

COUNCIL OF GREAT CITY SCHOOLS NAEP DASHBOARDS: TECHNICAL GUIDE

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Accessing the CGCS NAEP Dashboards

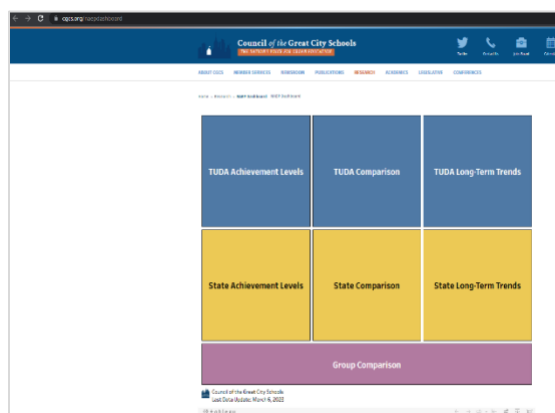


Figure 1: Users can navigate to the Council of the Great City Schools website to access the NAEP data visualization tools. Click the image to see full size.

The National Assessment of Educational Progress (NAEP) is the only representative and continuing assessment of American students' achievement. NAEP, the "nation's report card," describes the educational achievement of students at grades 4, 8, and 12 in both math and reading, and provides information about special groups of students (e.g., by race/ethnicity, by gender, by free-reduced price lunch eligibility). Results are provided for several jurisdictions including measures for students in national public and large city jurisdictions, states, as well as urban districts through the Trial Urban District Assessment (TUDA). It offers a national measure and source for understanding state and

urban district educational outcomes on a comparable scale to policymakers, educators, parents, and the public.

To streamline available information that is relevant to stakeholders, the Council of the Great City Schools (CGCS or *Council*) has developed interactive data visualization tools designed to provide users with information on NAEP results that suits their needs. These dashboards were designed for use by our TUDA district leaders with a primary focus on examining TUDA NAEP results (grades 4 and 8; mathematics and reading; 2003-2022 administrations), although they are public dashboards that can be used by any group of stakeholders. CGCS has placed these interactive tools on its website, which can be accessed by navigating to <https://www.cgcs.org/naepdashboard>.

The Navigation Page

Upon accessing the dashboard on the Council's website, users will begin at the Main Page, or Navigation Page (**Figure 2**), where users can select the interactive dashboards of their interest. At the time of this guide's development, there are seven (7) dashboards to for users to choose from:

- **TUDA Achievement Levels**
- **TUDA Comparison**
- **TUDA Long-Term Trends**
- **State Achievement**
- **State Comparison**
- **State Long-Term Trends**
- **Group Comparison**

The functionality of the navigation is point-and-click, with the selection taking the user to the corresponding dashboard.

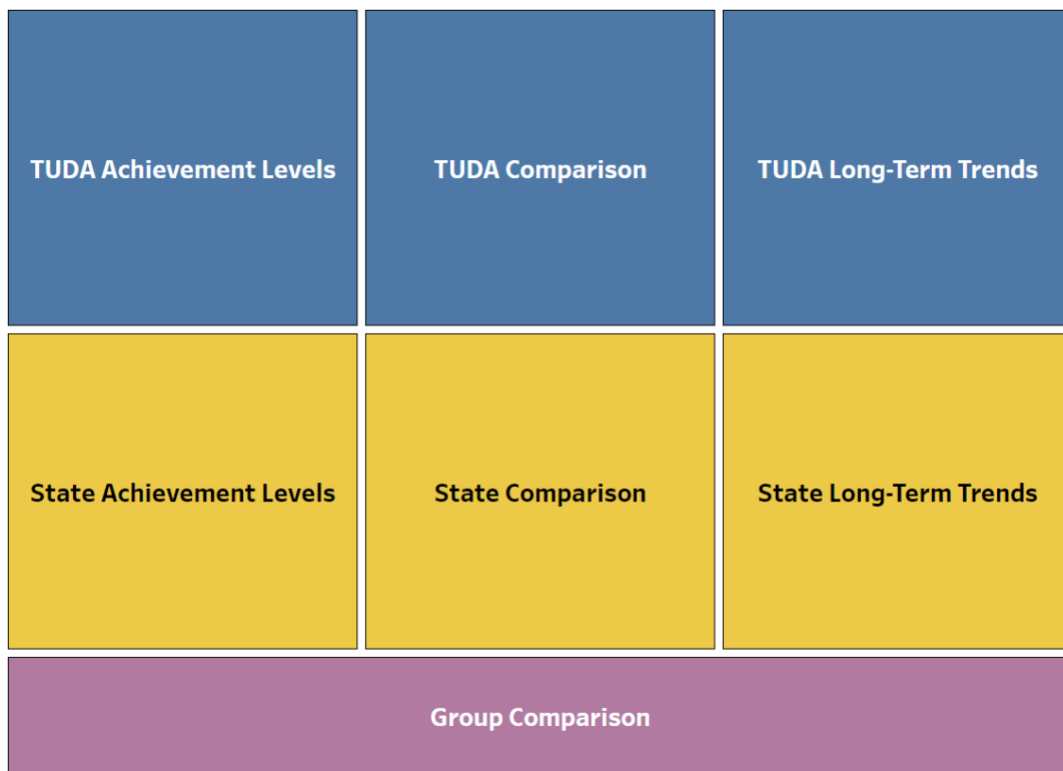
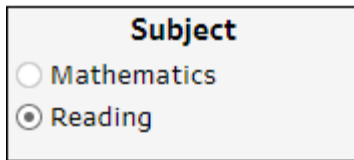


Figure 2: Main Page – Dashboard navigation buttons

Key Functions

There are eight (8) key functions that are relevant to all available dashboards that will be discussed in this section of the guide. These functions reflect the values that appear in the source data, appear as radio button or sliding selector buttons, and affect the visualizations of all dashboards that contain them.

Subject Selection



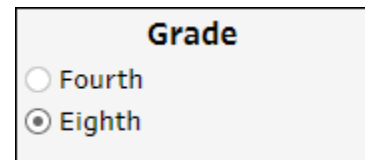
A screenshot of a web interface titled "Subject". It contains two radio button options: "Mathematics" and "Reading". The "Reading" option is selected, indicated by a filled circle next to it.

Figure 3: Selecting a value include in the subject selection filter prompts the visualization to display data for the corresponding subject test.

The NAEP data on which the visualization tools are based contains data from two subject tests: *mathematics* and *reading*. The Subject Selection filter (**Figure 3**) appears as a radio button on *all dashboards* and allows users to choose from the two subject tests that are included in the NAEP data visualizations. Selecting a value in this filter prompts the visualization to display NAEP results that pertain to the selected subject test.

Grade Level Selection

The NAEP data on which the visualization tools are based contains data for two grade level groups: *fourth* and *eighth*. The Grade Selection filter (**Figure 4**) appears as a radio button on *all dashboards* and allows users to choose from the two grade levels that are included in the NAEP data visualizations. Selecting a value in this filter prompts the visualization to display NAEP results that pertain to the selected grade level.



A screenshot of a web interface titled "Grade". It contains two radio button options: "Fourth" and "Eighth". The "Eighth" option is selected, indicated by a filled circle next to it.

Figure 4: Selecting a value include in the grade level selection filter prompts the visualization to display data for the corresponding grade level group.

Student Group Select

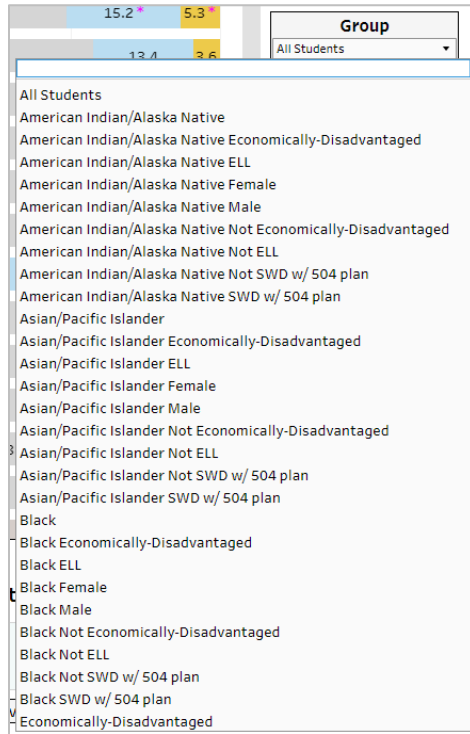


Figure 5: The Student Group Selection dropdown filter

The NAEP data on which the visualization tools are based contains data for approximately 87 student demographic groups, beginning with *All Students*, followed by the five main demographic categories—student *race/ethnicity*¹, *gender*, *economic status*², *disability status*, and *English Learner* status, as well as those that are a combination of values that fall within the five main categories (e.g., *Black Male*, *Economically-Disadvantaged English Learner*). The Group Selection filter (**Figure 5**) appears as a dropdown list on the *Achievement Level*, *Jurisdiction Comparison*, and *Long Term Trends* dashboards and allows users to choose one value from the list of student groups that are included in the NAEP data visualizations. Selecting a value in this filter prompts the visualization to display NAEP results that pertain to the selected student group. The Group Comparison dashboard contains an alternate version of the Student Group filter that is discussed in the [Group Comparison Dashboards section of this guide](#).

