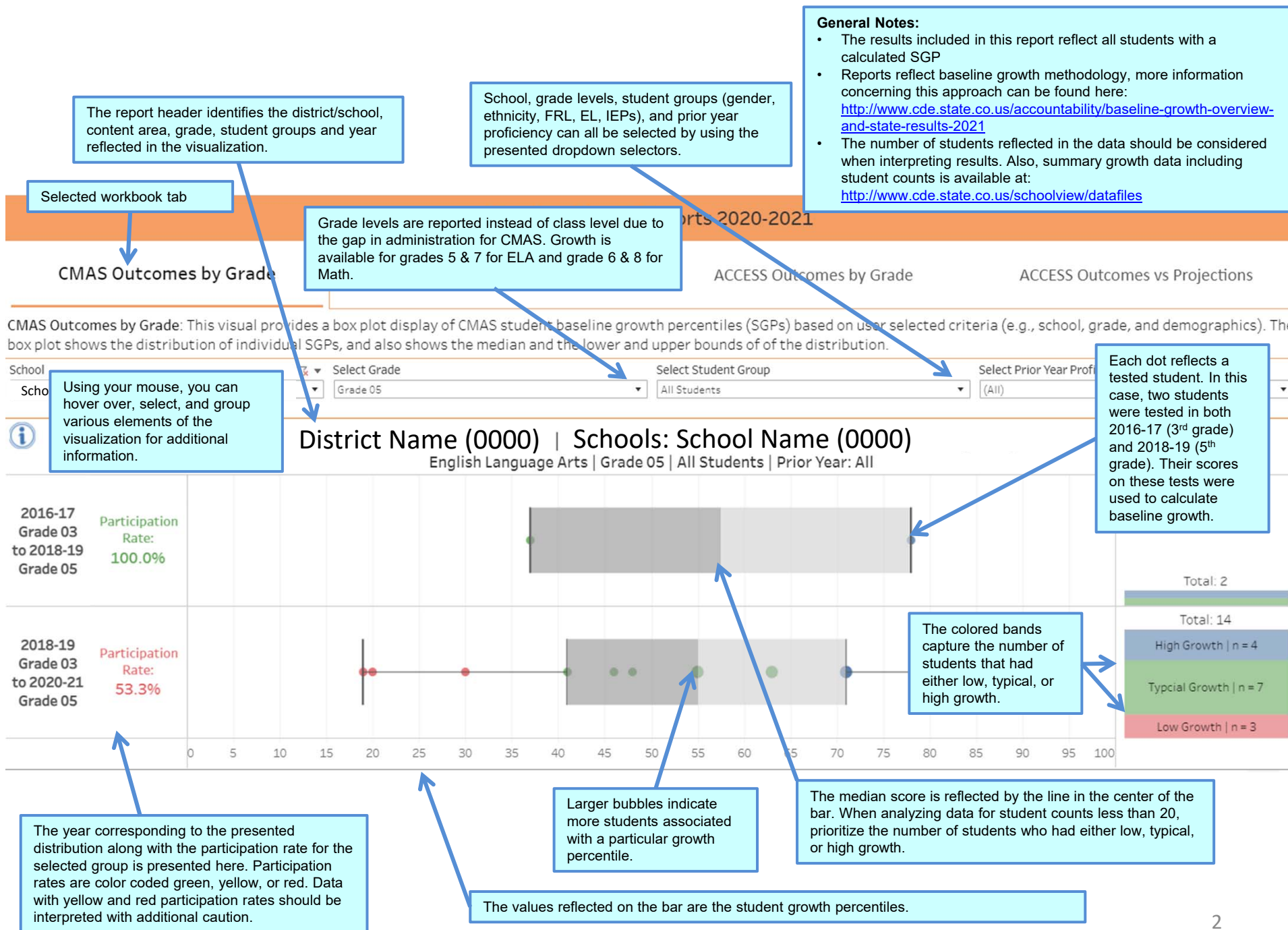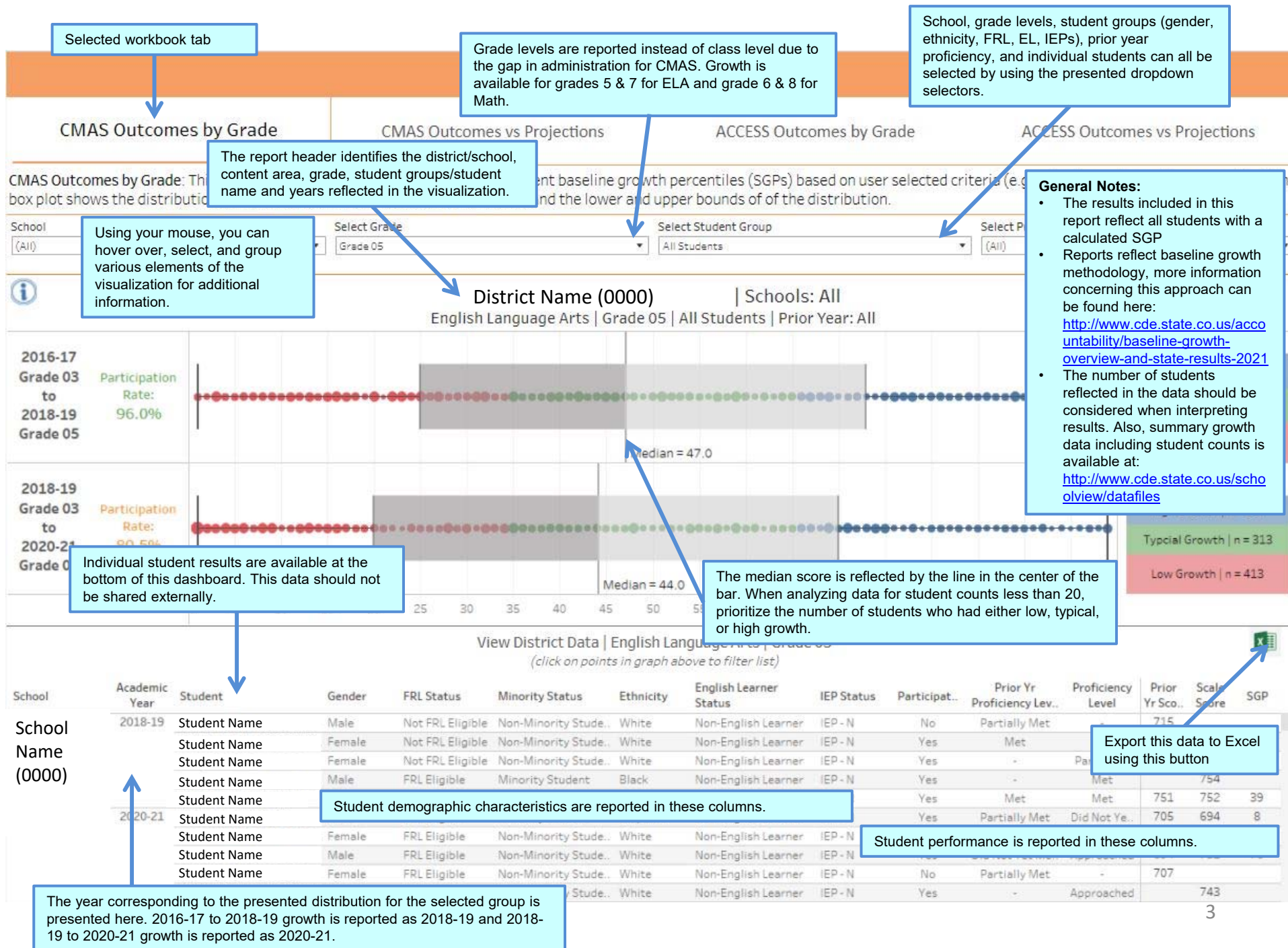# Baseline Growth Visualizations:
# Annotated Resources

