

# 2014 Washington Achievement Awards and the Index



ANDREW PARR, STATE BOARD OF EDUCATION

MARCH 11, 2015



# Today's Outcomes



- Learn about proposed changes to two of the Washington Achievement Awards (WAAs).
- Discuss possible changes to the weighting of indicators and measures applying to the 2015 Index next year.
- Anticipated Action items
  - ✦ Approve updated criteria for the English Language Acquisition Award.
  - ✦ Approve criteria for the Special Recognition - Gap Reduction Award
  - ✦ Approve new indicator weightings for the high school index ratings



# Ongoing Collaboration



- Presented on the English Language Acquisition Award to the:
  - ✦ Transitional Bilingual Instructional Program (TBIP) Task Force in January
  - ✦ Bilingual Education Advisory Committee (BEAC) in February
- Presented on the Special Recognition-Gap Reduction Award to the:
  - ✦ Educational Opportunity Gap Oversight and Accountability Committee (EOGOAC) in February



# Tasks and Timeline for 2014 Award Ceremony



February 13 – Preliminary Index Results

March 6 – Finalize Priority and Focus School Lists

March 23 – Identify Award Schools

March 26 – Notify Award Schools

April 21 (or 28) – Awards Ceremony



# School Recognition



**WHAT GUIDANCE IS FOLLOWED  
AND WHAT DATA SOURCES ARE  
USED FOR THE WASHINGTON  
ACHIEVEMENT AWARDS?**



# Washington Achievement Awards (WAAs) 4 Years of Fluidity



- **2012 WAAs**
  - ✦ Developed under NCLB
  - ✦ Utilized the old Index as the analysis basis
- **2013 WAAs**
  - ✦ Developed under the ESEA Flexibility Waiver
  - ✦ Utilized the Revised Index as the analysis basis
- **2014 WAAs**
  - ✦ Operating under NCLB and ESEA Flexibility Waiver
  - ✦ Utilizes the Washington Achievement Index as the analysis basis
- **2015 WAAs**
  - ✦ Operating under NCLB, ESEA Flexibility, or Reauthorized ESEA
  - ✦ Will utilize the Index and a new battery of SBAC assessments



# Awards by Category



## 2012 WAAs

- Overall Excellence (126)
  - ✦ Excludes schools with large gaps
- Special Recognition (426)
  - ✦ High Progress
  - ✦ High Performance
    - Proficiency by Content
    - Extended Graduation Rate
  - ✦ Gap Reduction

## 2013 WAAs

- Overall Excellence (100)
  - ✦ Excludes schools with large gaps
- Special Recognition (468)
  - ✦ High Progress
  - ✦ High Performance
    - Growth by Content
    - Extended Graduation Rate
  - ✦ Gap Closure
  - ✦ English Language Acquisition



# 2013 and 2014 Proposed Awards



One small change to the English Language Acquisition Award

New Criteria for the Gap Reduction Award

|                              | 2013 Award  | 2014 Award           |
|------------------------------|---|----------------------|
| Overall Excellence           | <ul style="list-style-type: none"> <li>Meet AMOs/AYP for three most recent years</li> <li>Top five percent based on the Composite AI</li> </ul> | No Change            |
| Special Recognition          |   |                      |
| High Progress                | <ul style="list-style-type: none"> <li>achievement and improvement</li> <li>equally weighted</li> </ul>   | No Change            |
| High Performance Growth      | <ul style="list-style-type: none"> <li>Top five percent based on 3-Year AVG median SGP</li> <li>reading or math</li> </ul>                      | No Change            |
| High Performance Graduation  | <ul style="list-style-type: none"> <li>highest rates over three years</li> <li>smallest gaps</li> </ul>   | No Change            |
| Gap Closure                  | <ul style="list-style-type: none"> <li>No recipients</li> </ul>   | New Criteria         |
| English Language Acquisition | <ul style="list-style-type: none"> <li>Largest median point gains on the WELPA</li> <li>School level and size</li> </ul>                        | 2- or 3-Year Average |





# English Language Acquisition Award

9

- Previous Board discussion
- Proposed Qualifying Criteria
  - ✦ Meet Title III AMAOs
  - ✦ WELPA performance

These criteria emphasize:

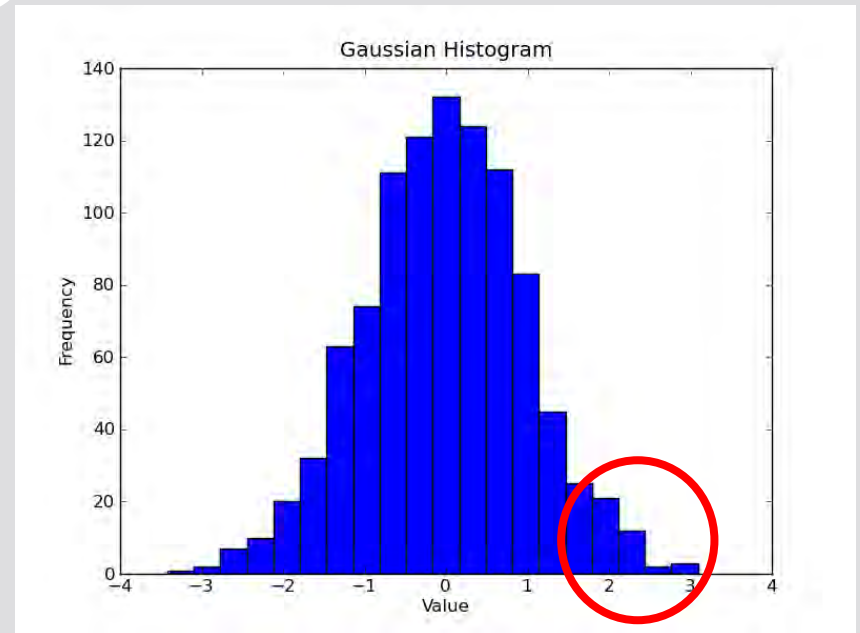
- 1) Meeting Federal accountability
- 2) Highest performing schools



