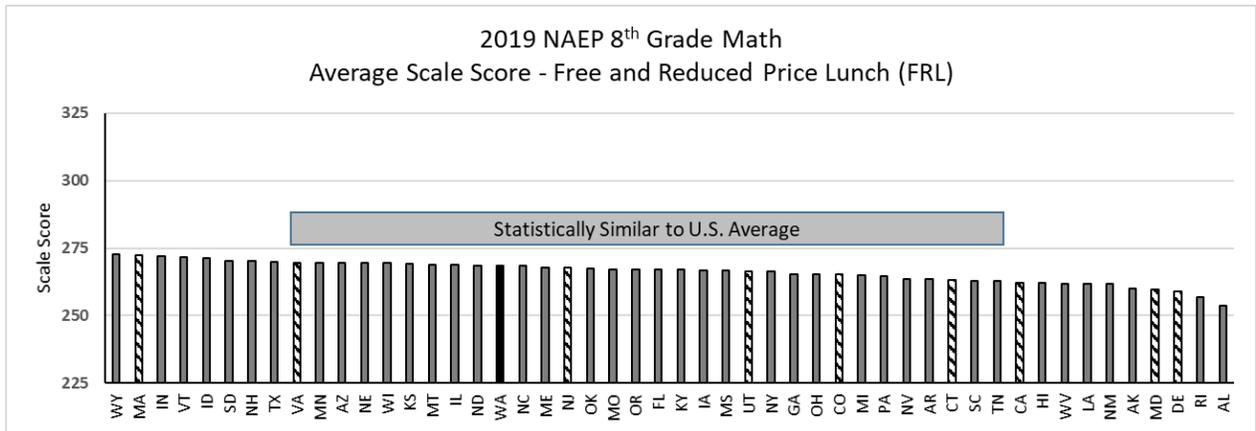
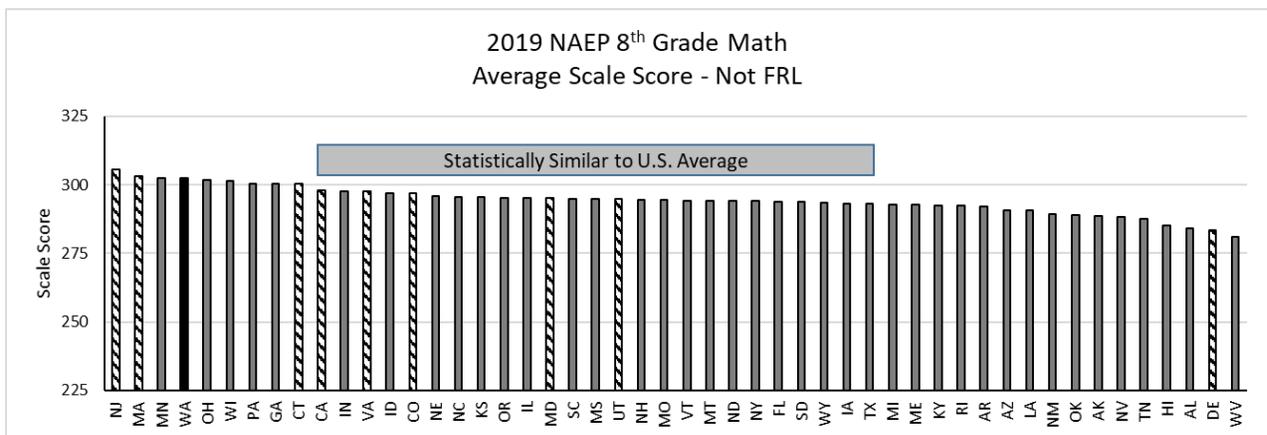
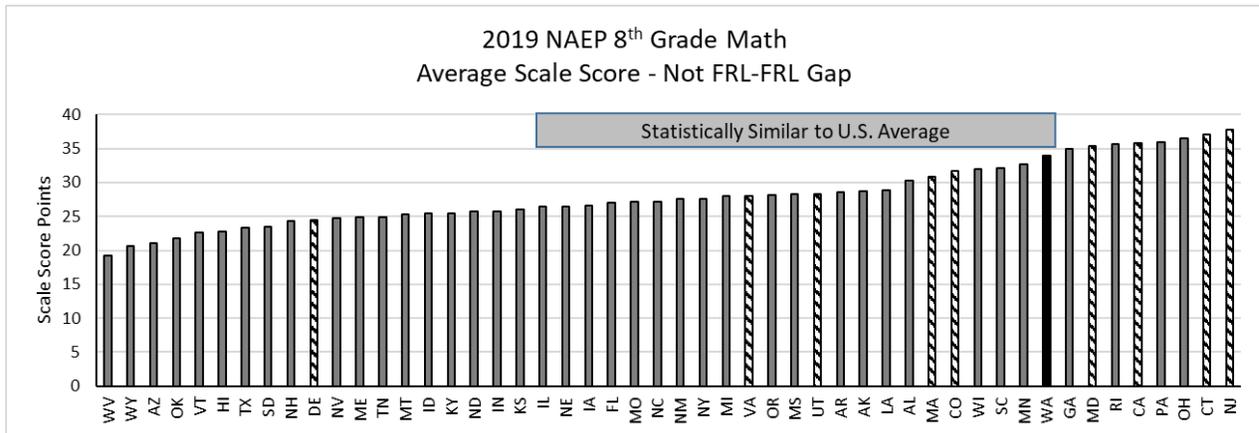