- In order to support understanding of the growth visualization tool, a series of annotated screenshots are provided in this document. Access to these visualizations are available through a free software called Tableau Reader. Information on how to find these visualizations and on how to use Tableau Reader has been shared with District Accountability Contacts.

- The growth visualization tool has four primary tabs, each reflecting either CMAS or ACCESS data by grade or with growth projections. This includes the following visuals:

  - **CMAS Outcomes by Grade (page 2):** a visual box plot display of CMAS student baseline growth percentiles (SGPs) based on user selected criteria (e.g., school, grade, and demographics). This display indicates the lower and upper bound of SGP scores along with the median score and individual scores included in the distribution. The data is displayed in two sections one for each of the most recent years in which data is available.

  - **CMAS Outcomes vs Projections (page 4):** a graph that displays change in CMAS scale score and proficiency level between years while also displaying the corresponding baseline growth percentile. The display can be displayed by state, district, or school results. It allows for selections by grade level, student group, and cohort group. In addition, individual student results can be displayed.

  - **ACCESS Outcomes by Grade (page 5):** a visual box plot display of WIDA-ACCESS student baseline growth percentiles (SGPs) based on user selected criteria (e.g., school, grade, and demographics). This display indicates the lower and upper bound of SGP scores along with the median score and individual scores that make up the score distribution.

  - **ACCESS Outcomes vs Projections (page 7):** a graph that displays change in WIDA-ACCESS scale score and proficiency level between years while also displaying the corresponding baseline growth percentile. The display can be displayed by state, district, or school results. It allows for selections by grade level, student group, and cohort group. In addition, individual student results can be displayed.

For more information concerning baseline growth, go to: http://www.cde.state.co.us/accountability/baseline-growth-overview-and-state-results-2021.

These visualizations include student-level information that should not be shared with external third parties. To learn more about protecting Student PII, go to: https://www.cde.state.co.us/dataprivacyandsecurity. Districts should consider how they may share this data within their system since all schools and student data is available within the dashboard. As a suggestion, it may be helpful to share individual screenshots with school-level administrators rather than the Tableau workbook in its entirety.

For additional questions regarding the presented visuals and/or requests for training on CDE data tools can be made to the following e-mail account: accountability@cde.state.co.us.

**General Notes:**
- The results included in this report reflect all students with a calculated SGP
- Reports reflect baseline growth methodology, more information concerning this approach can be found here: http://www.cde.state.co.us/accountability/baseline-growth-overview-and-state-results-2021
- The number of students reflected in the data should be considered when interpreting results. Also, summary growth data including student counts is available at: http://www.cde.state.co.us/schoolview/datafiles

The report header identifies the district/school, content area, grade, student groups and year reflected in the visualization.

School, grade levels, student groups (gender, ethnicity, FRL, EL, IEPs), and prior year proficiency can all be selected by using the presented dropdown selectors.

Selected workbook tab

Grade levels are reported instead of class level due to the gap in administration for CMAS. Growth is available for grades 5 & 7 for ELA and grade 6 & 8 for Math.

...rts 2020-2021

CMAS Outcomes by Grade

ACCESS Outcomes by Grade    ACCESS Outcomes vs Projections

**CMAS Outcomes by Grade:** This visual provides a box plot display of CMAS student baseline growth percentiles (SGPs) based on user selected criteria (e.g., school, grade, and demographics). The box plot shows the distribution of individual SGPs, and also shows the median and the lower and upper bounds of of the distribution.

Using your mouse, you can hover over, select, and group various elements of the visualization for additional information.

School | Select Grade [Grade 05] | Select Student Group [All Students] | Select Prior Year Profi... [(All)]

Each dot reflects a tested student. In this case, two students were tested in both 2016-17 (3rd grade) and 2018-19 (5th grade). Their scores on these tests were used to calculate baseline growth.

**District Name (0000)  |  Schools: School Name (0000)**
English Language Arts | Grade 05 | All Students | Prior Year: All

2016-17 Grade 03 to 2018-19 Grade 05 — Participation Rate: 100.0%

2018-19 Grade 03 to 2020-21 Grade 05 — Participation Rate: 53.3%

0  5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90  95  100

Total: 2

Total: 14
High Growth | n = 4
Typical Growth | n = 7
Low Growth | n = 3

The colored bands capture the number of students that had either low, typical, or high growth.

The median score is reflected by the line in the center of the bar. When analyzing data for student counts less than 20, prioritize the number of students who had either low, typical, or high growth.

Larger bubbles indicate more students associated with a particular growth percentile.