The functionality of the Student Group Selection filter allows users to select the group for which they would like to see corresponding data. The filter also has a search feature that allows users to find the student group of interest (**Figure 6**).

¹ In order to allow comparisons across years, assessment results presented are based on information for six mutually exclusive racial/ethnic categories: *White*, *Black*, *Hispanic*, *Asian/Pacific Islander*, *American Indian/Alaska Native*, and *Two or more races*.

² The economic status category includes two values: *Economically-Disadvantaged*—students that qualify for the [National School Lunch Program \(NSLP\)](#), and *Not Economically-Disadvantaged*.

28.5 * (-6.3 from 2019)

Group

All Students

Economically-Dis

- American Indian/Alaska Native Economically-Disadvantaged
- American Indian/Alaska Native Not Economically-Disadvantaged
- Asian/Pacific Islander Economically-Disadvantaged
- Asian/Pacific Islander Not Economically-Disadvantaged
- Black Economically-Disadvantaged
- Black Not Economically-Disadvantaged
- Economically-Disadvantaged

Figure 6: The student group selection filter search function.

To use the search function in the Student Group filter, click the group name to show the list of student group values and begin typing the name of the student group of interest.

Focal and Comparison Years

Dashboards contained in the Council's NAEP data visualization tool include results of [significance tests](#) conducted by the National Center for Education Statistics (NCES) which indicate whether differences are statistically meaningful. At the time of this guide's development, the dashboards are limited to significance test results that compare student outcomes across years. Such being the case, the NAEP data on which significance indicators are based consists of two key elements: *Focal Year* and *Comparison Year*.

The Focal Year refers to the year NAEP administration whose results are the focus of analysis. For example, if a user were interested in knowing how the results from the 2022 administration of NAEP compared to those of 2019 with the goal of drawing a conclusion about the 2022 results, the *focal year* would be 2022.

The Comparison Year refers to the year NAEP administration whose results are used for the purpose of comparison. For example, if a user were interested in knowing how the results from the 2022 administration of NAEP compared to those of 2019 with the goal of drawing a conclusion about the 2022 results, the *comparison year* would be 2019.

Where significance indicators are present, the difference in student performance between the focal and comparison year chosen is significant. The Council's dashboard includes NAEP data from all administrations of applicable grade and subject tests from 2003 through 2022.

The Comparison Year refers to the year NAEP administration whose results are used for the purpose of comparison. For example, if a user were interested in knowing how the results from the

2022 administration of NAEP compared to those of 2019 with the goal of drawing a conclusion about the 2022 results, the *comparison year* would be 2019.

Comparison Year Filter



Figure 7: The Comparison Year sliding button filter

The Comparison Year filter (**Figure 7**) appears as a sliding button selection object on *all dashboards* and allows users to choose one comparison year value from those included in the NAEP data visualizations. Selecting a value in this filter prompts the visualization to display significance indicators that compare the values from the selected focal year to those of the selected comparison year along with the between-year difference value in the selected outcome measure. If a user selects a comparison year

value that is the same as the focal year, differences will equal zero and no significance indicators will be displayed.

Focal Year Filter

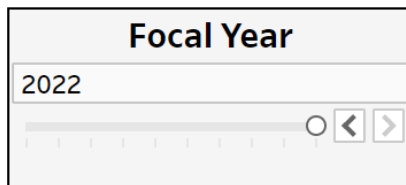


Figure 8: The Focal Year sliding button filter

The Focal Year filter (**Figure 8**) appears as a sliding button selection object on the [Achievement Level](#) and [Jurisdiction Comparison](#) dashboards that allows users to choose one focal year value from those included in the NAEP data visualizations. Selecting a value in this filter prompts the visualization to display the results of NAEP assessments that correspond with the selected focal year as well as the significance indicator.

Outcome Measure Selection

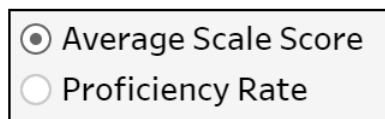


Figure 9: The Outcome Measure selection filter

As of the time of this guide's development, the Council's NAEP visualization tool includes two measures of student outcomes: *Average Scale Score*³ and *Proficiency Rate*⁴. The Outcome Measure selection filter (**Figure 9**) appears as a radio button on the [Jurisdiction Comparison](#), [Long Term Trends](#), and [Group Comparison](#) dashboards, and allows users to choose from the two measures of

student outcomes. Selecting a value in this filter prompts the visualization to display NAEP results in the form of the selected measure.

³ A score, derived from student responses to assessment items, that summarizes the overall level of performance attained by that student. While NAEP does not produce scale scores for individual students, NAEP does produce summary statistics describing scale scores for groups of students. NAEP subject area scales typically range from 0 to 500 (reading, mathematics, U.S. history, and geography) or from 0 to 300 (science, writing, and civics).

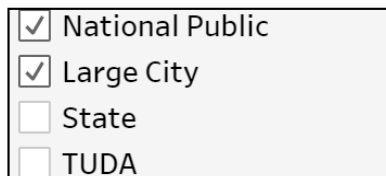
⁴ A value ranging from 0 to 100 indicating the percentage of students having NAEP scores that place them in either the [NAEP Proficient](#) or [NAEP Advanced achievement levels](#).

Classification and Jurisdiction Selection

The Council's NAEP visualization tools contain data for four types of classifications: *National Public*, *Large City*, *State*, and *TUDA Districts*. National Public and Large City are individual classifications. The State classification consists of 52 jurisdictions: the nation's 50 states, the District of Columbia, and the Department of Defense's Education Activities (DoDEA). Jurisdictions in the TUDA classification include the 28 urban districts that have participated in the [Trial Urban District Assessment](#) since 2003. Altogether, there are four classifications and 82 jurisdictions for which a user can see NAEP results.

Data for the *National Public* and *Large City* classifications are included in all dashboards, while the state and TUDA classifications have dashboards, and corresponding filter objects, dedicated to the jurisdictions that are included within each classification. For all TUDA dashboards, the corresponding state's data is also included for comparison.

Classification Selection



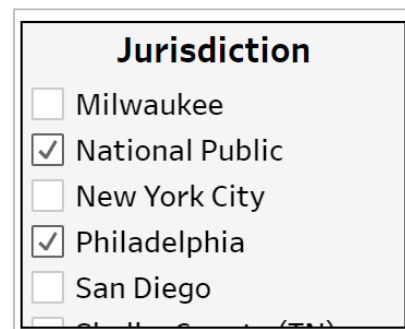
<input checked="" type="checkbox"/>	National Public
<input checked="" type="checkbox"/>	Large City
<input type="checkbox"/>	State
<input type="checkbox"/>	TUDA

Included in the *Group Comparison* dashboard, the Classification selection filter (**Figure 10**) is a multiple-choice checkbox list that allows users to filter the list of jurisdictions for which data is displayed in the line graph and legend. More than one value can be selected from the list of classifications included in the filter.

Figure 10: The Classification selection multiple-choice checkbox filter

Jurisdiction Selection

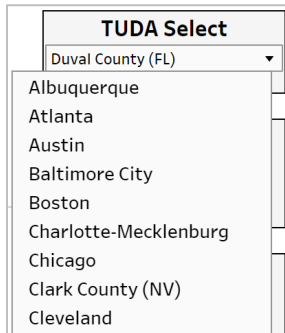
Included in the Group Comparison dashboard, the Jurisdiction selection filter (**Figure 11**) is a multiple-choice checkbox list that allows users to choose the jurisdictions to be included in the dashboard's line graph and legend. More than one value can be selected from the list of jurisdictions included in the filter.



Jurisdiction	
<input type="checkbox"/>	Milwaukee
<input checked="" type="checkbox"/>	National Public
<input type="checkbox"/>	New York City
<input checked="" type="checkbox"/>	Philadelphia
<input type="checkbox"/>	San Diego
<input type="checkbox"/>	Chicago (Ill.)

Figure 11: The Jurisdiction selection multiple-choice checkbox filter

TUDA Selection



The TUDA Selection filter (**Figure 12**) appears as a dropdown list on the *TUDA Long Term Trends* dashboard and allows users to choose one value from the list of TUDA jurisdictions that are included in the Council's NAEP data visualizations. Selecting a value in this filter prompts the visualization to display NAEP results that pertain to the selected TUDA district and the state in which that jurisdiction is located for comparison.

Figure 12: The TUDA selection dropdown list filter

State Select

The State Selection filter (**Figure 13**) appears as a dropdown list on the *State Long Term Trends* dashboard and allows users to choose one value from the list of state jurisdictions that are included in the NAEP data visualizations. Selecting a value in this filter prompts the visualization to display NAEP results that pertain to the selected state.