# Median Gain on the WELPA



- At least 20 students with a prior WELPA record
- Must have met AMAO 1 and AMAO 2
- Identify the top 5 percent
  - ✦ By program size
  - ✦ By school level
- **Proposed change – use a two- or three-year average**



- Identified 42 schools from across the state



# Approve new criteria for the English Language Acquisition Award as shown below

- Have at least 20 reportable and matched cases for each year on the WELPA
- The school met Title III AMAO 1 for each assessment year
- The school met Title III AMAO 2 for each assessment year
- The school is in the top five percent of school based on the median point gain on the WELPA (**three-year average if data are available, two-year average otherwise**) by
  - ✦ Program size (small program = 20 to 99 matched records and large programs  $\geq$  100 matched records)
  - ✦ School level (elementary, middle, high school, or combined school).
- **School must be in good standing regarding Title III compliance as determined by the OSPI.**



# Gap Reduction Award



- Performance gaps in educational settings are often described as a disparity in academic performance between mutually exclusive student groups, for example:
  - ✦ White and Black students,
  - ✦ White and Hispanic students, and
  - ✦ Students who qualify for FRL vs. students who do not qualify for FRL



# Reducing Gaps



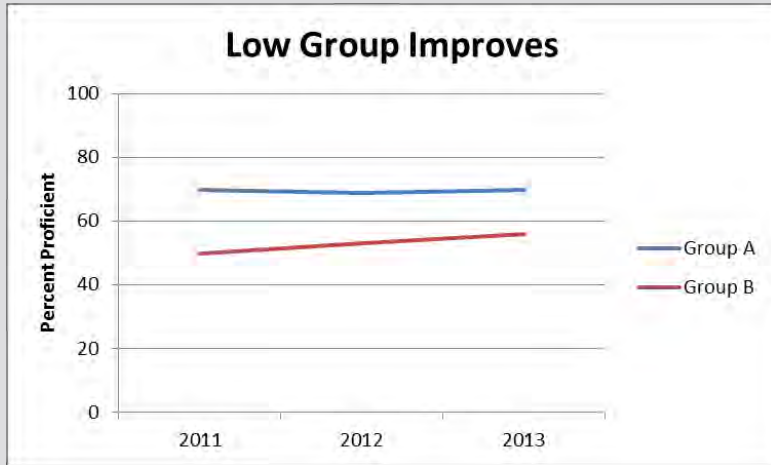
**GAP REDUCTIONS CAN  
LOOK DIFFERENT**



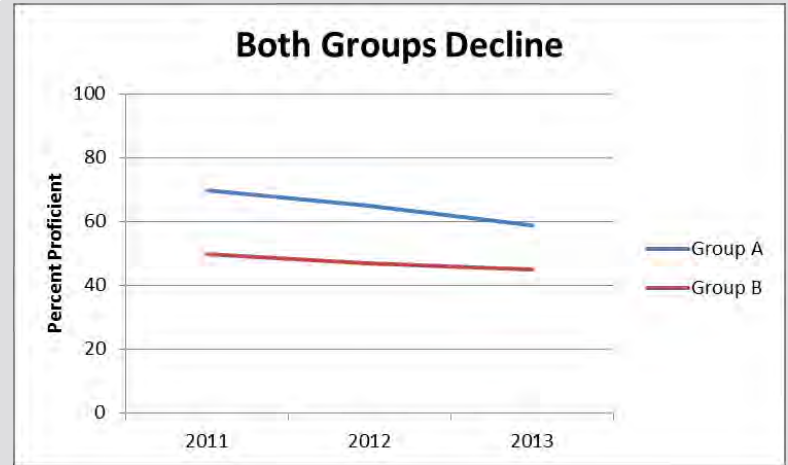
# 30 Percent Gap Reduction Not All Gap Reductions are Good