The year corresponding to the presented distribution along with the participation rate for the selected group is presented here. Participation rates are color coded green, yellow, or red. Data with yellow and red participation rates should be interpreted with additional caution.

The values reflected on the bar are the student growth percentiles.

2

Grade levels are reported instead of class level due to the gap in administration for CMAS. Growth is available for grades 5 & 7 for ELA and grade 6 & 8 for Math.

School, grade levels, student groups (gender, ethnicity, FRL, EL, IEPs), prior year proficiency, and individual students can all be selected by using the presented dropdown selectors.

## CMAS Outcomes by Grade

CMAS Outcomes vs Projections    ACCESS Outcomes by Grade    ACCESS Outcomes vs Projections

CMAS Outcomes by Grade: Th... ...nt baseline growth percentiles (SGPs) based on user selected criteria (e.g... ...he box plot shows the distributio... ...and the lower and upper bounds of of the distribution.

The report header identifies the district/school, content area, grade, student groups/student name and years reflected in the visualization.

**General Notes:**
- The results included in this report reflect all students with a calculated SGP
- Reports reflect baseline growth methodology, more information concerning this approach can be found here: http://www.cde.state.co.us/accountability/baseline-growth-overview-and-state-results-2021
- The number of students reflected in the data should be considered when interpreting results. Also, summary growth data including student counts is available at: http://www.cde.state.co.us/schoolview/datafiles

| School | Select Grade | Select Student Group | Select P... |
|---|---|---|---|
| (All) | Grade 05 | All Students | (All) |

Using your mouse, you can hover over, select, and group various elements of the visualization for additional information.

### District Name (0000)    | Schools: All
English Language Arts | Grade 05 | All Students | Prior Year: All

2016-17 Grade 03 to 2018-19 Grade 05    Participation Rate: 96.0%

Median = 47.0

2018-19 Grade 03 to 2020-21 Grade 0...    Participation Rate: 80.5%

Median = 44.0

25    30    35    40    45    50    5...

Typcial Growth | n = 313

Low Growth | n = 413

Individual student results are available at the bottom of this dashboard. This data should not be shared externally.

The median score is reflected by the line in the center of the bar. When analyzing data for student counts less than 20, prioritize the number of students who had either low, typical, or high growth.

View District Data | English Language... ...s | Grade 05
(click on points in graph above to filter list)

School Name (0000)

| School | Academic Year | Student | Gender | FRL Status | Minority Status | Ethnicity | English Learner Status | IEP Status | Participat... | Prior Yr Proficiency Lev... | Proficiency Level | Prior Yr Sco... | Scale Score | SGP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2018-19 | Student Name | Male | Not FRL Eligible | Non-Minority Stude.. | White | Non-English Learner | IEP - N | No | Partially Met | - | 715 | | |
| | | Student Name | Female | Not FRL Eligible | Non-Minority Stude.. | White | Non-English Learner | IEP - N | Yes | Met | | | | |
| | | Student Name | Female | Not FRL Eligible | Non-Minority Stude.. | White | Non-English Learner | IEP - N | Yes | - | Pa... | | | |
| | | Student Name | Male | FRL Eligible | Minority Student | Black | Non-English Learner | IEP - N | Yes | - | Met | | 754 | |
| | | Student Name | | | | | | | Yes | Met | Met | 751 | 752 | 39 |
| | 2020-21 | Student Name | | | | | | | Yes | Partially Met | Did Not Ye.. | 705 | 694 | 8 |
| | | Student Name | Female | FRL Eligible | Non-Minority Stude.. | White | Non-English Learner | IEP - N | | | | | | |
| | | Student Name | Male | FRL Eligible | Non-Minority Stude.. | White | Non-English Learner | IEP - N | Yes | Did Not Rec... | Approached | | | |
| | | Student Name | Female | FRL Eligible | Non-Minority Stude.. | White | Non-English Learner | IEP - N | No | Partially Met | - | 707 | | |
| | | | | | ...Stude.. | White | Non-English Learner | IEP - N | Yes | - | Approached | | 743 | |

Student demographic characteristics are reported in these columns.

Student performance is reported in these columns.