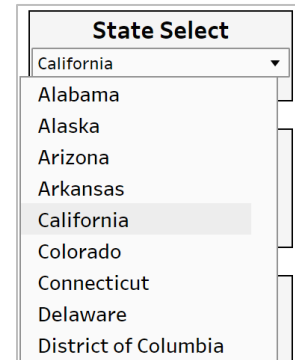


Figure 13: The State selection dropdown filter

Full Screen View Mode

Dashboard users can toggle between regular and full screen views of any visualization by clicking the full screen icon located in the lower-lefthand corner of all dashboards (**Figure 14**). Full screen mode is recommended for viewing the Council's NAEP dashboards.

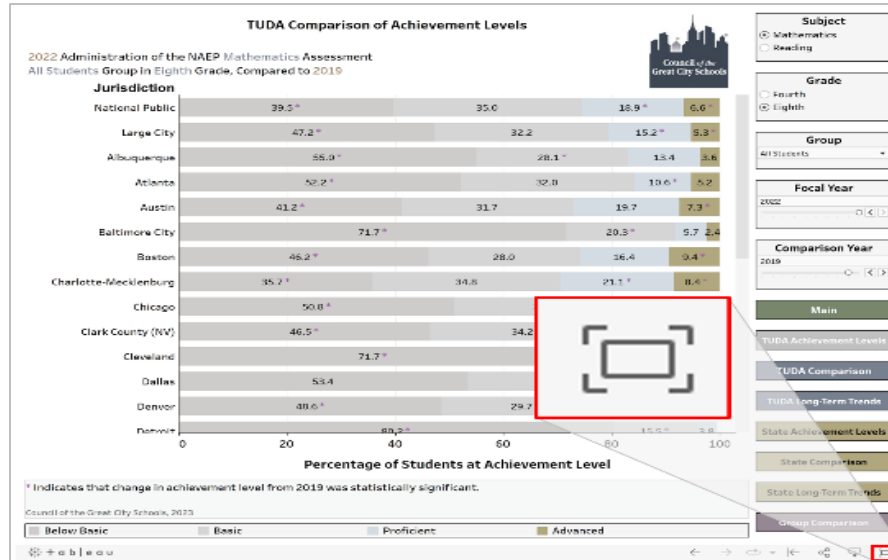


Figure 14: The full screen icon

Visualization Reset

Dashboard users looking to reset visualizations, returning all selected filters to their default values, can do so by clicking the visualization reset icon in the lower-lefthand corner of the dashboard (**Figure 15**).

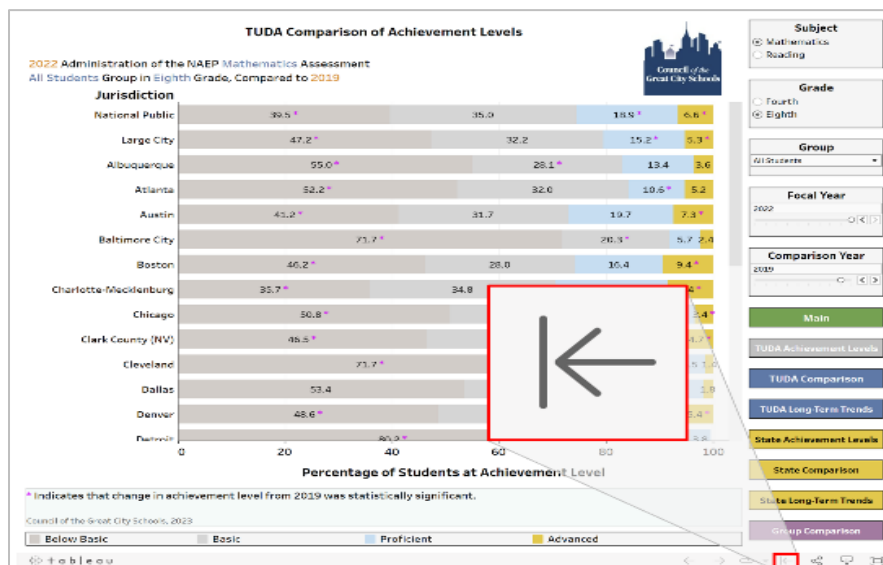


Figure 15: Visualization reset icon

NAEP Achievement Level Dashboards

The NAEP Achievement Level dashboards, which display the percentage of students scoring within each of the four (4) [NAEP achievement levels](#)⁵ by jurisdiction, exist in two versions: *TUDA* and *State*. The TUDA version of the dashboard includes data for the TUDA district, National Public, and Large City classifications—up to 30 jurisdictions. The State version of the dashboard includes data for the National Public, Large City, 50 states, District of Columbia, and Department of Defense Education jurisdictions—54 total. The visualization itself appears as a horizontal stacked bar graph.

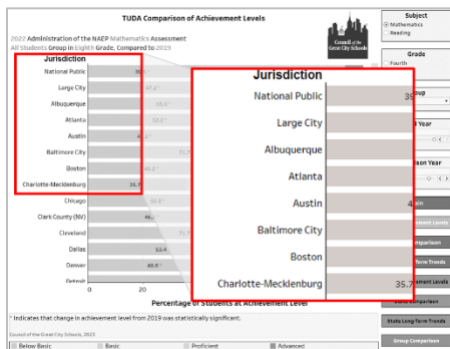
The NAEP achievement level dashboards were designed for users interested in seeing how the student scores are distributed across achievement levels, seeking insight into how the results for selected focal year differ from another year of interest (comparison year), and if the change in the percentage of students in each achievement level is significant, with the inclusion of significant test indicators.

Dashboard Components

Available Filters

The NAEP Achievement Level dashboards contain five (5) main filters that determine the data that get displayed in the dashboard: [Subject selection](#), [Grade Level selection](#), [Student Group selection](#), [Focal Year selection](#), and [Comparison Year selection](#). Each filter is discussed in the [Key Functions](#) section of this guide.

Jurisdiction Labels



On the left end of the bar graph in the dashboard (**Figure 16**) is a list of jurisdictions having reportable NAEP results from the selected focal year, subject, student group, and grade level. The jurisdictions included in the graph depend on the version of the graph the user has chosen to view (*TUDA Achievement Levels* or *State Achievement Levels*).

Figure 16: Jurisdiction labels appear at the left end of its corresponding stacked bar. The labels can also be used for highlighting data bars in the graph.

⁵ The levels, [NAEP Basic](#) (Basic), [NAEP Proficient](#) (Proficient), and [NAEP Advanced](#) (Advanced), measure what students should know and be able to do at each grade assessed. The *Below NAEP Basic* (Below Basic) level includes students that do not demonstrate at least partial mastery of prerequisite knowledge and skills that are fundamental for performance at the NAEP Proficient level.

In addition to serving as the label indicating the jurisdiction to which the adjacent data bars belong, users can click jurisdiction names to highlight data for jurisdictions of interest (**Figure 17**). Holding the **Ctrl** key (the **command** key for Mac users) on the keyboard allows users to select and highlight multiple jurisdictions. Clicking the name of a highlighted jurisdiction or the white space below the jurisdiction list deselects the highlighted jurisdiction.

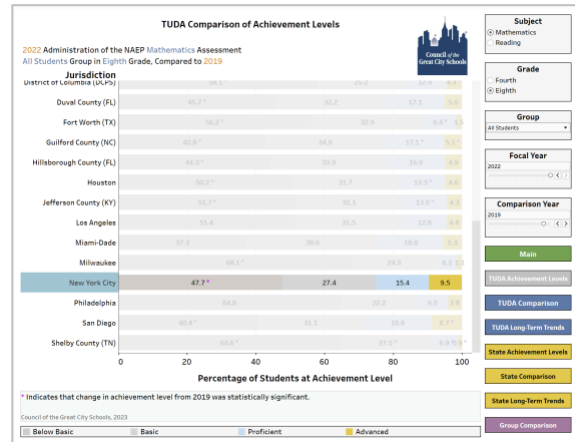


Figure 17: Clicking the name of a jurisdiction highlights the data for the selected jurisdiction.

Legend

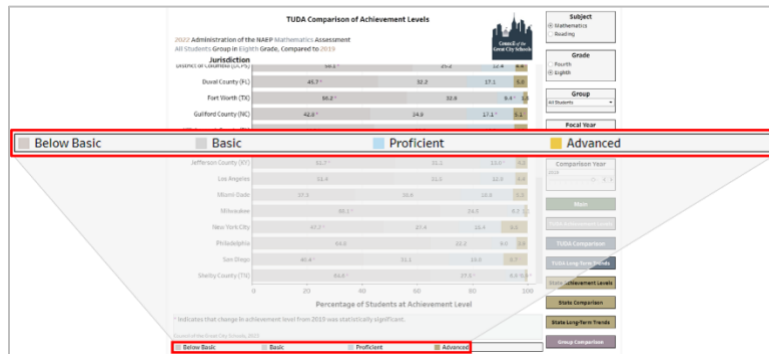


Figure 18: The legend in the NAEP Achievement Level dashboards.

