COLORADO

Department of Education

Stakeholder Group Pre-Meeting Webinar:

Possible Approaches to the Colorado Growth Model in 2021

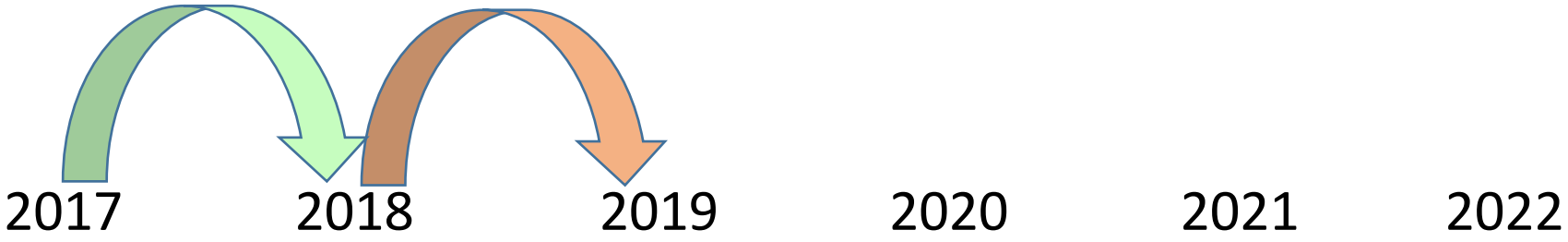
October 6, 2020

Agenda

- Possible methodologies for running growth in 2021
  - Skip-year Growth
  - Baseline Growth

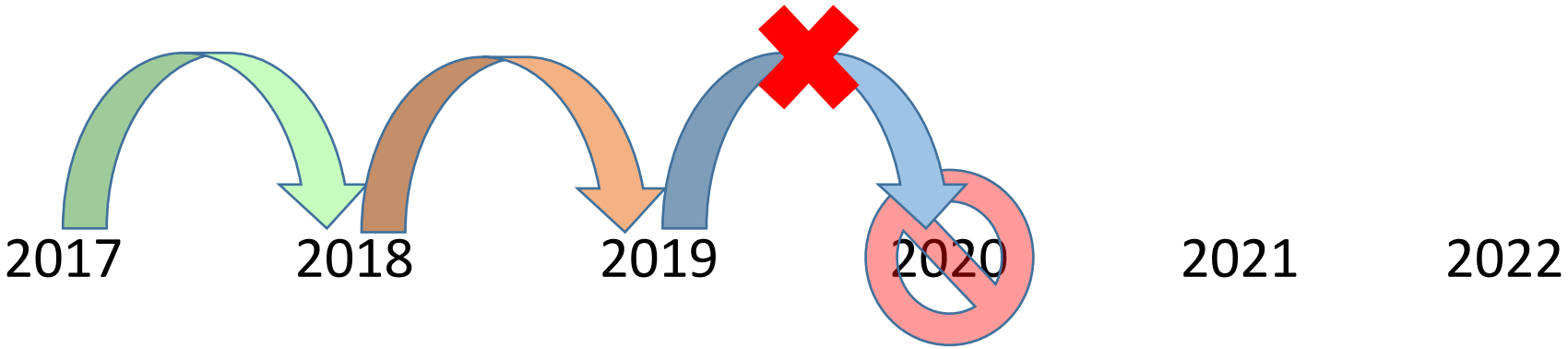
Background on the Colorado Growth Model

- In a normal year, growth calculations reflect the amount of progress a student has made from the prior year's summative assessment result (e.g. CMAS, PSAT and SAT) to the current year's result in comparison to their academic peer group
- Student progress is measured sequentially from one year to the next- so 2017 to 2018 and then 2018 to 2019