Export this data to Excel using this button

The year corresponding to the presented distribution for the selected group is presented here. 2016-17 to 2018-19 growth is reported as 2018-19 and 2018-19 to 2020-21 growth is reported as 2020-21.

3

Grade levels are reported instead of class level due to the gap in administration for CMAS. Growth is available for grades 5 & 7 for ELA and grade 6 & 8 for Math.

School, grade levels, student groups (gender, ethnicity, FRL, EL, IEPs), prior year proficiency, and individual students can all be selected by using the presented dropdown selectors

**General Notes:**
- The results included in this report reflect all students with a calculated SGP
- Reports reflect baseline growth methodology, more information concerning this approach can be found here: http://www.cde.state.co.us/accountability/baseline-growth-overview-and-state-results-2021
- The number of students reflected in the data should be considered when interpreting results. Also, summary growth data including student counts is available at: http://www.cde.state.co.us/schoolview/datafiles

CMAS Outcomes by Grade

CMAS Outcomes vs Projections

ACCESS Outc

Selected workbook tab

MAS Outcomes vs. Projections: This graph displays CMAS scale score and proficiency level outcomes across years along strict, or school level results, or to display outcomes for an individual student. Filters can also be used to change grade

The report header identifies the district/school, content area, grade, student groups/student name and years reflected in the visualization.

Select Current Grade Level | Grade 05
Select Student Group | All Students
Select Result Set | All Results Both Years
Select Students | (All)

District Name (0000) | Schools: All
English Language Arts | Grade 05 | All Students
All Results Both Years

Using your mouse, you can hover over, select, and group various elements of the visualization for additional information.

Each colored bubble corresponds to the amount of growth that would have been necessary to reach the identified score band. For a student to reach the projected placement demonstrated by the bubbles on the proficiency bands, they would have received a Mean Scale Score in the ranges listed under each bubble below.

addition to el outcomes, the graph below displays three different growth projections for 2020-21 based on data available for students v, typical, a nce points for understanding how 2020-21 outcomes compare to historical growth trajectories.

840
820

Proficiency Level 5 | 810

800

Proficiency Level 5 | 799

780

The line reflects the change in scale score between years. This reflects how students performed against proficiency level cut points (the colored bands).

760

Proficiency Level 4 | 750

Proficiency Level 4 | 750

High Growth Projection
66th Percentile
755 - 757

Mean Scale Score: 746
Median Growth Percentile: 44.0

740

Mean Scale Score: 739
Median Growth Percentile: n < 20

Proficiency Level 3 | 725

Proficiency Level 3 | 725

720

Proficiency Level 2 | 700

Proficiency Level 2 | 700

ypical Growth Projection
50th Percentile
747 - 749

700
680

In this district example, 5th grade students received a 746 Mean Scale Score, placing them in the Level 3 Proficiency band (shown as yellow). Using their 2018-19 to 2020-21 results, they received a Median Growth Percentile of 44, which is considered typical growth. If they had received a score in the 755-757 range (the blue bubble), their growth percentile would be considered high growth. This would have placed them in the Level 4 Proficiency band (shown by the blue dot).

Low Growth Projection
35th Percentile
739 - 741

660

2018-19 Grade 03

2020-2

Participation Rate: 96.6%

Participation Rate: 80.5%

The year corresponding to the presented distribution along with the initial grade level for the selected group is presented here.

Each colored proficiency band reflects the range of scores associated with a particular CMAS performance level.

4

**General Notes:**
- The results included in this report reflect all students with a calculated SGP
- Reports reflect baseline growth methodology, more information concerning this approach can be found here: http://www.cde.state.co.us/accountability/baseline-growth-overview-and-state-results-2021
- The number of students reflected in the data should be considered when interpreting results. Also, summary growth data including student counts is available at: http://www.cde.state.co.us/schoolview/datafiles

School, grade levels, student groups (gender, ethnicity, FRL, EL, IEPs), and prior year proficiency can all be selected by using the presented dropdown selectors.

Selected workbook tab

ACCESS did not have a gap in test administration during the 2019-20 school year. Therefore, grade ranges can be produced for ACCESS, but not for CMAS. Select grade levels here.