Figure 4.32: shows the rank ordering of states by average scale score for the Not FRL student group on the 2019 8<sup>th</sup> grade NAEP in math.



The performance of the two student groups in Washington resulted in a scale score gap of 34.0 points, which was the ninth largest in the nation but statistically similar to the U.S. average of 29.9 points (Figure 4.33). The Washington gap is statistically similar to eight peer states, and only Delaware posted a Not FRL-FRL gap statistically lower than Washington.

Figure 4.33: shows the rank ordering of states by average scale score gap for the Not FRL-FRL student groups on the 2019 8<sup>th</sup> grade NAEP in math.



Note: the gap is the scale score for the Not-FRL student group minus the scale score for the FRL student group. A positive value means the scale score for Not-FRL group is greater than the score for the FRL student group.

### GAP BASED ON SPECIAL EDUCATION (SWD) STATUS

Students receiving special education services (SWD) in Washington posted an average scale score of 235.1 which was statistically lower than the U.S. average of 242.1 (Figure 4.34). Students not receiving special education services (not SWD) posted an average scale score of 292.5, which was statistically higher than the U.S. average of 286.2 (Figure 4.35).

Figure 4.34: shows the rank ordering of states by average scale score for the special education (SWD) student group on the 2019 8<sup>th</sup> grade NAEP in math.

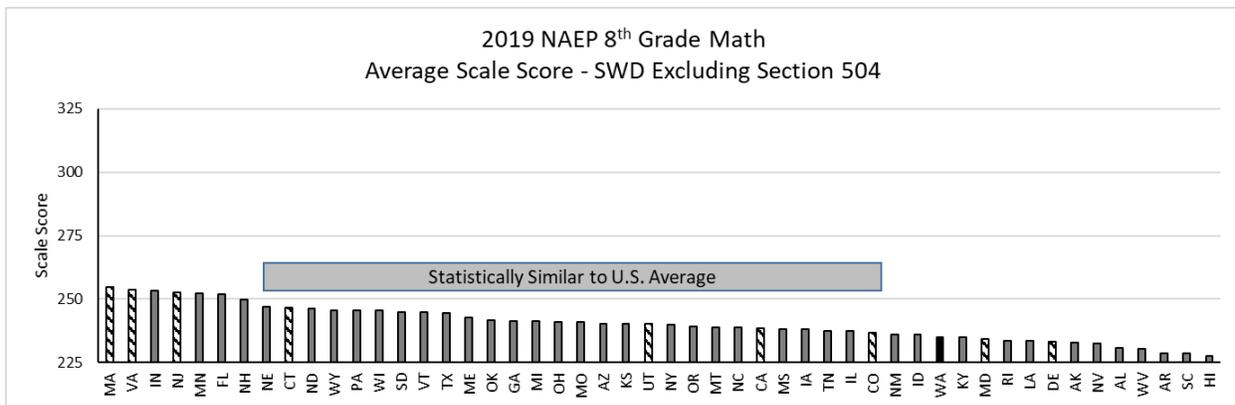




Figure 4.37: shows the rank ordering of states by average scale score for the English learner (EL) student group on the 2019 8<sup>th</sup> grade NAEP in math.