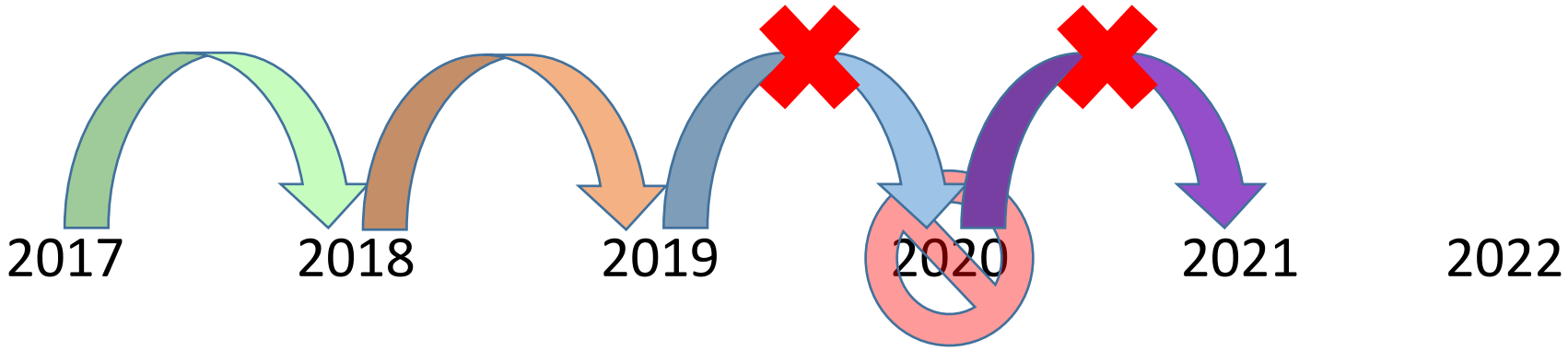
Implications of Cancellation of 2020 State Assessments on Growth Model

- Typically, 2020 growth would have captured student progress from 2019 to 2020
- Without 2020 state assessments, student results are not available to calculate growth



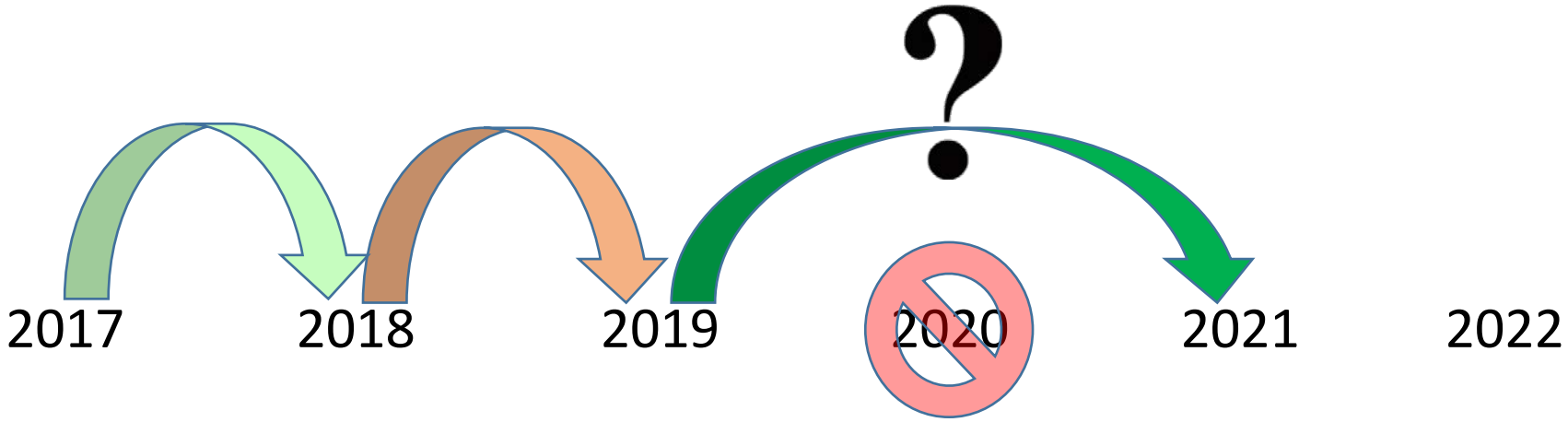
Implications of Cancellation of 2020 State Assessments on Growth Model