The report header identifies the district/school, content area, grade, student groups and year reflected in the visualization.

## Baseline Growth Reports 2020-2021

CMAS Outcomes by Grade | ACCESS Outcomes by Grade | ACCESS Outcomes vs Projections

ACCESS Outcomes by Grade: This visual provides a box plot display of WIDA-ACCESS student baseline growth percentiles (SGPs) based on user selected criteria (e.g., school, grade, and demographics). The box plot shows the distribution of individual SGPs, and also shows the median and the lower and upper bounds of of the distribution.

Using your mouse, you can hover over, select, and group various elements of the visualization for additional information.

Select School: (All)
Select Grade: Grades 01 to 05
Select Student Group: All Students
Select Prior Year Proficiency Level: (All)

Each dot reflects a tested student. In this case 1,075 students were tested from 2018-19 to 2019-20

### District Name (0000) | Schools: All
WIDA ACCESS Overall Results | Grades 01 to 05 | All Students | Prior Year: All

**2018-19 to 2019-20** — Participation Rate: 99.4%

Median = 47.0

Total: 1,075
High Growth | n = 362
Typical Growth | n = 323
Low Growth | n = 390

The colored bands capture the number of students that had either low, typical, or high growth.

**2019-20 to 2020-21** — Participation Rate: 80.7%

Median = 27.0

Total: 896
Typical Growth | n = 212
Low Growth | n = 526

0  5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90  95  100

The values reflected on the vertical bar are the student growth percentiles.

The median score is reflected by the line in the center of the bar. When analyzing data for student counts less than 20, prioritize the number of students who had either low, typical, or high growth.

The year corresponding to the presented distribution along with the participation rate for the selected group is presented here. Unlike CMAS, ACCESS has had consistent year to year administration. Therefore, 1-year intervals were used to calculate growth for ACCESS and 2-year intervals were used to calculate growth for CMAS.

Larger bubbles indicate more students associated with a particular growth percentile.

5

ACCESS did not have a gap in test administration during the 2019-20 school year. Therefore, grade ranges can be produced for ACCESS, but not for CMAS. Select grade levels here.

Selected workbook tab

School, grade levels, student groups (gender, ethnicity, FRL, EL, IEPs), prior year proficiency, and individual students can all be selected by using the presented dropdown selectors

The report header identifies the district/school, content area, grade, student groups/student name and years reflected in the visualization.

CMAS

ACCESS Outcomes by Grade

ACCESS Outcomes by Grade: This visual provides a box plot display of WIDA-ACCESS student baseline growth percentiles (SGPs) based on user selected demographics). The box plot shows the distribution of individual SGPs, and also shows the median and the lower and upper bounds of of the distribution.