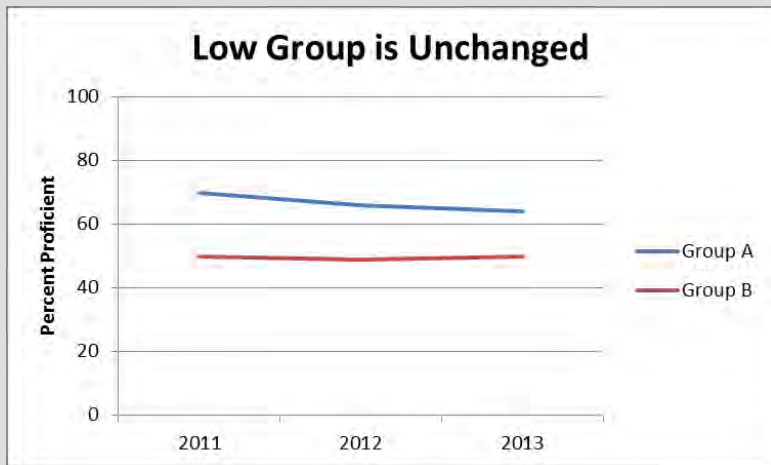
**A**



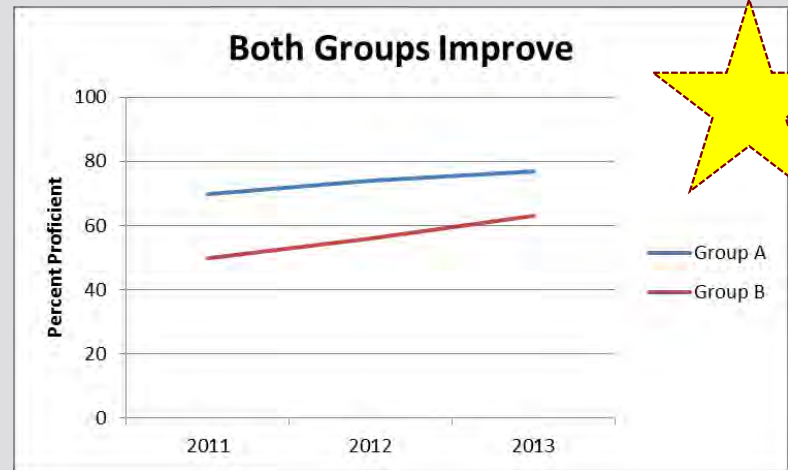
**C**



**B**



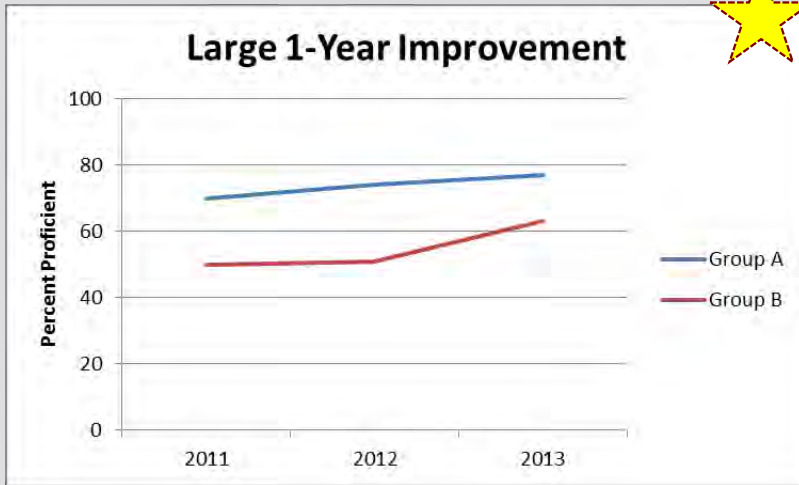
**D**



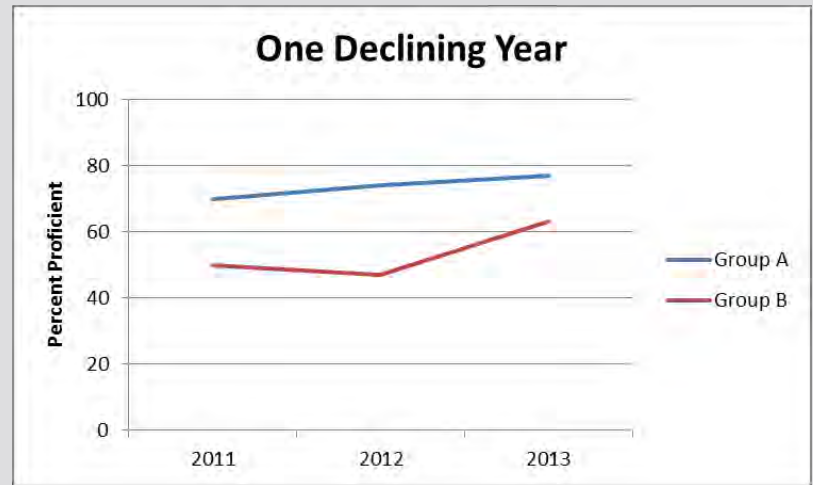
# 30 Percent Gap Reductions Some Good Reductions are Better



