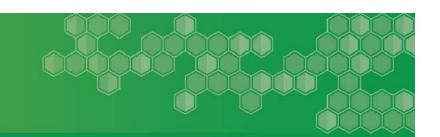


### Technical Advisory Panel

January 30, 2020

#### Agenda



- Welcome and Introductions
- Membership Updates
- Local Accountability Grant Update Informational
- On-track Metric (High School) Seeking TAP Feedback
- PWR Sub-Indicator Development- *Seeking TAP Feedback*





# Local Accountability Grant Update

Lisa Medler







### High School On Track Growth Metric

Marie Huchton



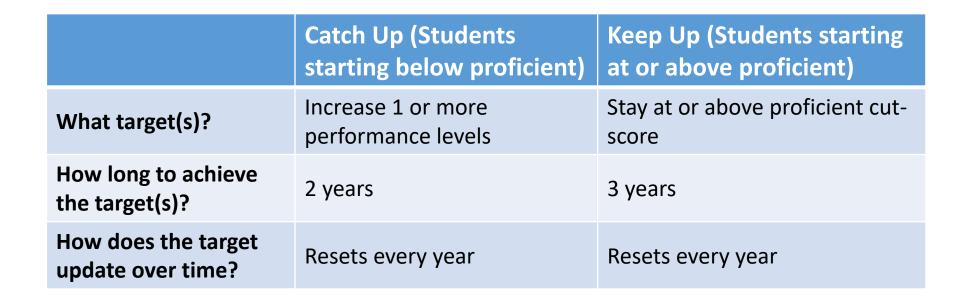


### On Track Growth (a.k.a. Growth to Standard) Requirement in SB18-1355

- Required performance indicator for inclusion in annually-determined school and district rating calculations: "Student academic growth to standards, based on students progress toward meeting the state standards... or for students who meet grade-level expectations on the state standards, progress toward higher levels of achievement, if available, as measured by the statewide assessments." 22-11-204(1)(a)(III)
- CMAS g3-8 On Track Growth metric approved by SBE last fall.
- Need to develop On Track Growth metric for PSAT/SAT grades 9-12.



# Re-cap of SBE-Approved CMAS g3-8 On Track Growth Metric

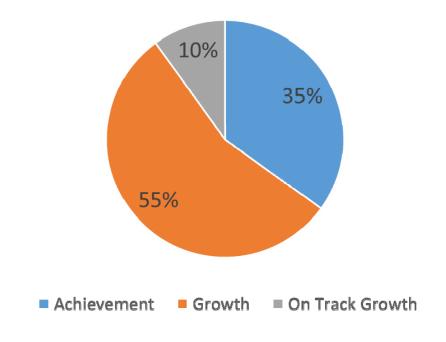


 The State Board approved the majority of TAP's methodological recommendations, however did vote to shorten the timeline for students starting below proficient to increase one or more performance levels, from 3 years to 2 years.



## Re-cap of SBE-Approved CMAS g3-8 On Track Growth Metric

#### Elementary & Middle School Indicator Weighting



- The State Board approved revisions to the elementary and middle school framework indicator weightings incorporating On Track Growth for 10% of total points.
- Five points were taken equally from the existing Achievement and Growth indicators to maintain the current relative weights of status versus progress.



# Timeline for Implementing CMAS g3-8 On Track Growth

- Student-level Catch Up/Keep Up/On Track Growth data were released to districts in fall 2019 for informational purposes
- Summary On Track Growth information and ratings impact data will be reported for informational purposes as an addendum to the final 2020 school and district performance frameworks.
- Summary On Track Growth information will be incorporated for points on the school and district performance frameworks no earlier than 2021.



#### Need for High School On Track Growth Metric

- Including On Track Growth for framework points for standalone elementary and middle schools, will mean a mismatch in the indicators and point weightings for K-12 schools, and districts.
- To try and minimize the impact of such indicator discrepancies on the frameworks, we are planning the development of the new High School On Track Growth metric this spring in consultation with the TAP.



# Influencing Factors for High School On Track Growth Metric Development and Use

- Establishment of Colorado PSAT/SAT Student Achievement Levels.
  - Standard setting was held mid-January to develop recommended EBRW and Math cut-scores for the g11 SAT (3 cut-scores leading to four achievement levels).
  - Results and reports from standard setting are currently being processed and developed.
  - Recommended SAT cut scores along with back-mapped PSAT10 and PSAT9 cut scores are targeted to be taken to the Board in March and April.
  - Mock (preliminary) data will be used to build our models for analyzing data for On Track growth.