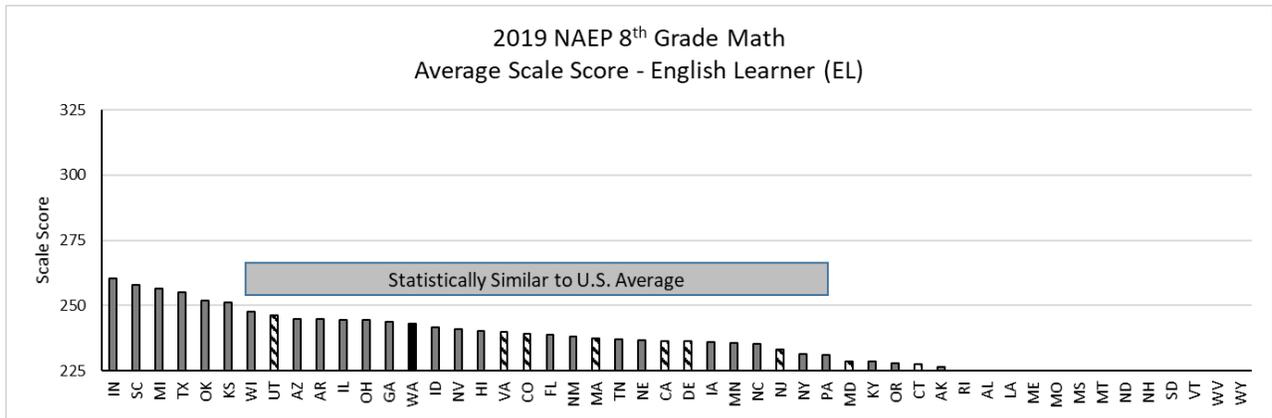
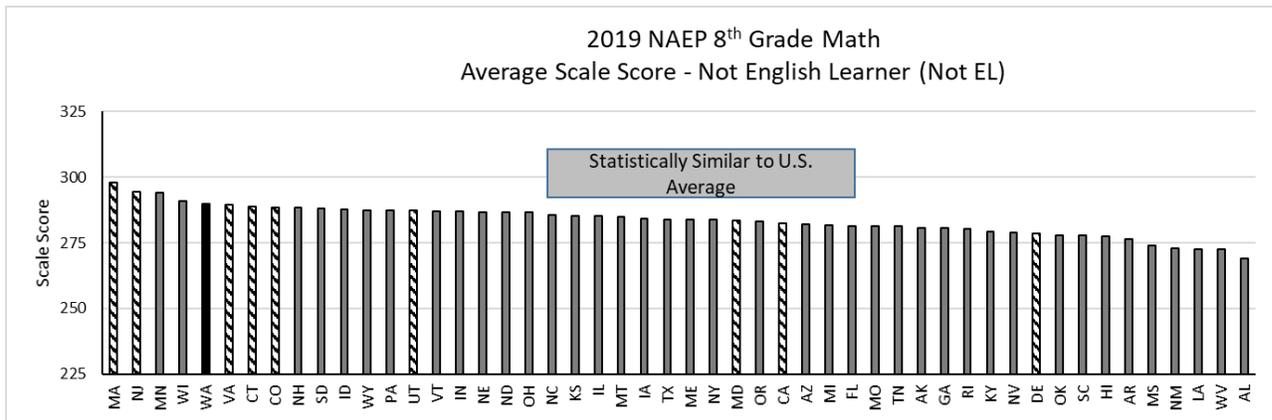
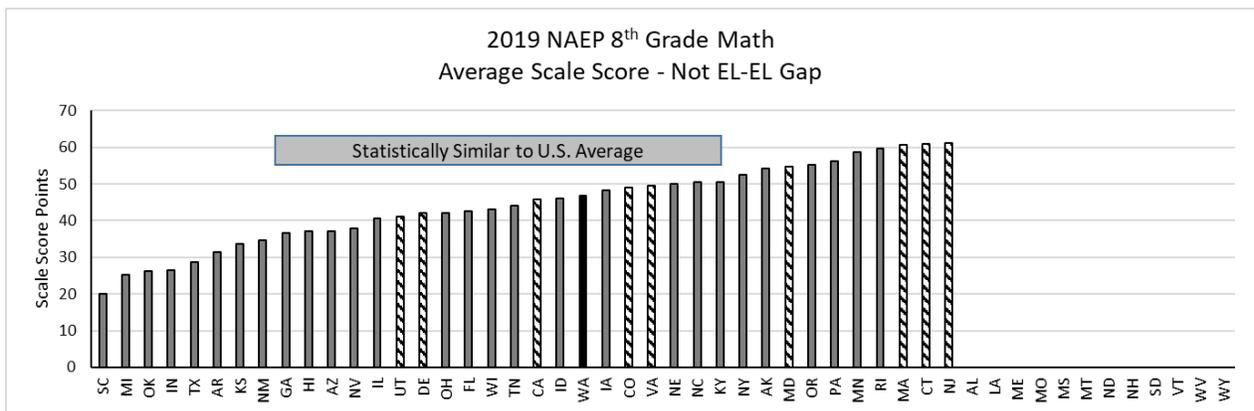


