

## **Accountability Indicator Benchmark Setting: Graduation Rate and Dropout**

**Board of Education's Committee on School and Division Accountability** 

Dr. Heather A. Carlson-Jaquez
Research Analyst
January 25, 2017



### Process for Defining School Performance Benchmarks

- ✓1.Select indicators: January
  - Graduation Completion
  - Dropout
  - 2.Determine a recommended calculation
  - 3.Examine the patterns in current data
  - 4.Establish and test benchmarks for each level on the matrix



### Process for Defining School Performance Benchmarks



### Choosing Calculations:

- ✓ Scientific studies on meaningful cut points
- ✓ Models from other states

#### Setting and Testing Benchmarks:

- ✓ Analysis of Virginia's data for patterns and trends
- ✓ "What if?" data modeling scenarios
- ✓ Validity checks
- ✓ Relationship with other drivers of school performance

## **Benchmark Selection Example: Graduation Rate**

### **Calculation Selection**

- Part of College & Career Readiness Index
- "On track to graduate" based on 8<sup>th</sup> or 9<sup>th</sup> grade cohort data
- Percentage of students graduating in 4year and 5-year cohort
- Current Graduation Completion Index used in Virginia



### **Graduation and Completion Index (GCI)**

- The GCI calculation includes students in the cohort of expected on-time graduates
  - students who were first-time ninth graders four years earlier,
  - plus transfers in and minus transfers out
  - students carried over from previous cohorts



### **GCI Example**

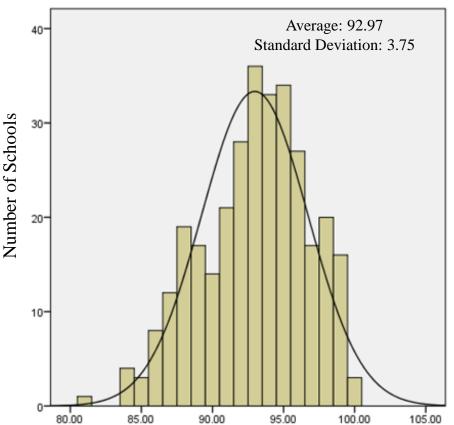
Outcome	Calculation		Results	
	# of Students	Point Value	# of Students X Point Value	
Diplomas	66	100	6,600	
GEDs	3	75	225	
Certificates of Completion	2	25	50	
Students still in School	4	70	280	
Dropouts	5	0	0	
Totals	80		7, 155	
	$GCI = \frac{7,155}{80} = 89$			

A GCI of at least 85 is currently required for full accreditation.



### **Data Patterns: GCI**

Three-Year Average GCI Rate School Years 2013-14 through 2015-16 (Outliers Removed)



**Graduation Completion Index** 

- Schools fall into a normal distribution.
- Using a three-year average stabilizes the scores so that schools aren't moving across accountability levels yearly
- Three-year average GCI with outliers removed is 92.97
- Opportunity to increase standards from current benchmark of 85



## Benchmark Selection: Graduation Completion Index

	Level 1 Exemplar	Level 2 Monitor	Level 3 Guiding	Level 4 Intervene
DRAFT Criteria	School three-year average GCI is equal to or greater than 97 (85th percentile)	School three-year average GCI rate is between 88 and 96	School three-year average GCI meets narrow margin criteria range, set at 80-87  Or  School that has a three-year average GCI below 75 but has shown at least a five point improvement compared to previous year.	School three-year average does not meet the benchmark, narrow margin criteria, or improvement (five point improvement).  School has met criteria for Level 3 for more than three consecutive years.
Number of Schools	56	229	29	5





## Benchmark Selection: Graduation Completion Index

Level 2 Benchmark	Level 1 Exemplar	Level 2 Monitor	Level 3 Guiding	Level 4 Intervene
Level 1: 97+ <b>Level 2: 88-96</b> Level 3: 80-87 Level 4: <80	56	229	29	5
Level 1: 97+ <b>Level 2: 87-96</b> Level 3: 77-86 Level 4: <77	56	241	17	5
Level 1: 97+ <b>Level 2: 86-96</b> Level 3: 76-87 Level 4: <76	56	249	9	5

<sup>\*</sup>A GCI of at least 85 is currently required for full accreditation.



# Accountability Indicator: Dropout Rate

- Graduation Completion more widely used by other states for accountability than dropout
- Dropout rate is only reported by other states



### **Dropout Rate**

- How is dropout calculated?
  - Four-year cohort
  - Dropouts are *not* students who are:
    - awarded a diplomas, certificate or GED
    - transferred out of state
    - deceased
    - on a long-term absence
    - still enrolled
    - enrolled in state operated agencies
  - Dropouts are: everyone else

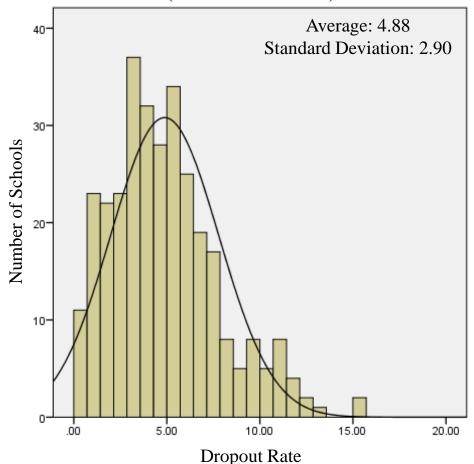
## **Dropout Example**

Outcome	Calculation	Results	
	# of Students (Denominator)	Numerator	
Diplomas	64	0	
GEDs	3	0	
Certificates of Completion	2	0	
nonIEP/nonLEP students still in School	2	0	
IEP/LEP students still in School	(2)	Moved to next cohort	
Dropouts	5	5	
Totals	76	5	
	<b>Dropout</b> = $\frac{5}{76}$ = 6.58%		



### **Data Patterns: Dropout**

Three-Year Average Dropout Rate School Years 2013-14 through 2015-16 (Outliers Removed)



- Schools fall into a normal distribution for dropout rate
- Using a three-year average stabilizes the scores so that schools aren't moving across accountability levels yearly
- Three-year average dropout rate with outliers removed is 4.88
- Standard deviation 2.9



### **Benchmark Selection: Dropout**

	Level 1 Exemplar	Level 2 Monitor	Level 3 Guide	Level 4 Intervene
DRAFT Criteria	School three-year average dropout rate is less than 3%.  (75th percentile)	School three- year average dropout rate is between 3% and 5.9%.  OR  School in Level 3 the prior year decreases dropout rate by 1.5% or more	School three-year average is between 6% and 8.9%.  OR  School in Level 4 the prior year decreases dropout rate by 1.5% or more	School three-year average does not meet the benchmark or improvement.  School has met criteria for Level 3 for more than 3 consecutive years.
Number of Schools	85	159	50	25

#### **DRAFT**



### **Policy Implications: GCI**

### Why GCI?

- All students get points in GCI except long-term absences and dropout
- Gives schools credit for taking steps to help students complete a program of study



### **Policy Implications: Dropout**

### Why dropout?

- Simple calculation
- Provides schools with a clear measure of how many students they are losing to dropout
- Simple calculation allows schools to determine if their efforts to reduce dropout are effective