**General Notes:**
- The results included in this report reflect all students with a calculated SGP
- Reports reflect baseline growth methodology, more information concerning this approach can be found here: http://www.cde.state.co.us/accountability/baseline-growth-overview-and-state-results-2021
- The number of students reflected in the data should be considered when interpreting results. Also, summary growth data including student counts is available at: http://www.cde.state.co.us/schoolview/datafiles
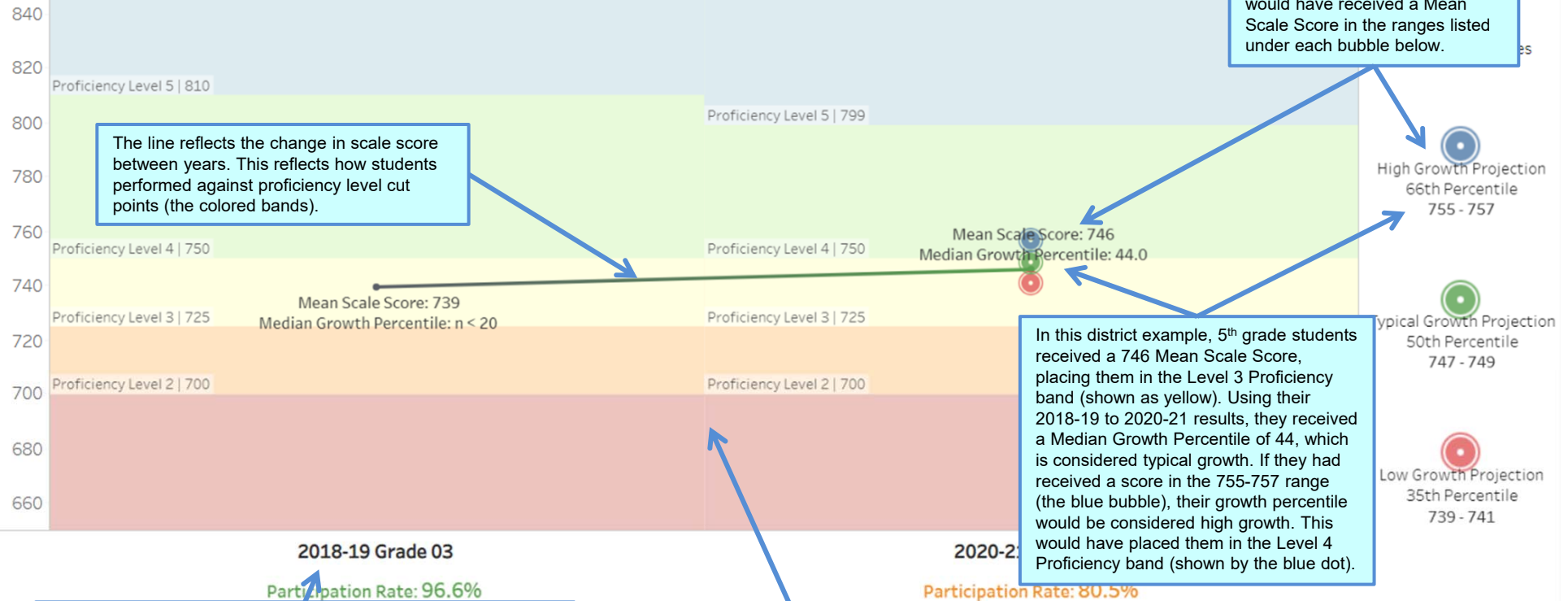
Select School
(All)

Using your mouse, you can hover over, select, and group various elements of the visualization for additional information.

Select Grade
Grades 01 to 05

Select Student Group
All Students

Select P
(All)

District Name (0000)  |  Schools: All
WIDA ACCESS Overall Results | Grades 01 to 05 | All Students | Prior Year: All

2018-19 to 2019-20
Participation Rate: 99.4%

Median = 47.0

2019-20 to 2020-21
Participation Rate: 80.7%

Median = 27.0

Typical Growth | n = 212

Low Growth | n = 526

Individual student results are available at the bottom of this dashboard. This data should not be shared externally.

The median score is reflected by the line in the center of the bar. When analyzing data for student counts less than 20, prioritize the number of students who had either low, typical, or high growth.

Export this data to Excel using this button

30   35   40   45

View District Data | WIDA ACC
District Name (0000)

| School | Academic Year | Grade | Student | Gender | FRL Status | Minority Status | Ethnicity | Language Proficien.. | IEP Status | Participat.. | Prior Yr Proficiency Lev.. | Proficiency Level | Prior Yr Score | Scale Score | SGP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| School Name (0000) | 2019-20 | Grade 02 | Student Name | Male | FRL Eligible | Minority Student | Hispanic | LEP | IEP - N | Yes | L4 | L4 | 324 | 345 | 52 |
| | | Grade 04 | Student Name | Male | Not FRL Eligible | Minority Student | Asian | LEP | IEP - N | Yes | - | L2 | | 288 | |
| | 2019-20 | Grade 01 | Student Name | Female | Not FRL Eligible | Minority Student | Asian | NEP | IEP - N | | | | | | |
| | | | Student Name | Female | Not FRL Eligible | Minority Student | Asian | LEP | IEP - N | | | | | | |
| | | | Student Name | Female | Not FRL Eligible | Minority Student | Asian | LEP | IEP - N | Yes | L3 | L3 | 263 | 301 | 63 |
| | | | Student Name | Female | Not FRL Eligible | Minority Student | Asian | LEP | IEP - N | Yes | L2 | L3 | 240 | 302 | 81 |
| | | | Student Name | | | | | | | Yes | L3 | L4 | 291 | 316 | 67 |
| | | | Student Name | Female | Not FRL Eligible | Minority Student | Asian | LEP | IEP - N | Yes | L3 | L4 | 279 | 327 | 86 |
| | | | | | | | | | | Yes | L3 | L3 | 278 | 325 | 71 |
| | | | | | | | | | | Yes | - | L3 | | 318 | |

Student performance is reported in these columns.