Figure 4.38: shows the rank ordering of states by average scale score for the not English learner (Not EL) student group on the 2019 8<sup>th</sup> grade NAEP in math.



The performance of the student groups in Washington resulted in a Not EL-EL scale score gap of 46.7 points, which was statistically similar to the U.S. average of 41.2 points (Figure 4.39). The gap for Washington students was statistically similar to or smaller than all nine peer states.

Figure 4.39: shows the rank ordering of states by average scale score gap for the EL-Not EL student groups on the 2019 8<sup>th</sup> grade NAEP in math.



Note: the gap is the scale score for the Not-EL student group minus the scale score for the EL student group. A positive value means the scale score for Not-EL group is greater than the score for the EL student group.

### **HIGH SCHOOL GRADUATION RATE**

The indicator is the official 4-year graduation rate following the Adjusted Cohort methodology utilized by all of the United States. Even though the opportunity gaps are large and persistent, there is good evidence that the graduation gaps are being reduced (Figure 4.40).

- The Native American-White, Black-White, Hispanic-White, and Pacific Islander-White gaps decreased by 2.2 to 6.0 percentage points over the five most recent graduation classes, and
- The FRL-Not FRL, SWD-Not SWD, and EL-Not EL gaps decreased to 2.8 to 7.0 percentage points over the five most recent graduation classes, and

Figure 4.40: shows the changes in gaps (in percentage points) over the most recent years for the four-year High School Graduation Rate indicator.

<b>High School Graduation Rate</b>	<b>Class of 2016</b>	<b>Class of 2017</b>	<b>Class of 2018</b>	<b>Class of 2019</b>	<b>Class of 2020</b>	<b>Five-Year Trend</b>
<b>Female-Male Gap</b>	<b>6.4</b>	<b>6.3</b>	<b>6.2</b>	<b>5.9</b>	<b>6.0</b>	<b>Gap Decreased</b>
<b>Native Amer.-White Gap*</b>	<b>20.9</b>	<b>21.6</b>	<b>22.5</b>	<b>21.1</b>	<b>14.9</b>	<b>Gap Decreased</b>
<b>Black-White Gap*</b>	<b>10.8</b>	<b>10.4</b>	<b>8.5</b>	<b>9.2</b>	<b>8.4</b>	<b>Gap Decreased</b>
<b>Hispanic-White Gap*</b>	<b>9.2</b>	<b>9.2</b>	<b>7.7</b>	<b>7.1</b>	<b>7.0</b>	<b>Gap Decreased</b>
<b>Pacific Isl.-White Gap*</b>	<b>13.3</b>	<b>13.8</b>	<b>8.8</b>	<b>8.4</b>	<b>7.4</b>	<b>Gap Decreased</b>
<b>FRL-Not FRL Gap**</b>	<b>19.9</b>	<b>19.5</b>	<b>17.9</b>	<b>17.8</b>	<b>16.0</b>	<b>Gap Decreased</b>
<b>SWD-Not SWD Gap**</b>	<b>23.8</b>	<b>22.8</b>	<b>21.8</b>	<b>21.5</b>	<b>21.0</b>	<b>Gap Decreased</b>
<b>EL-Not EL Gap**</b>	<b>22.9</b>	<b>23.0</b>	<b>18.1</b>	<b>20.0</b>	<b>15.9</b>	<b>Gap Decreased</b>