# Influencing Factors for High School On Track Growth Metric Development and Use

- Open, competitive procurement for the college entrance suite – statutorily mandated every five years
  - RFP release and proposal review process: Spring 2020
  - Announcement of Apparent Successful Offeror: May 2020 (target)
  - New contract in place for Spring 2021 administration
- Two potential outcomes:
  - Current vendor is awarded the contract PSAT/SAT continues to be administered in spring 2021
    - Report out On Track Growth in the frameworks as soon as possible
  - New vendor is awarded the contract transition to new college entrance suite begins in spring 2021
    - This spring's On Track Growth development work used to inform conversations and decisions for new college entrance suite





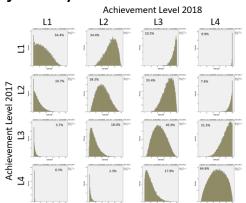
- What target(s)?
  - Should the target be set to "Proficient Benchmark" or should interim targets be used for Catch Up trajectories?
- How long to achieve the target(s)?
  - How many years should students be given to attain their target performance level?
- How does the target update over time?
  - Does the clock start over every year or should this be a set trajectory where we track student progress from the first test result?
- How do we report?
  - Do we report students below proficient (Catch Up) and above proficient (Keep Up) separately? Or combined?





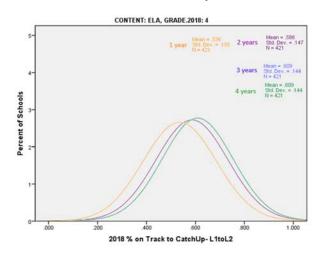
- What target(s)?
  - Should the target be set to "Proficient Benchmark" or should interim targets be used for Catch Up trajectories?
  - Assume the same increase of one performance level, as approved by SBE for elementary and middle schools?
  - What information would TAP members want to see before confirming?
    - % of students increasing a performance level on PSAT/SAT?
    - SGP distributions by achievement trajectory?

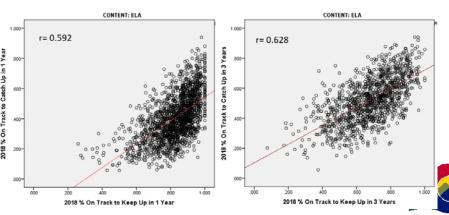
Percent of Students	ELA				
Catching Up		% of	Up to	Up 1+	
Within 5 Years	N	Total	Level 4+	Levels	
Start CMAS Level 1	18,886	13.4%	6.9%	81.1%	
Start CMAS Level 2	26,501	18.8%	25.9%	76.4%	
Start CMAS Level 3	36,689	26.0%	65.6%	65.6%	





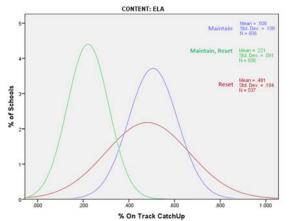
- How long to achieve the target(s)?
  - How many years should students be given to attain their target performance level?
  - Assume the same 2 years to Catch Up and 3 years to Keep Up?
  - What information would TAP members want to see before confirming?
    - Distribution of school % On Track by time horizon?
    - Relationship between % On Track CU and % KU by time horizon?

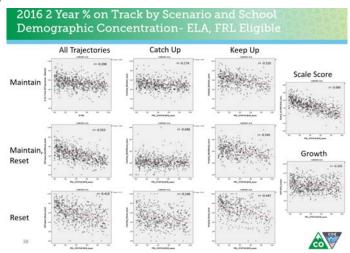






- How does the target update over time?
  - Does the clock start over every year or should this be a set trajectory where we track student progress from the first test result?
  - Assume the targets and timelines reset each year?
  - What information would TAP members want to see before confirming?
    - School-level aggregations of % On Track by maintain/reset scenario?
    - % On Track by Demographic Concentration?











- Do we report students below proficient (Catch Up) and above proficient (Keep Up) separately? Or combined?
- Indicator weightings on the framework?
- Assume % On Track Total will be used for framework points and with disaggregations. Separate Catch Up and Keep Up percentages will be published for informational purposes without disaggs?
- Additional TAP conversations will be needed around revised indicator weightings including both On Track Growth and PWR.



#### Current Data and On Track Analysis Plans

2016	2017	2018	2019
CMAS g9	CMAS g9	PSAT g9	PSAT g9
PSAT g10	PSAT g10	PSAT g10	PSAT g10
ACT g11	SAT g11	SAT g11	SAT g11

As of 2019, we have not yet had a single cohort of students take the entire PSAT/SAT sequence, so trajectory-over-time information is only available for one year.

We can still calculate target growth percentiles and On Track Growth using a daisy-chaining approach across grades-- 9<sup>th</sup> to 10<sup>th</sup> then 10<sup>th</sup> to 11<sup>th</sup>

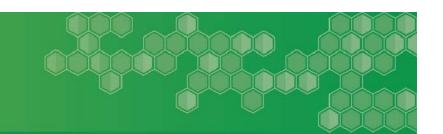


### Additional High School On Track Growth Questions

- Since we can't calculate growth from CMAS g8 ELA to PSAT g9 EBRW, we also won't have On Track Growth until g10 for EBRW.
- For Math, do we want to link-up CMAS g3-8 and PSAT/SAT g9-11 trajectories and On Track timeframes?
- Other considerations?