Student demographic characteristics are reported in these columns.

The year corresponding to the presented distribution for the selected group is presented here. The year corresponding to the presented distribution along with the participation rate for the selected group is presented here. Unlike CMAS, ACCESS has had consistent year to year administration. Therefore, 1-year intervals were used to calculate growth for ACCESS and 2-year intervals were used to calculate growth for CMAS.

6

ACCESS did not have a gap in test administration during the 2019-20 school year. Therefore, grade ranges can be produced for ACCESS, but not for CMAS. Select grade levels here.

School, grade levels, student groups (gender, ethnicity, FRL, EL, IEPs), prior year proficiency, and individual students can all be selected by using the presented dropdown selectors

2021

CMAS Outcom... ...Outcomes vs Projections    ACCESS Outcomes by Grade    **ACCESS Outcomes vs Projections**

ACCESS Outcomes vs. Projections: This graph displays WIDA ACCESS scale score and proficiency level outcomes across years along with growth percentile metrics. Filters allow users to display state, district, or school level results, or to display outcomes for an individual student. Filters can also be used to change grade level, demographic, and cohort selections.

The report header identifies the district/school, content area, grade, student groups/student name and years reflected in the visualization.

Select Current Grade Level — Grade 06
Select Student Group — All Students
Select Result Set — All Results Both Years

**General Notes:**
- The results included in this report reflect all students with a calculated SGP
- Reports reflect baseline growth methodology, more information concerning this approach can be found here: http://www.cde.state.co.us/accountability/baseline-growth-overview-and-state-results-2021
- The number of students reflected in the data should be considered when interpreting results. Also, summary growth data including student counts is available at: http://www.cde.state.co.us/schoolview/datafiles

**District Name (0000)** | Schools: All
OVERALL | Grade 06 | All Students
All Results Both Years

Each colored band reflects the range of scores associated with a particular WIDA-ACCESS performance level.

In addition to showing scale score and proficiency level outcomes, the graph below displays three different growth projection... ...for student... ...ow, typical, and high - are intended to provide reference points for understanding how 2020-21 outcomes compare to histor...

Using your mouse, you can hover over, select, and group various elements of the visualization for additional information.

The line reflects the change in scale score between years.

Each colored bubble corresponds to the amount of growth that would have been necessary to reach the identified score band.

420 — Proficiency Level 6 | 415     Proficiency Level 6 | 42...

400 — Proficiency Level 5 | 390     Proficiency Level 5 | 399

380

Proficiency Level 4 | 365

Mean Scale Score: 362
Median Growth Percentile: 41.5

360 — Proficiency Level 4 | 358

358 - 361

In this example, 6th grade students received a 344 Mean Scale Score, placing them in the Level 3 Proficiency band (shown as yellow). Using prior year results, they received a Median Growth Percentile of 28, which is considered low growth. If they had received a score in the 351-355 range (the green bubble), their growth percentile would be considered typical growth. This would have placed them further up the Level 3 Proficiency band (shown by the green dot).

340

Mean Scale Score: 344
Median Growth Percentile: 28.0

320 — Proficiency Level 3 | 317     Proficiency Level 3 | 324

Typical Growth Projection
50th Percentile
351 - 355

300

Proficiency Level 2 | 286     Proficiency Level 2 | 291

Low Growth Projection
35th Percentile
345 - 348

280

**2019-20 Grade 05**          **2020-21 Grade 06**

The year corresponding to the presented distribution along with the participation rate for the selected group is presented here. Unlike CMAS, ACCESS has had consistent year to year administration. Therefore, 1-year intervals were used to calculate growth for ACCESS and 2-year intervals were used to calculate growth for CMAS.

Participation Rate: **81.2%**

7