There are four (4) colors in the graph that represent each of the four achievement levels (Below Basic, Basic, Proficient, Advanced) in the NAEP result data. The legend in the achievement level dashboard (**Figure 18**) serves as a key for users so that they may be able to identify the colors that correspond to their respective color bar. Users can also interact with the legend to highlight bars in the graph by clicking on a color in the legend.

Data Bars

The horizontal bars (**Figure 19**) represent the NAEP result data and are broken up into three to four colors. Each color in the horizontal bar represents an achievement level group and contains a value indicating the percentage of students at each NAEP achievement level for the selected **focal year**. The significance asterisks that appear in the bar graphs indicate that the difference between displayed value for the focal year and the value for the selected **comparison year** was significant.

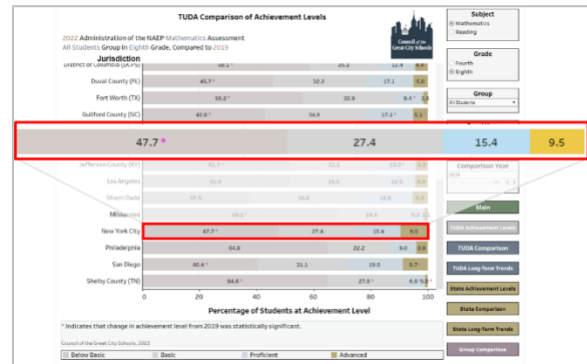


Figure 19: Horizontal data bar in the NAEP Achievement Level dashboard.

Tooltips

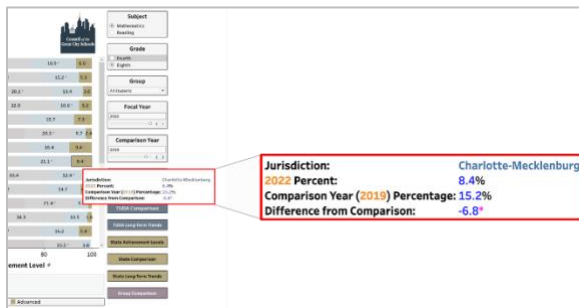


Figure 20: Tooltip pop-up that appears when the user hovers their pointer over a bar in the graph.

Hovering over any of the bars in the graph shows a tooltip pop-up (**Figure 20**) containing data points relevant to the corresponding achievement level group. The tooltips include outcome measure values for both the focal and comparison values, the arithmetic difference between the two values (focal year value minus the comparison year value), and an indicator of significance (if applicable).

Jurisdiction Comparison Dashboards

The Jurisdiction Comparison dashboards, which display the average scale score or the percentage of students scoring at or above the [NAEP Proficient](#) achievement level by jurisdiction in the selected testing year, exist in two versions: *TUDA* and *State*. The TUDA version of the dashboard includes data for the TUDA district, National Public, and Large City jurisdictions—up to 30 jurisdictions. The State version of the dashboard includes data for the National Public, Large City, 50 states, District of Columbia, and Department of Defense Education jurisdictions—54 total. The visualization itself appears as a horizontal bar graph.

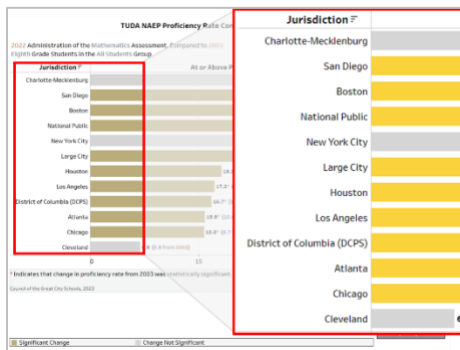
The Jurisdiction Comparison dashboards were designed for users interested in seeing how proficiency rates or average scale score for the selected testing year compare across TUDA district, National Public, or Large City jurisdictions. These dashboards provide insight into how the results for selected focal year differ from another year of interest (comparison year), and if the change in the percentage of students in each achievement level is significant.

Dashboard Components

Available Filters

The Jurisdiction Comparison dashboards contain six (6) main filters that determine the data that get displayed in the dashboard: [Outcome Measure selection](#), [Subject selection](#), [Grade Level selection](#), [Student Group selection](#), [Focal Year selection](#), and [Comparison Year selection](#). Each filter is discussed in the [Key Functions](#) section of this guide.

Jurisdiction Labels



On the left end of the bar graph in the dashboard (**Figure 21**) is a list of jurisdictions having reportable NAEP results from the selected focal year, subject, student group, and grade level. The jurisdictions included in the graph depend on the version of the graph the user has chosen to view (*TUDA Achievement Levels* or *State Achievement Levels*).

Figure 21: Jurisdiction labels appear at the left end of its corresponding stacked bar. The labels can also be used for highlighting data bars in the graph.

Users can click jurisdiction names to highlight data for jurisdictions of interest (**Figure 22**). Holding the **Ctrl** key (the **command** key for Mac users) on the keyboard allows users to select and highlight multiple jurisdictions, and clicking the name of a highlighted jurisdiction or the white space below the jurisdiction list deselects the highlighted jurisdiction.

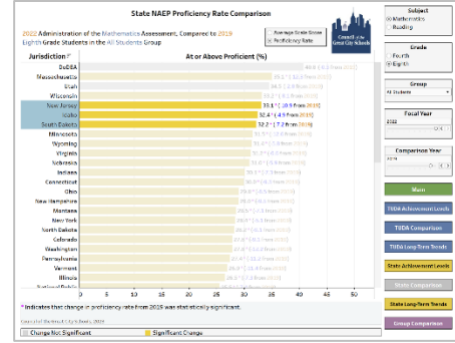


Figure 22: Selecting jurisdictions from the labels in the Jurisdiction Comparison dashboards.

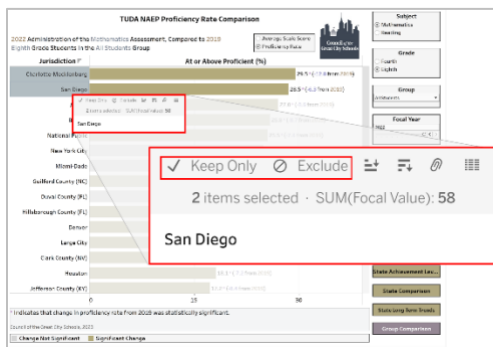


Figure 23: Filtering jurisdictions using the pop-up in the Jurisdiction Comparison dashboard.

Hovering over a selected jurisdiction shows a pop-up tooltip (**Figure 23**) that also allows users to filter on the selected values, either by choosing the *keep only* option (which removes all other unselected jurisdictions) or by choosing the *exclude* option (which removes the selected jurisdictions and leaves the unselected jurisdictions). This can be undone by clicking the [visualization reset icon](#).

Legend

The legend in the jurisdiction comparison dashboard (**Figure 24**) serves as a key for users so that they may be able to identify the colors that correspond to their respective color bar. There are two (2) colors in the graph that indicate the results of significance tests comparing outcomes from NAEP administration in the focal year to those of the comparison year (**Significant** and **Not Significant**) in the NAEP result data. Users can also interact with the legend to highlight bars in the graph by clicking on an item in the legend.

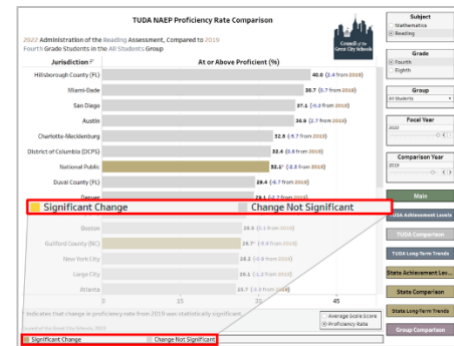


Figure 24: Legend in the Jurisdiction Comparison dashboard

Hovering over a selected item shows a pop-up tooltip that also allows users to filter on the selected bar color, either by choosing the *keep only* option (which removes the other unselected color) or by choosing the *exclude* option (which removes the selected color and leaves the unselected color). This can be undone by clicking the [visualization reset icon](#).

Data Bars

The horizontal bars (**Figure 25**) represent either the proficiency rate or average scale score for the named jurisdiction in the selected focal year, with a data label that shows:

1. A value representing the average scale score/proficiency rate of students in the jurisdiction,
2. an asterisk indicating if the focal year outcome differs significantly from that of the comparison year, and
3. In parentheses, the arithmetic difference between the focal year outcome value and the comparison year value.