#### **Next Steps**



- Once PSAT/SAT cut-scores are established, Accountability staff will dig into the data and start running the requested analyses.
- Plan to spend time at the March, April and May meetings reviewing results and providing recommendations on the outstanding decision points.





### BREAK







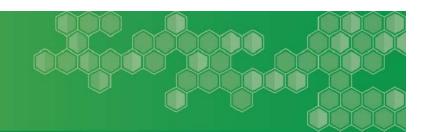
### PWR Sub-Indicator Development

Dan Jorgensen/Marie Huchton





#### Background

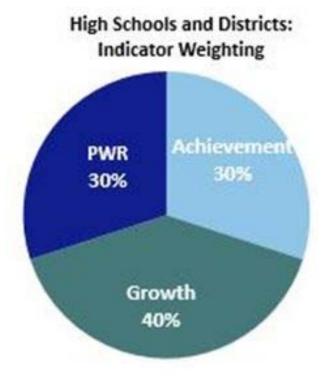


- Three bills passed during prior legislative sessions that will require changes to the postsecondary and workforce readiness (PWR) indicator.
  - Military enlistment
  - Successful completion of AP, IB, and/or Concurrent Enrollment for non-ELA and non-Math courses
  - Students meeting higher bar for graduation guidelines (to be discussed at future meetings)
- Military enlistment will be included within the matriculation sub-indicator, and the other two new sub-indicators will be incorporated in the PWR indicator.
- CDE has been conducting informational feedback sessions to obtain input regarding implementation of these new measures. The exact timeline for inclusion in the performance framework reports is expected to be no earlier then 2022.



#### Overview of Current PWR Indicator

 The PWR indicator is included within the high school and district performance frameworks. This indicator contributes 30% of the points that comprise the overall score. Currently, the PWR indicator consists of five sub-indicators.



#### **PWR Indicator: Points by Sub Indicator & Level**

High Schools/District				
SAT EBRW (8 points): Mean Scale Score				
[All Students (4) & Disaggregated (1 each)]				
SAT Math (8 points): Mean Scale Score				
[All Students (4) & Disaggregated (1 each)]				
<b>Graduation (16 points):</b> Rate				
[All Students (8) & Disaggregated (2 each)]				
Dropout (16 points): Rate				
[All Students (8) & Disaggregated (2 each)]				
Matriculation (4 points): Rate				
[All Students]				



### Military Enlistment as Part of Matriculation (SB18-012)

- Military enlistment will be factored into matriculation rate calculations. Enlistment will be self-reported by districts as the data is not available from another source.
- Enlistment data will be collected in the student demographic interchange pending EDAC approval.

Military Enlisted - Student has enlisted or intends to enlist as a member of the Armed Forces, or on full-time National Guard duty.

- · Students only need to be identified if 17 years of age or older.
- The definition of Armed Forces and full-time National Guard duty can be found in 10 U.S.C. 101(a)(4) and 101(d)(5).



• It is anticipated that military enlistment will be included in the frameworks no sooner then Fall 2022 (for information).



#### AP. CE, and IB for Non-Math & Non-ELA (HB18-1019)

A new PWR sub-indicator will be created that reflects students that successfully complete non-English Language Art/Math courses in Advanced Placement, International Baccalaureate, or concurrent enrollment and earn a particular score on the related assessment or grade for concurrent enrollment classes.

**Statute:** C.R.S. 22-11-204. Performance Indicators - measures. For each public high school, district, the institute, and the state, the department shall calculate: Beginning in 2020-21 school year, the percentage of students enrolled in the public high school who successfully complete an advanced placement course in a subject other than English language arts or math and earn a score of three or higher on the end-of-course advanced placement exam, the percentage of students who successfully complete a concurrent enrollment course in a subject other than English language arts or math and earn a grade of 'B' or higher in the course, and the percentage of students who successfully complete an international baccalaureate course in a subject other than English language arts or math and earn a score of four or higher.



### AP. CE, and IB for Non-Math & Non-ELA(HB18-1019)

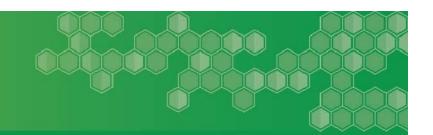
#### Sub-Indicator Mock-up

Non-Math/ELA	Count	Comp & Higher*	Pts Earn/Elig	Rating
All Students	710	33.20%	1/2	
✓ Advanced Placement (3+)	710	12.00%	*	
✓ International Baccalaureate (4+)	710	15.50%	*	
✓ Concurrent Enrollment (B & above)	710	12.00%	*	

<sup>\*:</sup> reflects students that successfully complete the course and achieve the identified grade/score.