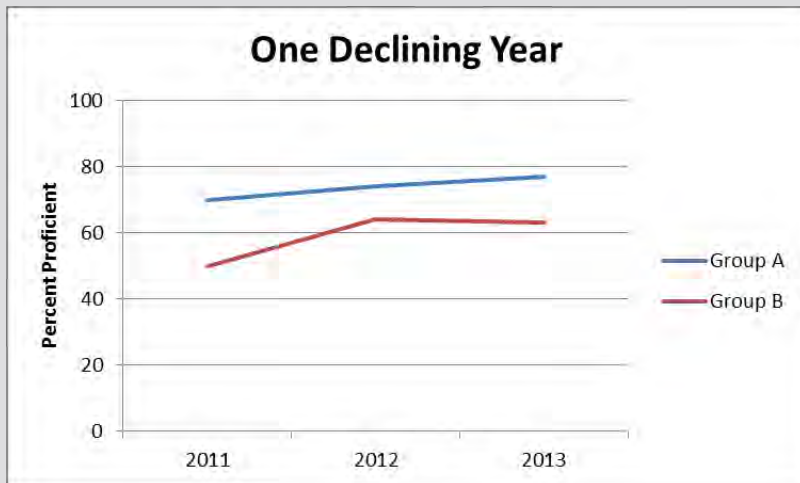
**A**



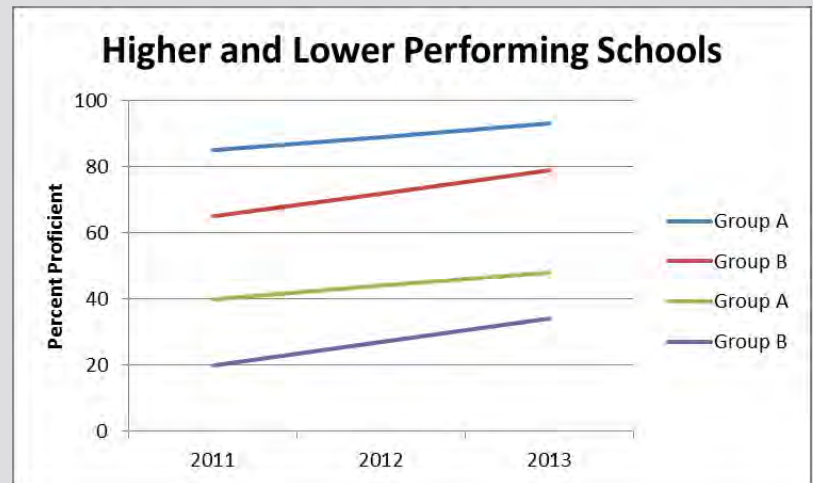
**C**



**B**



**D**



# Looking for the Perfect Award Model?



“All models are wrong, but some are useful. Since all models are wrong, the scientist cannot obtain a ‘correct’ one by excessive elaboration.”

Statistician George Box (1976 & 1987)

Regardless of the complexity of business rules and criteria we apply to the award methodology, the model we build will be imperfect. Knowing this, look for

- the simplest solution
- providing the most meaning for stakeholders
- consistently applies defensible business rules





# Many Elements to Consider



## Criteria to consider

- Measure
  - ✦ Proficiency, growth, or graduation
  - ✦ Reading (ELA), math, or science (individually or combined)
- Normative or criterion-based
  - ✦ Best performers
  - ✦ Reduced gaps by at least ??
- Percentages or rating points
- Which groups to compare
  - ✦ Targeted Subgroup to All Students
  - ✦ White to Black, for example
  - ✦ Hispanic to state average, for example

## Rules to Consider

- Inclusion thresholds
  - ✦ Minimum number of data years
  - ✦ Minimum ratings
  - ✦ Upward data trends
- Exclusion rules
  - ✦ Priority and Focus Schools
  - ✦ AYP or AMO tests
  - ✦ Downward years/trends
- Number of awards
  - ✦ Percentage of schools
  - ✦ Fixed number
  - ✦ Proportionate number



# Two Trials On Last Year's Index

- Trial 1

- ✦ Compared Targeted Subgroup to the All Students
- ✦ Reading, Math, Science, and Writing (combined RMSW) Proficiency Ratings
- ✦ 3 Years of data

- Trial 2

- ✦ Compared White to Hispanic student group
- ✦ R & M Proficiency Rates
- ✦ 3 Years of data

- Trial 1

- ✦ potentially masks underperforming groups

- Trial 2

- ✦ Conventional
- ✦ Mutually exclusive groups
- ✦ Deeper disaggregation

- Trial 2 was most supported by EOGOAC

- Led to Trial 3 – live data



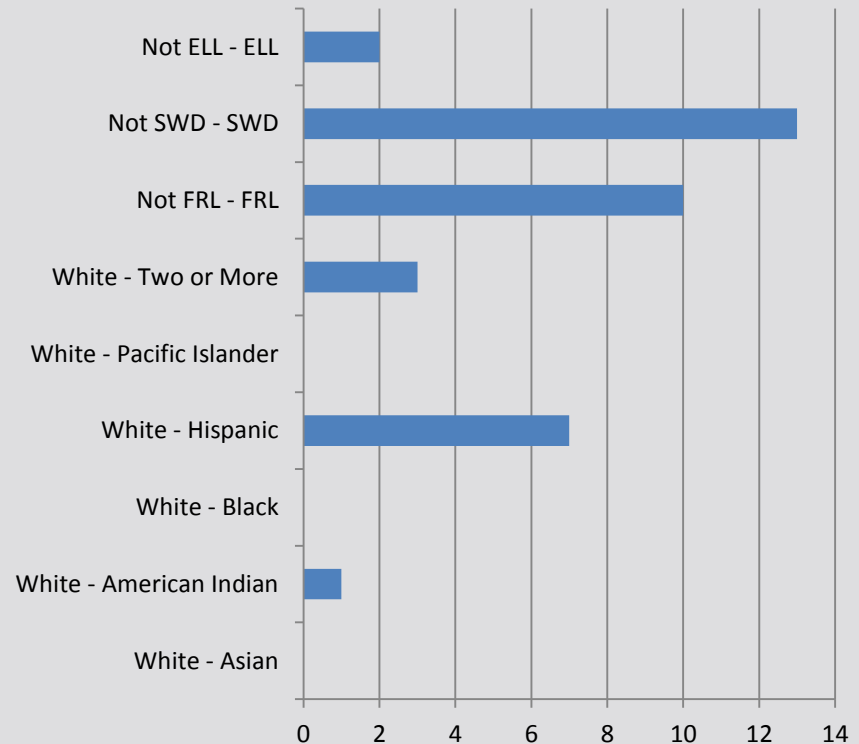
# Gap Reduction Award



- Trial 3 – live data
  - ✦ Compared
    - White to each student group
    - FRL to Not-FRL
    - SWD to Not-SWD
    - ELL to Not-ELL
  - ✦ R & M proficiency rates
  - ✦ 3 Years of data
  - ✦ Requires annual improvement
  - ✦ 10 percentage point gain
  - ✦ No increasing gaps for other subgroups