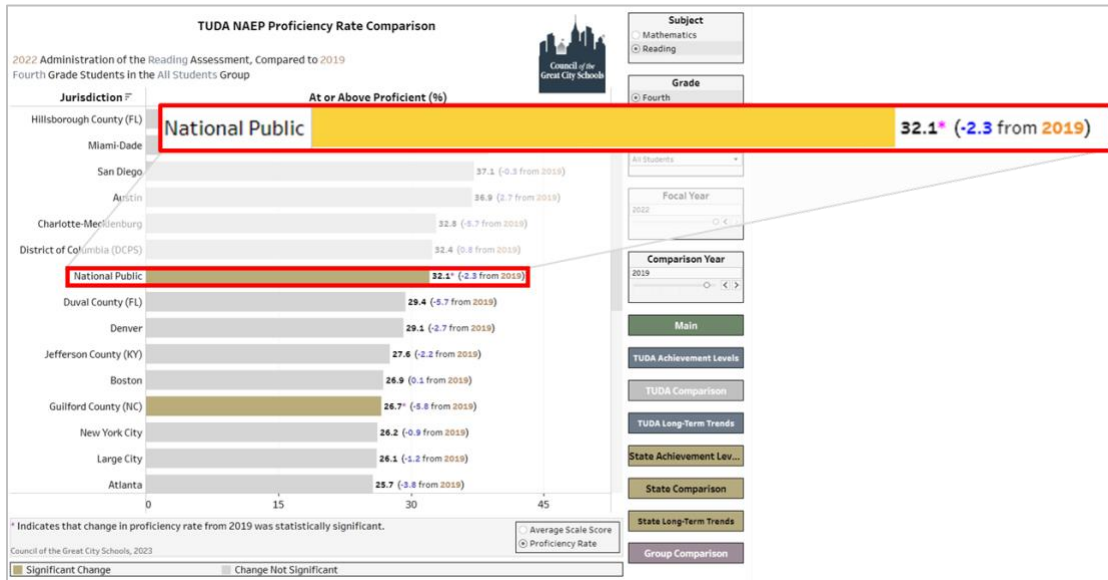


Figure 25: Data bar from the Jurisdiction Comparison dashboard

Tooltips

Hovering over any of the bars in the graph shows a tooltip pop-up (**Figure 26**) containing data points relevant to the corresponding jurisdiction. The pop-up includes outcome measure values for both the focal and comparison values, the arithmetic difference between the two values (focal year value minus the comparison year value), and an indicator of significance (if applicable).

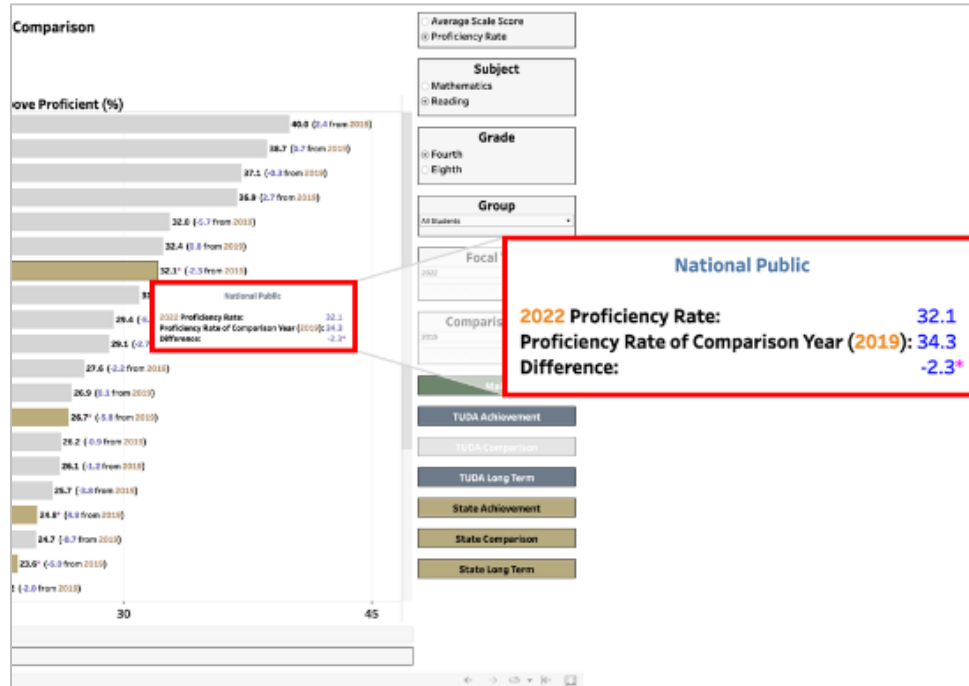


Figure 26: Tooltip pop-up that appears when the user hovers their pointer over a bar in the graph.

Long Term Trends Dashboards

The Long Term Trends dashboards, which display the average scale score or the percentage of students scoring at or above the [NAEP Proficient](#) achievement level by jurisdiction over time, exist in two versions: *TUDA* and *State*. The TUDA version of the dashboard includes data for the selected TUDA district, the state in which the selected TUDA district resides, the National Public, and Large City jurisdictions. The State version of the dashboard includes data for the National Public, Large City, and the selected state jurisdictions. The visualization itself appears as a line graph.

The Long Term Trends dashboards were designed for users interested in seeing a graphic representation of how proficiency rates or average scale score have changed over time in a selected TUDA district or state, and to see the changes alongside those of the National Public and Large City jurisdictions.

Dashboard Components

Available Filters

The Long Term Trends dashboards contain six (6) main filters that determine the data that get displayed in the dashboard: [Outcome Measure selection](#), [Jurisdiction Selection](#) (which is dependent upon the version of the dashboard being viewed), [Subject selection](#), [Grade Level selection](#), [Student Group selection](#), and [Comparison Year selection](#). Each filter is discussed in the [Key Functions](#) section of this guide.

Legend

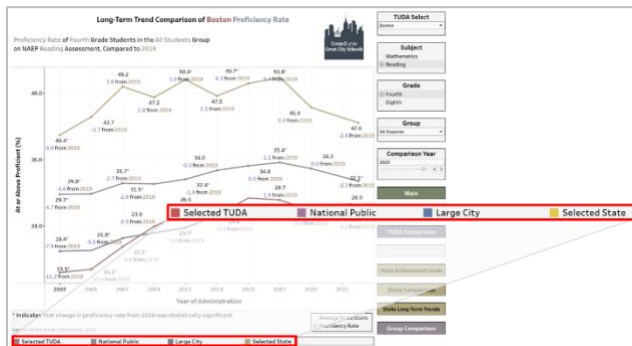


Figure 27: The legend in the Long Term Trends dashboard

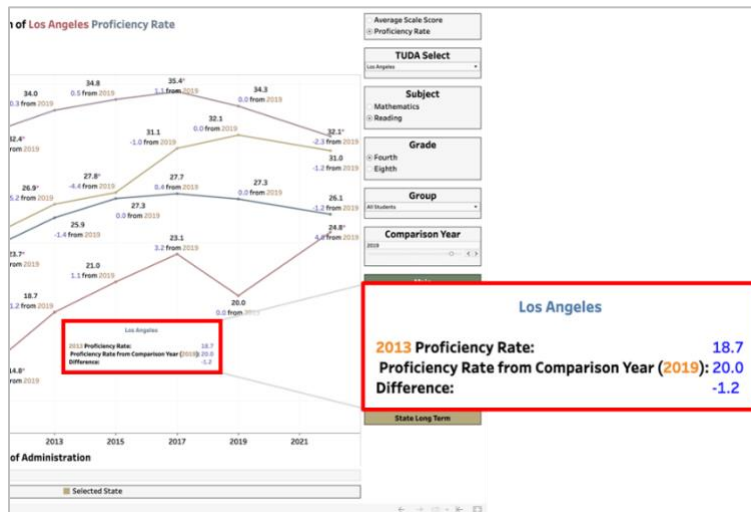
The legend in the Long Term Trends dashboard (**Figure 27**) serves as a key for users to identify the colors that correspond to their respective jurisdiction. Users can also interact with the legend to highlight lines in the graph by clicking on an item in the legend.

Graph Lines

The lines on the graph represent the course of changes in either the proficiency rate or average scale score for the named jurisdiction over time, with a data label that shows:

1. A value representing the average scale score/proficiency rate of students in the jurisdiction,
2. an asterisk indicating if the focal year outcome differs significantly from that of the comparison year, and
3. on the second line of the label, the arithmetic difference between the focal year outcome value and the comparison year value.

Tooltips



Hovering over any of the lines in the graph shows a tooltip pop-up (**Figure 28**) containing data points relevant to the corresponding jurisdiction. The pop-up includes outcome measure values for both the focal and comparison years, the arithmetic difference between the two values (focal year value minus the comparison year value), and an indicator of significance (if applicable).

Figure 28: Tooltip pop-up that appears when the user hovers their pointer over a line in the graph.

Group Comparison Dashboards

The Group Comparisons dashboard displays the average scale score or the percentage of students scoring at or above the [NAEP Proficient](#) achievement level for selected jurisdictions and selected student groups, over time. The visualization itself appears as a line graph.

The Group Comparison dashboard was designed for users interested in seeing a graphic representation of how proficiency rates or average scale score have changed over time in a selected jurisdiction among specified groups of students, and to visually compare those changes.