- Absence of 2020 state assessments also interferes with typical calculation of 2021 growth



Possible Options for Calculating Growth

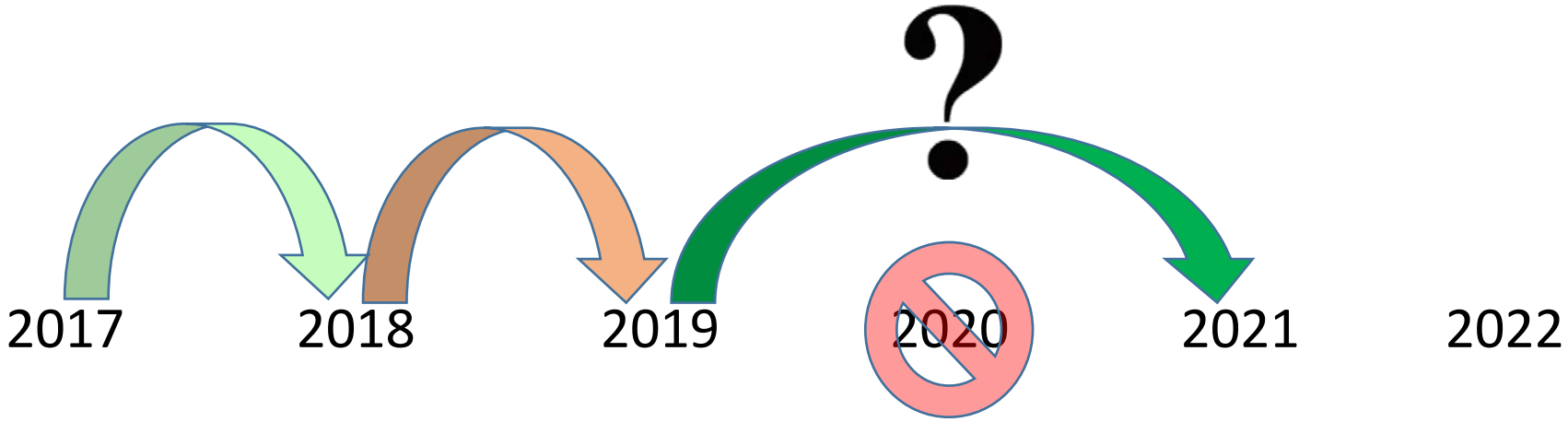
- What are the possible options for calculating growth in 2021 given the missing 2020 data?
  - Skip-Year Growth
  - Baseline Growth



Skip-Year Growth

Skip-Year Growth

- It is possible to calculate growth from 2019 to 2021, skipping over 2020
- However, we need to ensure the skip-year growth results are comparable to the one-year growth outcomes



Historical Skip-Year Growth Analyses

- The National Center for the Improvement of Educational Assessment (NCIEA) used historical CMAS ELA and math data to run growth from 2017 to 2019 (skipping 2018).
- **Purpose:** Determine how comparable historical skip-year growth results are to one-year growth at student, school/district, state and disaggregated student group levels.
- **Findings:**
  - Strong correlations (between 0.83 and 0.92 across all levels)
  - Slight increases in growth gaps (1-3 points) for special populations (e.g., FRL, EL, IEP)
- **Conclusion:** Skip year growth can be used in place of one-year growth in “normal” circumstances