36 Schools

## Schools Identified for the Gap Reduction Award



# Approve new criteria for the Special Recognition – Gap Reduction Award as shown below.

- The measure is the gap reduction over three assessment years based on reading and math (combined) proficiency.
- The school must have reportable subgroup data ( $\geq 20$  students in each group being compared) for reading and math for each of the three years being analyzed.
- The proficiency rates for both groups must not decline in any of the three years.
- The total gap reduction for the three years of data must be equal to or greater than 10 percentage points.
- The school may not be a newly identified Priority or Focus School.
- The school may not have any other gaps that are increasing.

## Gaps to be analyzed

- White – American Indian/Alaskan Native
- White – Asian
- White – Black/African American
- White – Hispanic/Latino
- White – Pacific Islander
- White – Two or More race/ethnicities
- Not FRL – FRL
- Not SWD – SWD
- Not ELL – ELL



# Next Steps



- Staff will incorporate Board feedback/direction into a revised model in collaboration with EOGOAC staff
- SBE staff will request to present the revised model to the EOGOAC that is best aligned with today's discussion



# High School Index Weightings



## Anticipated Action Item for Tomorrow

Approve new Proficiency, Growth, and CCR Indicator weightings for high school ratings under the Washington Achievement Index.



# Key Question

## Washington Achievement Index



- Why propose changes to the Achievement Index indicator weightings?

More closely conforms to stakeholder values

Changes brought about by the SBAC assessments

USED approval for federal accountability.



# Proposed Changes Indicator Weighting for High Schools



- SBAC assessments require changes to the Index
- Reduce the impact of student growth in high school
- Elevate the importance of graduation rate

| Indicator   | Weighting in the Index |          |             |          |             |          |         |          |         |          |
|-------------|------------------------|----------|-------------|----------|-------------|----------|---------|----------|---------|----------|
|             | Total                  |          | Reading/ELA |          | Math        |          | Science |          | Writing |          |
|             | Current                | Proposed | Current     | Proposed | Current     | Proposed | Current | Proposed | Current | Proposed |
| Proficiency | 33.3                   | 35.0     | 8.3         | 11.7     | 8.3         | 11.7     | 8.3     | 11.7     | 8.3     |          |
| Growth      | 33.3                   | 20.0     | 16.7        | 10.0     | 16.7        | 10.0     |         |          |         |          |
|             |                        |          | Graduation  |          | Dual Credit |          | HS SBAC |          |         |          |
| CCR         | 33.3                   | 45.0     | 33.3        | 40.0     | TBD         | 5.0      | TBD     |          |         |          |

TBD = To Be Determined





# Summary of Proposed Changes



- Values proficiency over growth
- Reduces the reliance on a 3-Year SGP calculation
- Makes graduation at least as important as proficiency.

## Proposed Weightings

| Indicator                    | Weighting | Description  |
|------------------------------|-----------|--|
| Proficiency                  | 35%       | <ul style="list-style-type: none"><li>• HS SBAC results using the CCR cut points</li><li>• Biology EOC, then NGSS when available</li><li>• ELA, math, and science results are equally weighted</li></ul> |
| Growth                       | 20%       | <ul style="list-style-type: none"><li>• median SGP in reading and math,</li><li>• equally weighted</li></ul>   |
| College and Career Readiness | 45%       | <ul style="list-style-type: none"><li>• Extended Graduation rate and Dual Credit participation</li><li>• weighted at 40 percent for graduation and 5 percent for Dual Credit participation</li></ul>     |



# Anticipated Action Item



- Approve new Proficiency, Growth, and CCR Indicator weightings for high school ratings under the Washington Achievement Index as shown below:
  - ✦ 35 percent - Proficiency Indicator
    - Equally weighted between reading, math, and science
  - ✦ 20 percent - Growth Indicator
    - Equally weighted between reading and math
  - ✦ 45 percent - College and Career Readiness
    - 40 percent graduation rate
    - 5 percent Dual Credit participation



# Trial Analyses



**TWO TEST RUNS – 2013**  
**ONE TEST RUN – 2014**



# My Guiding Principles



- Devise a methodology that is compatible for 80 to 90 percent of schools.
- Include as many schools as possible in the beginning consideration pool.
- Use defensible business rule decisions to exclude schools in order to derive a meaningful list of award recipients.