Dashboard Components

Available Filters

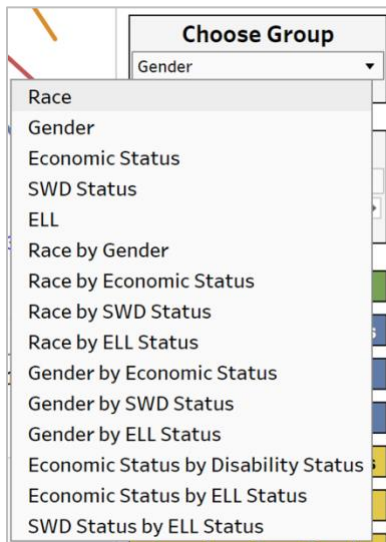


Figure 29: The alternate student group selection filter

The Group Comparisons dashboard contains seven (7) main filters that determine the data that get displayed in the dashboard: [Outcome Measure selection](#), [Classification selection](#), [Jurisdiction selection](#), [Subject selection](#), [Grade Level selection](#), and [Comparison Year selection](#). These filters are discussed in the [Key Functions](#) section of this guide. The dashboard also includes an alternate version of the Student Group selection filter (**Figure 29**) so that multiple student groups can be displayed in the same visualization.

The alternate student group filter is a dropdown list containing 15 student group categories. Selecting a value from the list prompts the visualization to show data pertaining to students in the groups included in the selected category.

Legend

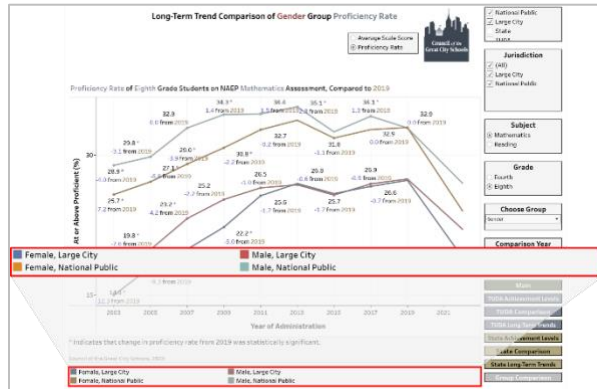


Figure 30: The legend in the Group Comparison dashboard

The legend in the group comparison dashboard (**Figure 30**) serves as a key for users to identify the colors that correspond to their respective jurisdiction and student group combination. Each line is assigned a color in the graphic. Users can also interact with the legend to highlight lines in the graph by clicking on an item in the legend.

Hovering over a selected item in the legend shows a pop-up tooltip that allows users to filter on the selected line color, either by choosing the *keep only* option (which removes unselected colors) or by choosing the *exclude* option (which removes the selected colors and leaves the unselected colors). This can be undone by clicking the [visualization reset icon](#).

Graph Lines

The lines on the graph represent the course of changes in either the proficiency rate or average scale score for the selected jurisdiction and student group combinations over time, with a data label that shows:

1. A value representing the average scale score/proficiency rate of students in the jurisdiction,
2. an asterisk indicating if the focal year outcome differs significantly from that of the comparison year, and
3. on the second line of the label, the arithmetic difference between the focal year outcome value and the comparison year value.

Tooltip

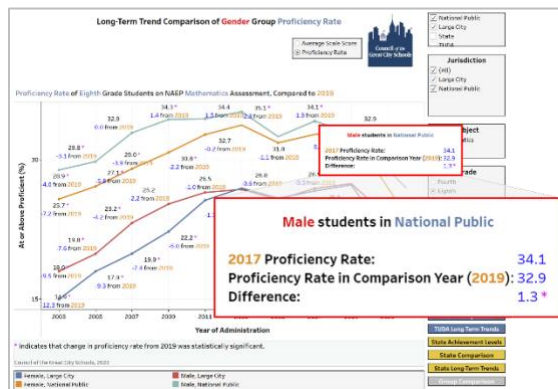


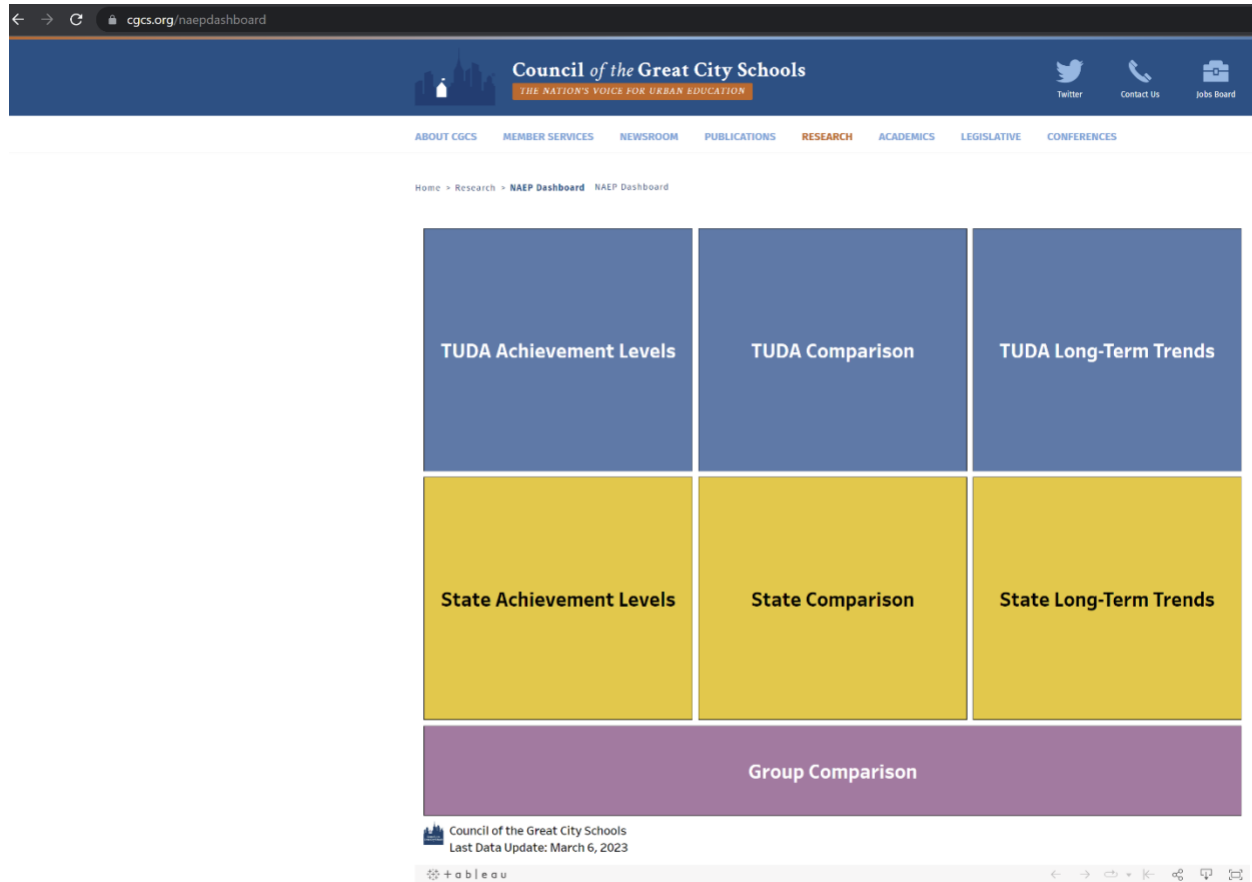
Figure 31: Tooltip pop-up that appears when the user hovers their pointer over a line in the graph.

Hovering over any of the lines in the graph shows a tooltip pop-up (**Figure 31**) containing data points relevant to the corresponding jurisdiction and student group combination. The pop-up includes outcome measure values for both the focal year and comparison year, the arithmetic difference between the two values (focal year value minus the comparison year value), and an indicator of significance (if applicable).