- Statute indicates students should successfully complete the course and achieve a particular score/grade.
  - If possible, does the TAP recommend allowing for the use of the obtained score as a proxy for course participation?
- Statute indicates that, 'the percentage of students meeting established criteria is to be calculated for AP, IB, and CE'.
  - Based on this language, does the TAP recommend that points be assigned for each individual option or only assigned for an overall unduplicated student group?
  - Does the TAP recommend reporting out individual percentages for AP, IB, and CE in the framework reports?



### Requested Feedback: Inclusion Rules (Denominator)

 The statutory language says, the percentage of students enrolled in the public high school who complete a course and earn a particular score. So, what do TAP members believe are the appropriate inclusion rules for the calculation of the denominator?

#### Denominator:

- All Grades 9-12?
- Every student who was enrolled in the school that year?
- Every student enrolled at the beginning of the exam windows (i.e. May)?
- Only students continuously enrolled from October count through testing?
- Special considerations for Concurrent Enrollment?



### Requested Feedback: Inclusion Rules (Numerator)

• The statutory language says, the percentage of students enrolled in the public high school who complete a course and earn a particular score. So, what do TAP members believe are the appropriate inclusion rules for the numerator?

#### Numerator:

- Unique Student Count?
- Meeting one or more (AP/IB/CE)?
- All Grades 9-12?
- Only students continuously enrolled from October count through testing?

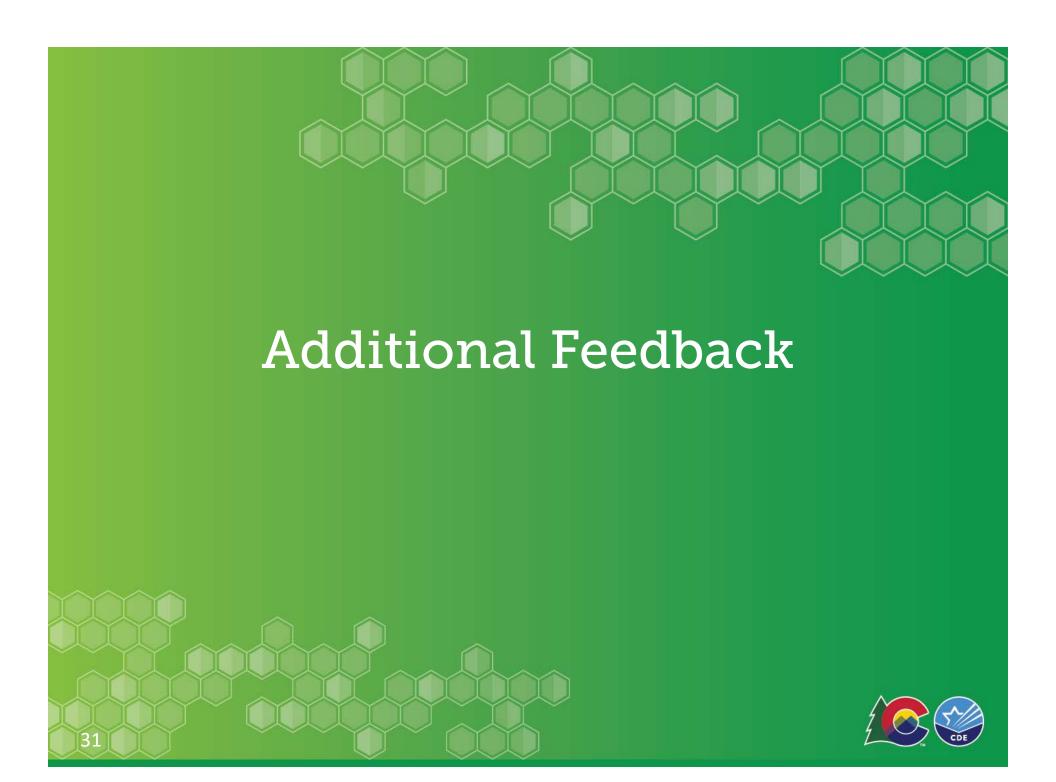






- We currently have access to student-level results for AP and IB exams for 2019 and are working to get Concurrent Enrollment information from the Colorado Department of Higher Education.
- Based on today's discussions, we hope to bring back preliminary analyses and impact data in April and finalize recommendations for the new AP/IB/CE for non-ELA/Math courses metric in May.





#### Technical Advisory Panel



- Meeting Summary:
  - Suggested future analysis
  - TAP recommendations from this meeting
- Public Comment
- Close Meeting
  - Next Scheduled Meeting, Thursday, March 19<sup>th</sup>, 9-noon (CDE)