# Gap Reduction – Trials



## Trial 1

- Compare All Students to Targeted Subgroup
- Proficiency Index Rating (R-M-S-W combined)
- 3 years of Index rating data for each group
- Must show a rating gap reduction each year
- Must show a Proficiency Index Rating annual increase for both groups

## Trial 2

- Compare White and Hispanic students
- Reading and math proficiency (combined)
- 3 years of reading and math data required
- Must show a rating gap reduction each year
- Must show a Proficiency Rate annual increase for both groups



# Trial 1



- Compute the annual performance gap based on the Index proficiency rating (All Students rating minus Targeted Subgroup rating) for 2011, 2012 and 2013.
- Compute the gap changes
  - ✦ 2012 Gap minus 2011 Gap & 2013 Gap minus 2012 Gap
  - ✦ Negative values mean the performance gap was reduced
  - ✦ Compute total gap reduction if 2011/12 and 2012/13 gap changes are  $\leq 0$
- Rank order schools by size of gap reduction
- Identified 184 schools



# Trial 1 - Results



- Based on the Index proficiency ratings for the All Students group and the Targeted Subgroup for 2011, 2012, and 2013.
- Identified 184 schools
  - ✦ 101 Elementary, 20 Middle, 41 High Schools, and 22 Combined
  - ✦ 20 Priority and Focus Schools
  - ✦ Schools distributed across the state
- Up to 2.47 rating point gap reduction and an average reduction of 0.77 rating points.
  - ✦ 50 schools showed a rating point gap reduction  $> 1.0$



# Trial 1 - Summary



## Pros

- Only a few additional calculations are required
- Consistent with other Index methodology
- Incorporates all content area proficiency rates

## Cons

- Rating point reduction is not totally transparent
- Underperformance of some groups may be masked
- Does not include the comparison if mutually exclusive groups.





# Trial 2



- Compute the average reading and math (combined) proficiency rate for Hispanic and White student groups for 2011, 2012, and 2013
- Compute the annual White-Hispanic performance gap (rate for White students minus the rate for the Hispanic students) for 2011, 2012 and 2013.
- Compute the gap changes
  - ✦ 2012 Gap minus 2011 Gap & 2013 Gap minus 2012 Gap
  - ✦ Negative values mean the performance gap was reduced
  - ✦ Compute total gap reduction if 2011/12 and 2012/13 gap changes are both  $\leq 0$
- Identified 51 schools



# Trial 2 - Results



- Based on White and Hispanic reading and math proficiency rates (combined) over three testing cycles.
- Identified 51 schools
  - ✦ 25 Elementary, 16 Middle, and 10 High Schools
  - ✦ 7 Focus Schools and 1 Priority School
  - ✦ I-5, Wenatchee, Yakima, Pasco, Walla Walla
  - ✦ Approximately 30 schools received no 2013 WAA
- Up to 30 percentage point gap reduction from 2010-11 to 2012-13 (average = 10 percentage point gap reduction)
  - ✦ 21 schools showed a >10 percentage point gap reduction



# Trial 2 - Summary



## Pros

- White-Hispanic gap based on proficiency rate is widely understood
- More precise and focused comparison

## Cons

- Slightly more complex calculations
- Comparison to White students may not be the best
- Not all schools have a reportable White student group.



# How Many Schools to Award?



- Other Washington Achievement Awards seek to identify the top five percent
- Nearly all of the 1822 schools with a Composite Index rating have at least one analyzed subgroup and FRL analysis is largest (n = 1502)
  - ✦ 5 percent of all rated schools = 90 schools
  - ✦ 5 percent of FRL schools = 75 schools

Targeting 75 to 90 schools is consistent for a norm-based Washington Achievement Award.



# Gap Reduction Tied to 5491 Indicators



- Defines annual incremental increase for All Students and student groups for the state
- Based on 3<sup>rd</sup> and 8<sup>th</sup> Grade Indicators
  - ✦ White student group = 2.5 pppy increase expected
  - ✦ Subgroups = 5.0 pppy increase expected
  - ✦ A gap reduction of 5.0 percentage points over three testing cycles would be expected or targeted
  - ✦ 5.0 = expected for a school
  - ✦ 7.5 = above average for a school
  - ✦ 10.0 = far above average for a school



# How Much Gap Reduction?



- 10.0 percentage point gap reduction is:
  - ✦ Not in 95<sup>th</sup> percentile for any group based on performance
  - ✦ Not in the 90<sup>th</sup> percentile for most groups

| Gap                | Schools | Percentile |         |
|--------------------|---------|------------|---------|
|                    |         | 90th       | 95th    |
| W-American Indian  | 23      | -17.931    | -24.701 |
| W-Black            | 250     | -15.166    | -18.884 |
| W-Hispanic         | 1082    | -12.716    | -16.026 |
| W-Pacific Islander | 18      | -8.922     | -12.719 |
| W-Asian            | 458     | -9.778     | -13.283 |
| W-Two or More      | 491     | -11.337    | -15.967 |
| Not FRL-FRL        | 1502    | -9.703     | -12.844 |
| Not SWD-SWD        | 1223    | -13.138    | -17.188 |
| Not ELL-ELL        | 473     | -15.834    | -21.067 |