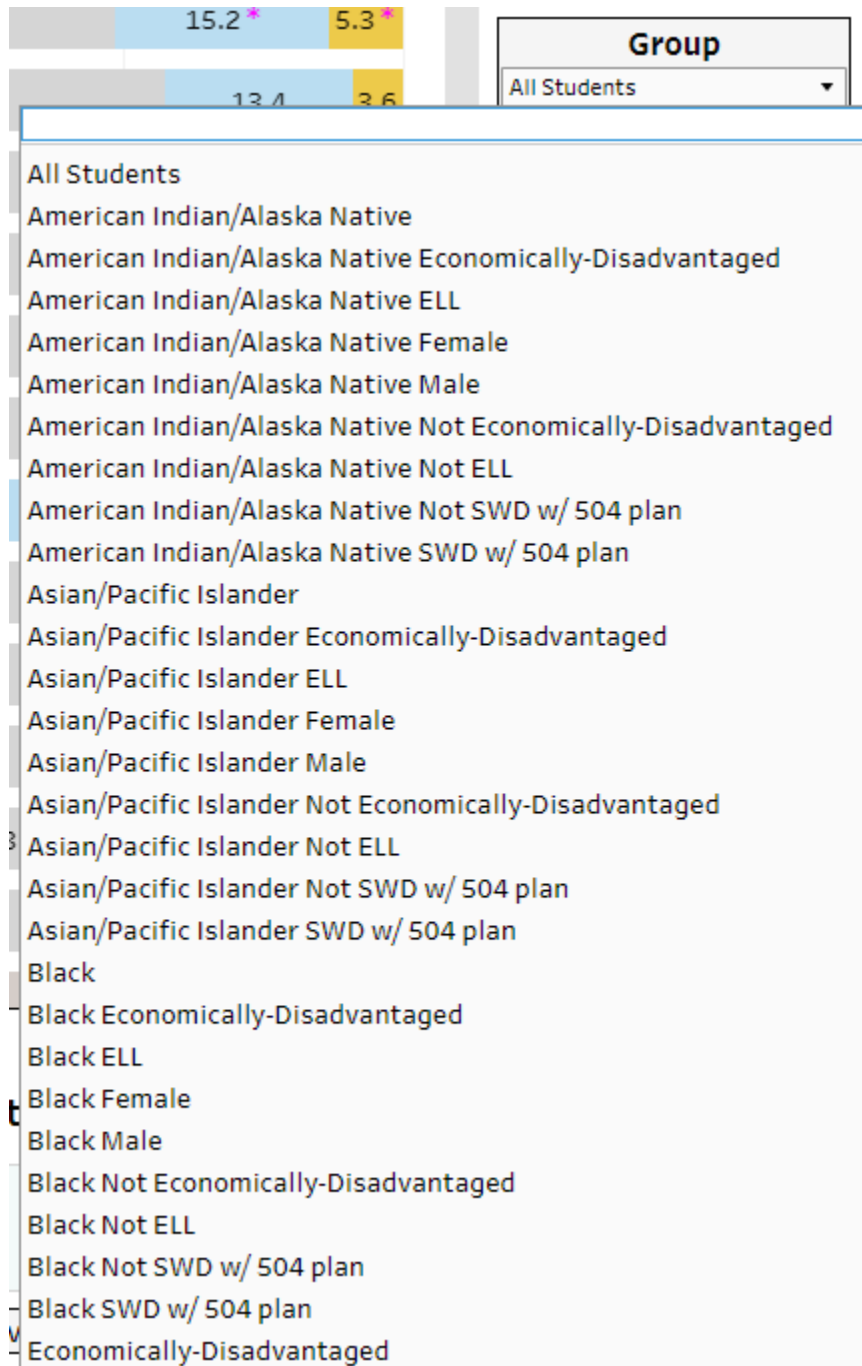
Appendix: Technical Guide Figures

Appendix Technical Guide Figures

Figure 1: Dashboard on the CGCS Website



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Figure 5: The Student Group Selection Dropdown Filter

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Figure 6: The Student Group Selection Filter Search Function

28.5 * (-6.3 from 2019)

Group

All Students

Economically-Dis

- American Indian/Alaska Native Economically-Disadvantaged
- American Indian/Alaska Native Not Economically-Disadvantaged
- Asian/Pacific Islander Economically-Disadvantaged
- Asian/Pacific Islander Not Economically-Disadvantaged
- Black Economically-Disadvantaged
- Black Not Economically-Disadvantaged
- Economically-Disadvantaged

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Figure 12: TUDA Selection Filter

TUDA Select

Duval County (FL)

- Albuquerque
- Atlanta
- Austin
- Baltimore City
- Boston
- Charlotte-Mecklenburg
- Chicago
- Clark County (NV)
- Cleveland

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Figure 13: State Selection Filter

State Select

California ▼

Alabama

Alaska

Arizona

Arkansas

California

Colorado

Connecticut

Delaware

District of Columbia

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Figure 14: Full Screen Icon

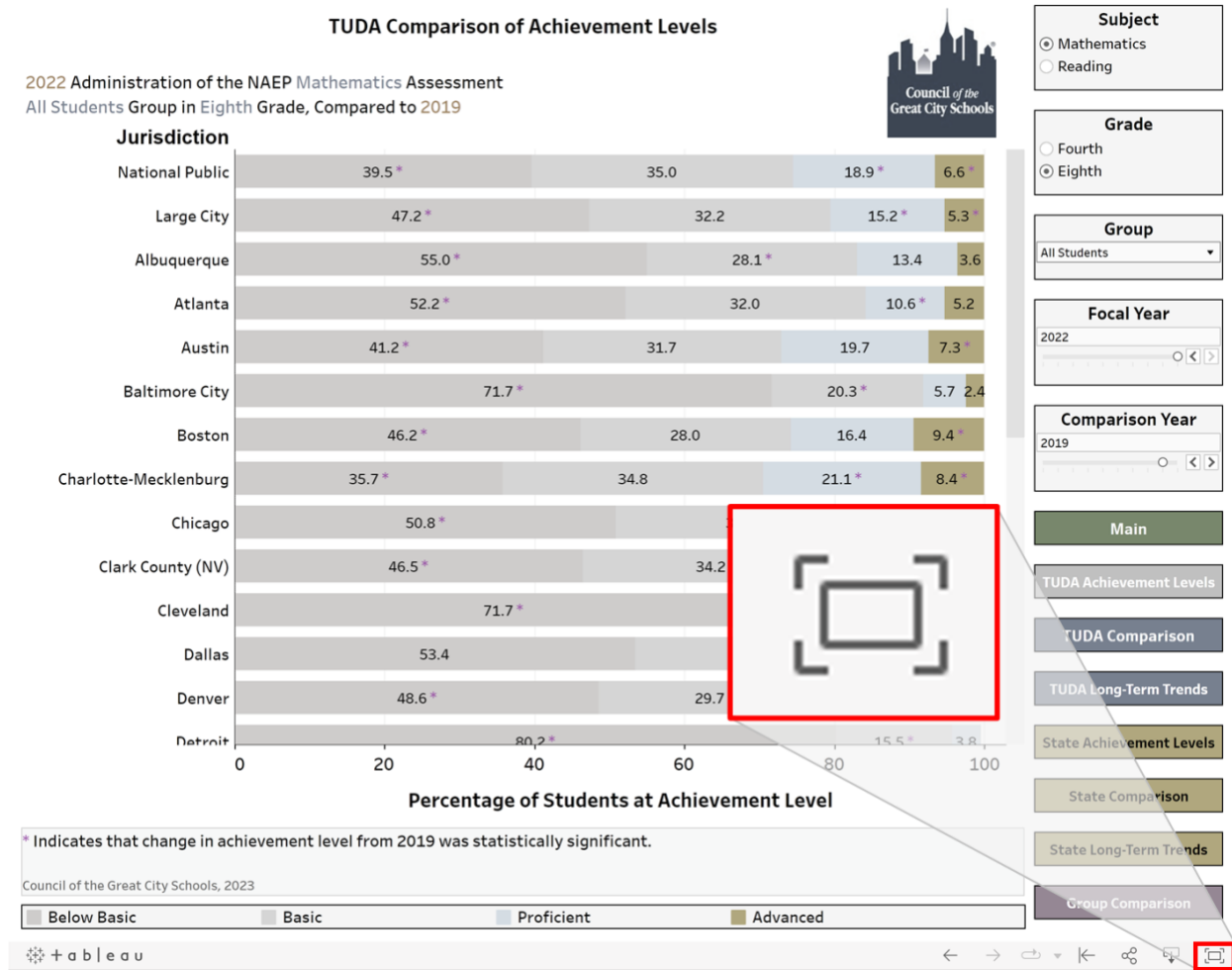
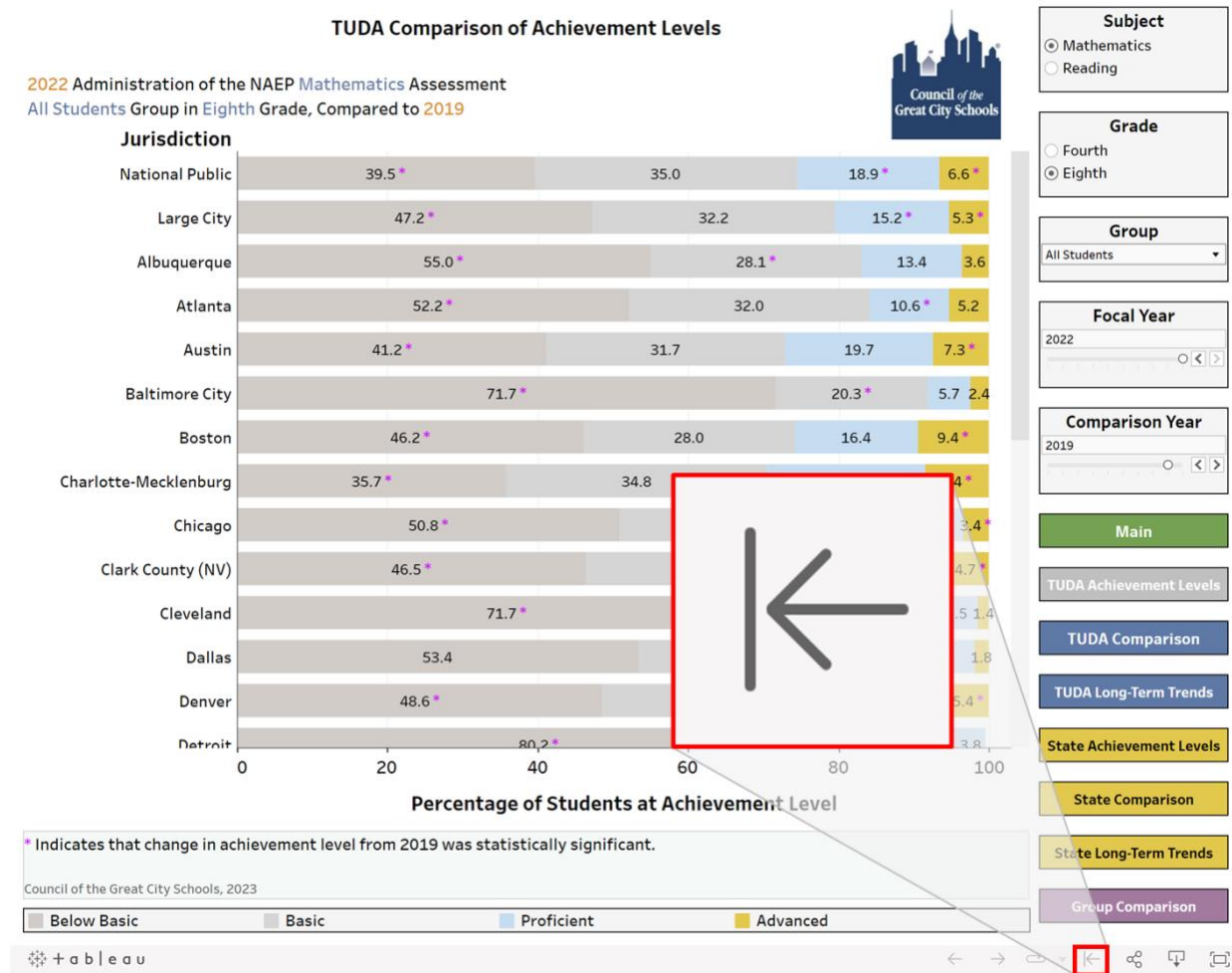
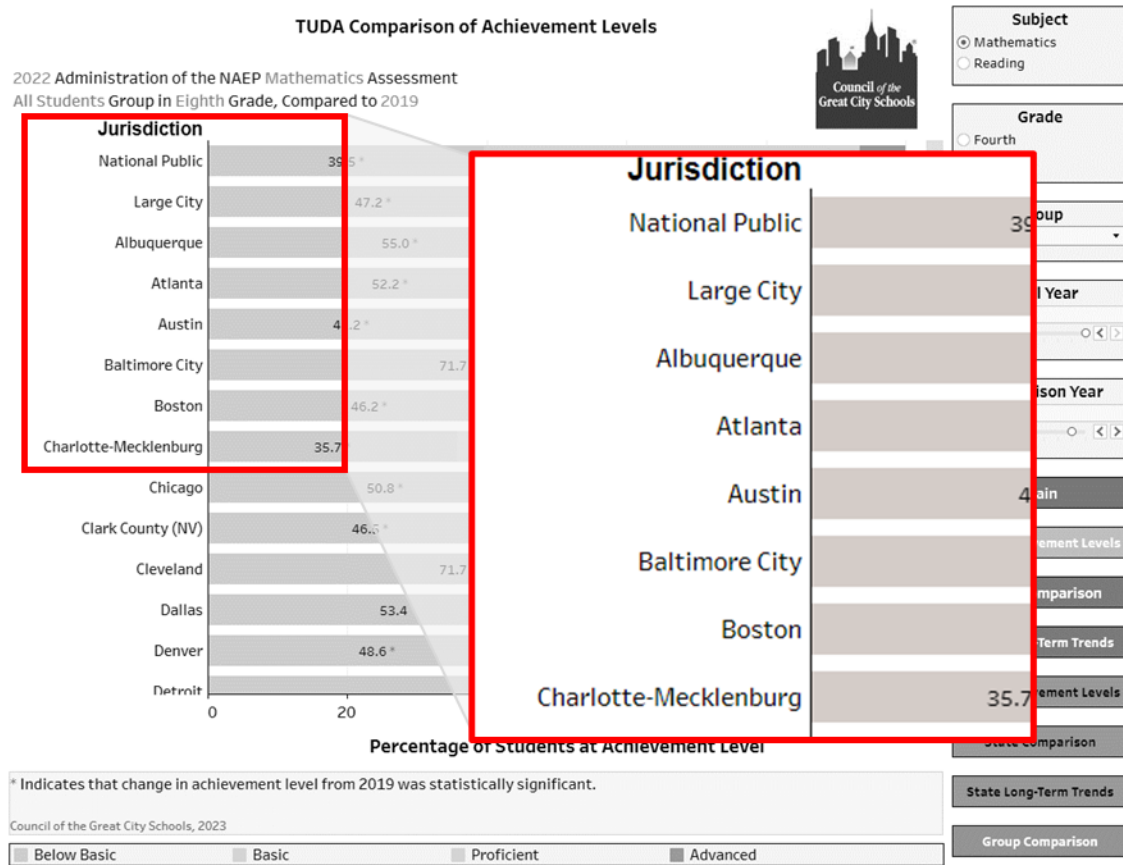