\*Note: the gaps is computed as the value for the White student group minus the value for the xxx student group, resulting in a positive value and meaning that the value for the White student group is higher than the value for the comparison group. \*\*Note: shows where the gap is computed as the value for the Not XXX group minus the value for the XXX group.

## **APPENDIX A – List of Abbreviations**

ACGR – Adjusted Cohort Graduation Rate

CO – Class of 20xx for High School Graduation Measures

ECEAP – Early Childhood Education and Assistance Program

ECE – Early Childhood Education

EL – English Learner

ELA – English/Language Arts

ERDC – Educational Research and Data Center

ESSA – Every Student Succeeds Act

FRL – Free and Reduced Price Lunch Program

Low-Income – students qualifying for the Free and Reduced Price Lunch program

MSP – Measures of Student Progress

NAEP – National Assessment of Educational Progress

NCES – National Center for Educational Statistics

OSPI – Office of the Superintendent of Public Instruction

SBE – State Board of Education

SBA – Smarter Balanced Assessment Consortium

SQSS – School Quality and Student Success

SWD – Students with a Disability

TPS – Traditional Public School

WaKIDS – Washington Kindergarten Inventory of Developmental Skills

WaSIF – Washington School Improvement Framework

## APPENDIX B - Peer States for the Required Comparisons

The list of peer states is derived from the 2017 State [New Economy Index](#) produced every few years by the Information Technology and Innovation Foundation. The New Economy Index is designed to measure the degree to which states' economic structure matches the ideal structure of the innovation driven New (Global) Economy. The 2017 Index used 25 indicators divided into five broad categories (Knowledge Jobs, Globalization, Economic Dynamism, Digital Economy, and Innovation Capacity) to capture what is deemed important about the new global economy.

The list of the states used for the peer state comparisons and the states' current ranking on the New Economy Index are presented in Figure B.1. Massachusetts has been the highest performing state on all the New Economy Indices since 1999. Washington has been in the top five performing states for all of the years since 1999. Seven of the ten peer states used in the 2018 report are the same as those used in earlier reports, with California, Utah, and Delaware being included in the report for the first time.

Figure B.1: shows the list of peer states used in the required comparisons for the December 2018 report to the Education Committees of the Washington Legislature.

New Economy Rating (2017)	New Peer State for 2018	Peer States (2018 Report)	Peer States (2016 Report)
1	No	Massachusetts	Massachusetts
2	Yes	California*	
3	No	Washington	Washington
4	No	Virginia	Virginia
5	Yes	Delaware	
6	No	Maryland	Maryland
7	No	Colorado	Colorado
8	No	New Jersey	New Jersey
9	Yes	Utah	
10	No	Connecticut	Connecticut
			Minnesota
			North Carolina

\*Note: California was not included in the peer state comparisons for previous reports because of being characterized as an 'outlier,' but after hearing comments from a variety of people from various organizations, the inclusion of California in the peer analysis was deemed to be most appropriate.

## APPENDIX C – NAEP Technical Documentation for Test of Significance

### ***T TEST FOR INDEPENDENT GROUPS***

In NAEP, a *t* test for independent samples is used to compare estimates from two populations unless both groups have some overlap in terms of sampled students. The goal of the *t* test is to determine the probability that average estimates from two samples come from a single population (with a single, common average.) If this probability is small, then the two sample average estimates are said to be significantly different.