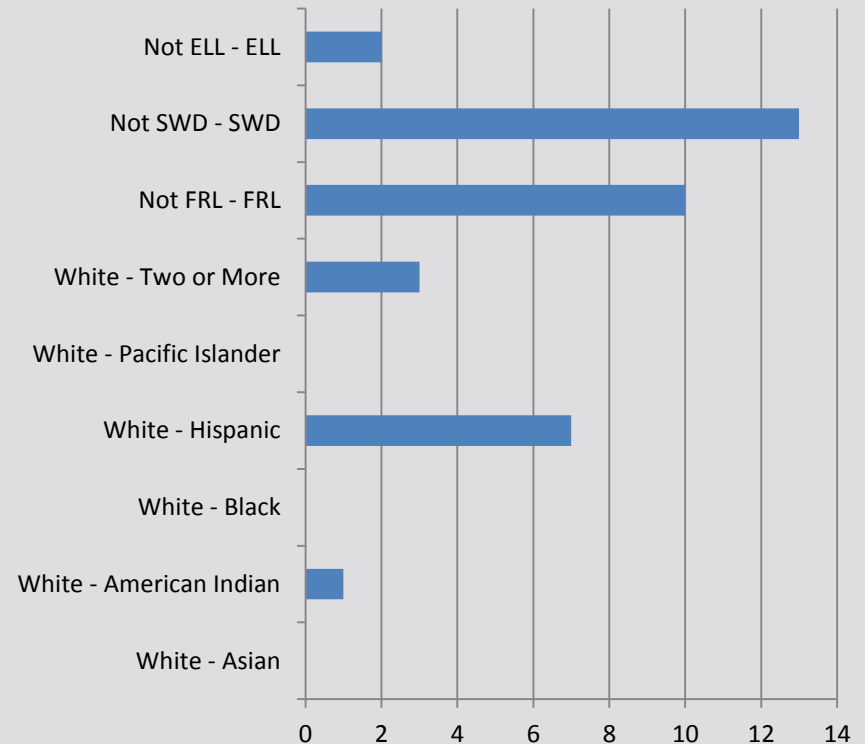
# Gap Reduction Award



- Trial 3 – live data
  - ✦ Compared
    - White to each student group
    - FRL to Not-FRL
    - SWD to Not-SWD
    - ELL to Not-ELL
  - ✦ R & M proficiency rates
  - ✦ 3 Years of data
  - ✦ **No annual decline in prof.**
  - ✦ 10 percentage point gap reduction
  - ✦ No increasing gaps for other subgroups

36 Awards – 30 Schools

## Schools Identified for the Gap Reduction Award



# No Annual Decline in Proficiency

- Trial 3
- Compute 3-Year Gap Reduction
- IF total gap reduction  $\leq -10.00$  and
  - ✦ 2013 read prof  $\geq$  2012 read prof and
  - ✦ 2014 read prof  $\geq$  2013 read prof and
  - ✦ 2013 math prof  $\geq$  2012 math prof and
  - ✦ 2014 math prof  $\geq$  2013 math prof
- These schools qualify for the award IF
  - ✦ Total gap reduction  $\leq 0$  for other reportable subgroups.

- Trial 4
- Compute 3-Year Gap Reduction
- IF total gap reduction  $\leq -10.00$  and
  - ✦ 2013 RM prof  $\geq$  2012 RM prof and
  - ✦ 2014 RM prof  $\geq$  2013 RM prof and
- These schools qualify for the award IF
  - ✦ Total gap reduction  $\leq 0$  for other reportable subgroups.





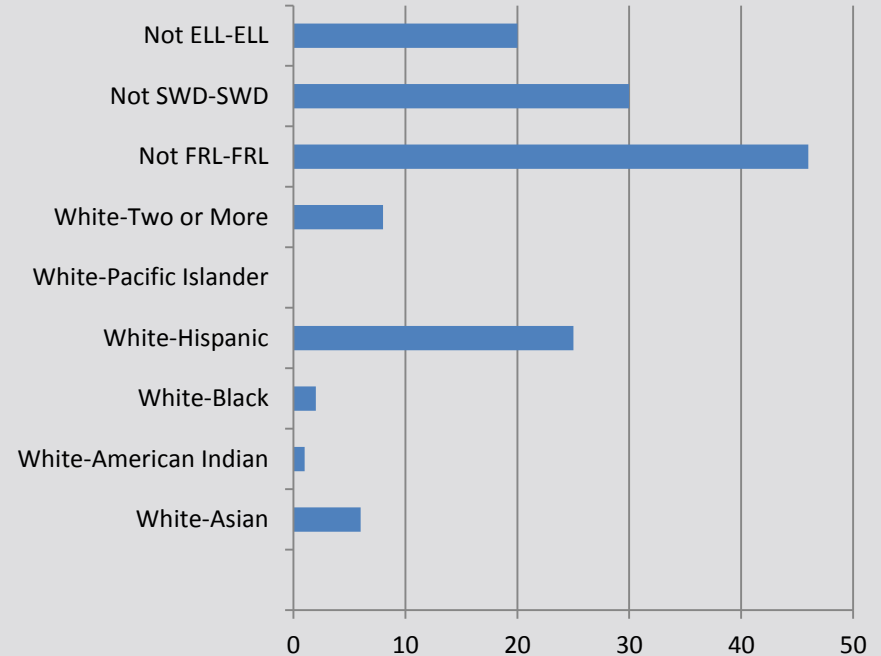
# Gap Reduction Award



- Trial 4 – live data
  - ✦ Compared
    - White to each student group
    - FRL to Not-FRL
    - SWD to Not-SWD
    - ELL to Not-ELL
  - ✦ R & M proficiency rates
  - ✦ 3 Years of data
  - ✦ **No annual decline in prof**
  - ✦ 10 percentage point gain
  - ✦ No increasing gaps for other subgroups