Feasibility of Skip-Year Growth under Current Conditions

- Concern that the pandemic interferes with the “normal” conditions necessary
- It is possible that during COVID-19:
  - Students have been exposed to a wide variety of instructional approaches (e.g., in person, remote, hybrid)
  - School calendars and the amount of instructional time have been impacted in some cases
  - School staff are navigating many unknowns and having to adapt to changing local conditions
- CDE planning for all possible outcomes in spring 2021

Use of 2021 Skip-Year Growth Results

If,	Then…	Level of Use
Skip-Year results are aligned with NCIEA's historical analyses	Growth *could* be included in Frameworks	Student, School, District, State
Skip-Year results are not aligned with NCIEA's historical analyses	Growth would *not* be available for use in Frameworks.	n/a
	May be able to use results for student progress monitoring – with caution.	Student

Other Considerations: Student Participation

- If state assessments are given in spring 2021, student participation rates could be lower than usual.

- A previous Colorado study established 85% as the threshold for ensuring population representativeness in academic achievement reporting for accountability purposes. CDE will investigate whether this is an appropriate threshold under current conditions.

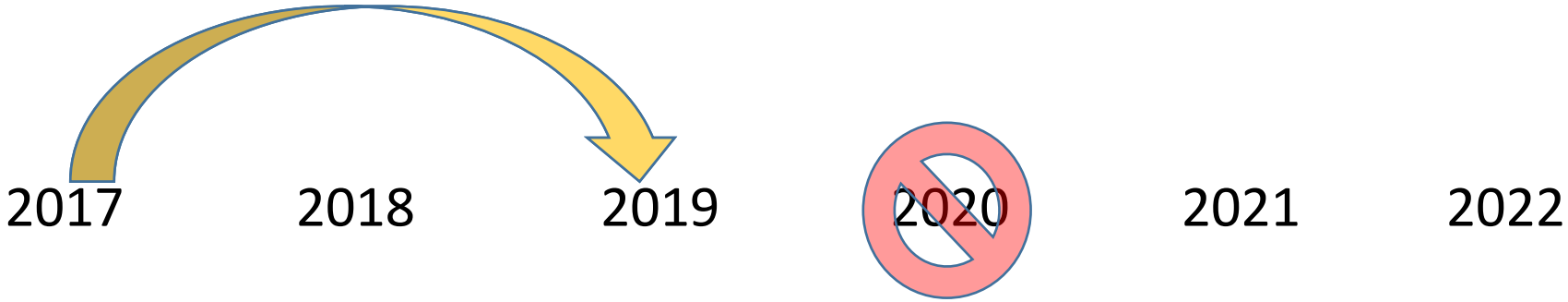
- If 85% threshold is not met, it is unlikely CDE will calculate or release skip-year growth results for 2021. One-year growth calculations for 2022 could also be affected.

Baseline Growth

Alternative Baseline Growth Methodology

- This approach uses the growth expectations we established in past normal years (e.g., 2017-2019) to gauge the impact of the pandemic on student learning in the current atypical years (e.g., 2020+).

- Baseline growth could result in a state-level median student growth percentile (MGP) for 2021 that is less than 50, how much less would be an estimate of the average learning loss due to the pandemic.



Baseline Growth Considerations

- With this approach, the 85% participation threshold is not needed to calculate growth in 2021.

- Since we are borrowing the historical norming group, we can estimate baseline growth for any number of students participating in 2021 state assessments.

- CDE is investigating baseline growth for all possible grade and content area combinations. High school may be more difficult because of the staggered implementation of assessments between 2017 and 2019.

Uses for Baseline Growth Reporting

Types of Reporting	Level	Uses	Caveats
Student Reports	Student	Individual progress compared to peers in a normal school year	Training and communication necessary
Summary Reports	School, District, Demographic Groups	Group progress compared to peers in a normal school year	Low participation could skew actual student learning
State Performance Frameworks	n/a	n/a	Not appropriate for state accountability

Additional Questions?

Contact

Marie Huchton

CDE, Accountability Analytics Supervisor

Huchton_m@cde.state.co.us