Let  $A_i$  be the statistic in question (e.g., a mean for group  $i$ ) and let  $S_{A_i}$  be the jackknife standard error of the statistic. The text in the reports identified the means or proportions for groups  $i$  and  $j$  as being different if:

$$\frac{|A_i - A_j|}{\sqrt{S^2(A_i) + S^2(A_j)}} \geq T_{\frac{\alpha}{2}}$$

where  $T_{\alpha}$  is the  $(1 - \alpha)$  percentile of the *t* distribution with *df* degrees of freedom. In some cases where more than two groups or jurisdictions are compared, multiple comparison procedures are applied. This adjustment is based on the Benjamini and Hochberg (1995) procedure of controlling the false discovery rate (FDR).

Many of the group comparisons explicitly discussed in the reports involved mutually exclusive sets of students. Examples include comparisons of the average scale score for male and female students, White and Hispanic students, students attending schools in central city and urban fringe or large-town locations, students who reported watching six or more hours of television each night, and students who reported watching less than one hour of television each night.

The current procedures used to complete most statistical tests for NAEP require the assumption that the data being compared are from independent samples. Because of the sampling design in which primary sampling units (PSUs), schools, and students within school are randomly sampled, the data from mutually exclusive sets of students may not be strictly independent. Therefore, the significance tests employed are, in many cases, only approximate. Another procedure, one that does not assume independence, could have been conducted. However, a more conservative stance is taken with the use of *t* tests for partly overlapping groups when dependencies in the sample must be addressed.

A comparison of the standard errors using the independence assumption and the correlated group assumption was made using NAEP data. The estimated standard error of the difference based on independence assumptions was approximately 10 percent larger than the more complicated estimate based on correlated groups. In almost every case, the correlation of NAEP data across groups was positive. Because, in NAEP, significance tests based on assumptions of independent samples are only somewhat conservative, the approximate (assuming independence) procedure was used for most comparisons.

Source: [https://nces.ed.gov/nationsreportcard/tdw/analysis/infer\\_ttest\\_indep.aspx](https://nces.ed.gov/nationsreportcard/tdw/analysis/infer_ttest_indep.aspx)

## **ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES AND ENGLISH LEARNERS**

The NAEP Governing Board seeks to set policy to ensure that NAEP is fully representative of students with a disability (SWD) and English learners (EL). Inclusion in NAEP of an SWD or EL student is encouraged if that student participated in the regular state academic assessment in the subject being tested, and if that student can participate in NAEP with the accommodations NAEP allows. Even if the student did not participate in the regular state assessment, or if he/she needs accommodations NAEP does not allow, school staff are asked whether that student could participate in NAEP with the allowable accommodations.

Although every effort is made to include as many students as possible, different jurisdictions have different exclusion policies and not all students identified for NAEP participation actually participate in the administration (Figure C.1 and C.2). Because SWD and EL students typically score lower than students not categorized as SWD or EL, jurisdictions that are more inclusive (that is, jurisdictions that assess greater percentages of these students) may have lower average scores than if they had a less inclusive policy.

In all NAEP assessments accommodations are provided as necessary for students with disabilities and or English learners. Students with disabilities and English learners are allowed to use most of the testing accommodations that they receive for state or district tests. Accommodations are adaptations to standard testing procedures that remove barriers to participation in assessments without changing what is being tested. Examples of such accommodations are extended time and small-group or one-on-one administration. NAEP offers bilingual (English and Spanish) test booklets for the mathematics assessment but not the reading assessment. Extending testing over several days is not allowed for any of the NAEP assessments because NAEP administrators are in each school only one day.

Figure C1: shows the percentage of English Learners (ELs) identified and assessed on the 2019 4<sup>th</sup> grade NAEP in reading with and without accommodations.