138 Awards - 105 Schools

Schools Identified for the Gap Reduction Award



# More on Trial 4



- Identified 105 Schools
  - ✦ 76 elementary schools
  - ✦ 7 middle schools
  - ✦ 13 high schools
  - ✦ 9 combined schools
  
  - ✦ Large and small districts
  - ✦ Across the state

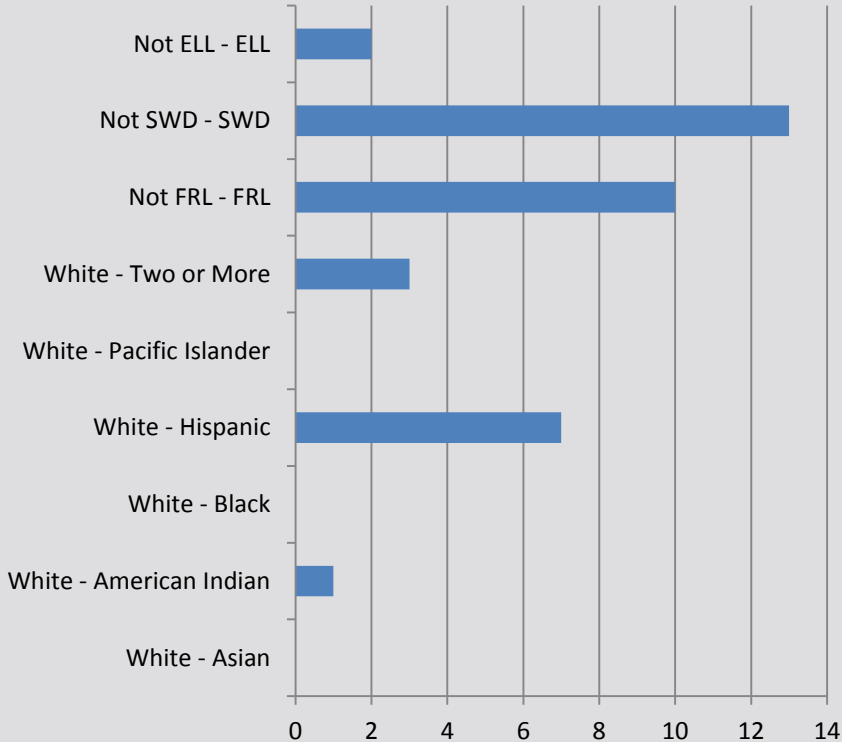
|             | Low | High | Average |
|-------------|-----|------|---------|
| Enrollment  | 62  | 1928 | 529     |
| FRL Percent | 2   | 100  | 53      |



# Comparison of Trials 3 and 4

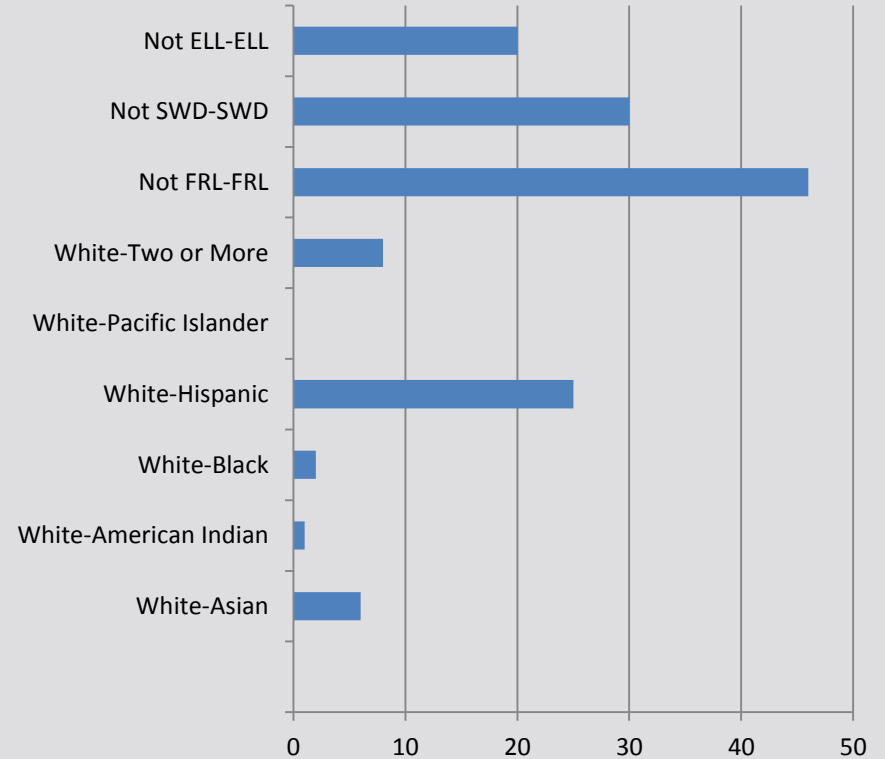
## Trial 3 - 36 Awards (30 sch.)

### Schools Identified for the Gap Reduction Award



## Trial 4 - 138 Awards (105 sch.)

### Schools Identified for the Gap Reduction Award



# Questions



For questions and other information, contact:

[Andrew.Parr@k12.wa.us](mailto:Andrew.Parr@k12.wa.us)