<b>4<sup>th</sup> Grade NAEP in Reading</b>	<b>Percentage of Identified ELs Excluded</b>	<b>Percentage of Identified ELs Assessed</b>	<b>Percentage of ELs Assessed without Accommodations</b>	<b>Percentage of ELs Assessed with Accommodations</b>
California	1	24	19	5
Colorado	1	14	10	4
Connecticut	1	10	4	6
Delaware	1	15	10	5
Maryland	1	13	4	9
Massachusetts	1	13	8	4
New Jersey	1	7	1	6
Utah	<1	11	8	2
Virginia	1	11	7	5
Washington	1	14	9	5
<b>US Public</b>	<b>1</b>	<b>12</b>	<b>7</b>	<b>5</b>

Figure C2: shows the percentage of English Learners (ELs) identified and assessed on the 2019 4<sup>th</sup> grade NAEP in math with and without accommodations.

4 <sup>th</sup> Grade NAEP in Math	Percentage of Identified ELs Excluded	Percentage of Identified ELs Assessed	Percentage of ELs Assessed without Accommodations	Percentage of ELs Assessed with Accommodations
California	1	24	19	4
Colorado	1	14	10	4
Connecticut	1	10	4	6
Delaware	1	15	10	6
Maryland	1	13	4	9
Massachusetts	1	13	7	5
New Jersey	1	8	1	7
Utah	1	10	8	2
Virginia	<1	11	6	5
Washington	1	14	9	5
<b>US Public</b>	<b>1</b>	<b>12</b>	<b>7</b>	<b>6</b>

Accommodations in the testing environment or administration procedures are available for SD and ELL students to support their participation in the assessment. Some accommodations are actually built-in features—or Universal Design Elements of the digitally based assessments that are available to all students. Other accommodations, such as additional test time, are available upon request. Every jurisdiction decides what accommodations the students in that jurisdiction are eligible to receive (Figure C.3 and C.4).

Some SD and ELL students can be assessed without accommodations. Some require accommodations to participate in NAEP, while others may not be able to participate even with accommodation. The percentage of SD and ELL students who are excluded from NAEP assessments varies across assessment subjects, from one jurisdiction to another, and within a jurisdiction over time

Figure C3: shows the percentage of English Learners (ELs) identified and assessed on the 2019 8<sup>th</sup> grade NAEP in math with and without accommodations.

8 <sup>th</sup> Grade NAEP in Math	Percentage of Identified ELs Excluded	Percentage of Identified ELs Assessed	Percentage of ELs Assessed without Accommodations	Percentage of ELs Assessed with Accommodations
California	1	14	11	4
Colorado	<1	8	5	3
Connecticut	1	4	2	2
Delaware	<1	4	2	2
Maryland	1	6	1	5
Massachusetts	1	6	3	3
New Jersey	1	4	<1	4
Utah	<1	5	3	2
Virginia	1	5	2	3
Washington	1	8	6	3
<b>US Public</b>	<b>1</b>	<b>7</b>	<b>4</b>	<b>3</b>

Figure C4: shows the percentage of English Learners (ELs) identified and assessed on the 2019 8<sup>th</sup> grade NAEP in reading with and without accommodations.

<b>8<sup>th</sup> Grade NAEP in Reading</b>	<b>Percentage of Identified ELs Excluded</b>	<b>Percentage of Identified ELs Assessed</b>	<b>Percentage of ELs Assessed without Accommodations</b>	<b>Percentage of ELs Assessed with Accommodations</b>
California	1	14	11	3
Colorado	1	8	5	5
Connecticut	1	4	2	2
Delaware	<1	4	2	2
Maryland	1	5	1	4
Massachusetts	1	5	4	1
New Jersey	1	4	1	3
Utah	<1	6	3	2
Virginia	1	5	3	2
Washington	1	8	5	3
<b>US Public</b>	<b>1</b>	<b>7</b>	<b>4</b>	<b>3</b>

Sources:

[https://www.nationsreportcard.gov/reading/supportive\\_files/2019\\_technical\\_appendix\\_reading.pdf](https://www.nationsreportcard.gov/reading/supportive_files/2019_technical_appendix_reading.pdf)

[https://www.nationsreportcard.gov/mathematics/supportive\\_files/2019\\_technical\\_appendix\\_math.pdf](https://www.nationsreportcard.gov/mathematics/supportive_files/2019_technical_appendix_math.pdf)