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Figure 15: Visualization Reset Icon



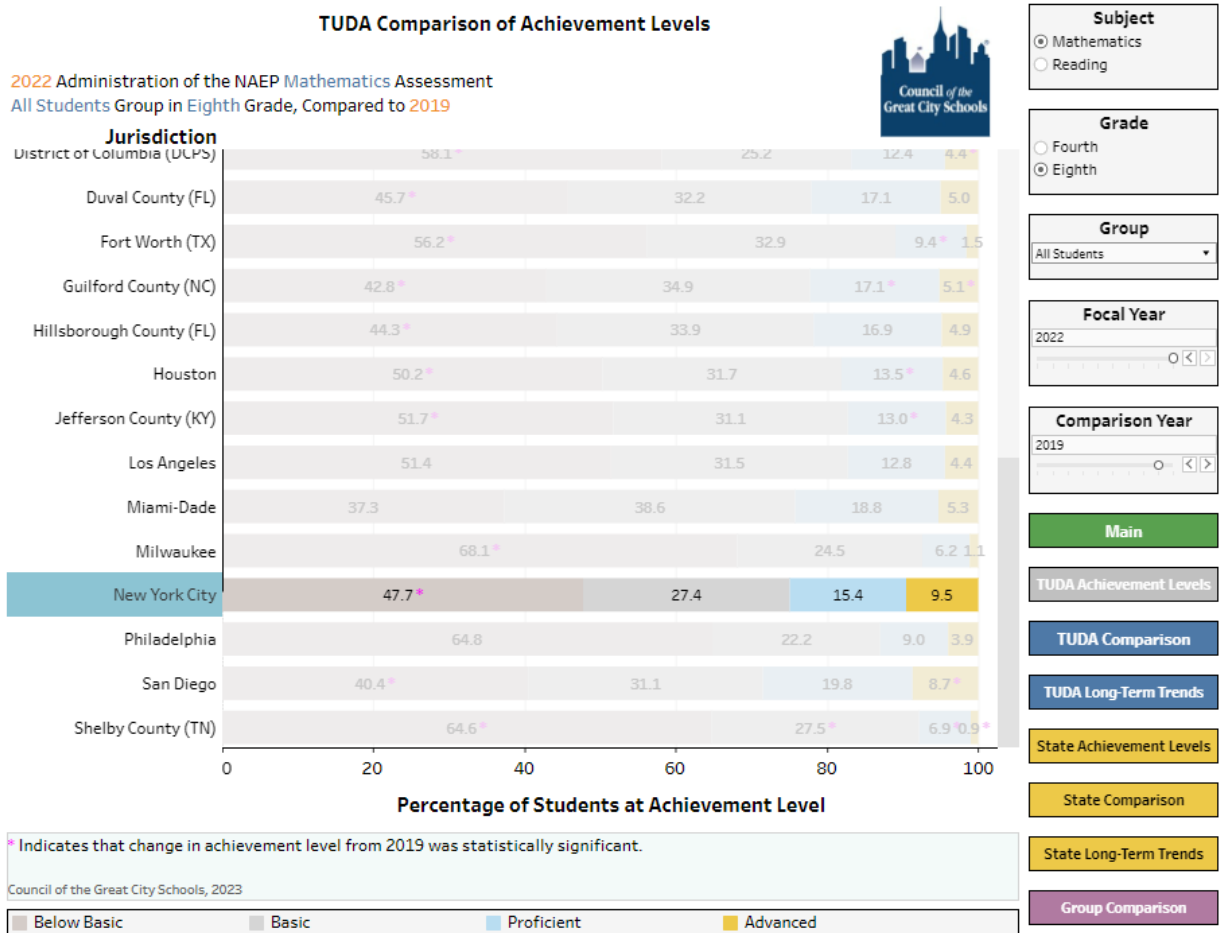
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Figure 16: NAEP Achievement Level Dashboard Jurisdiction Labels

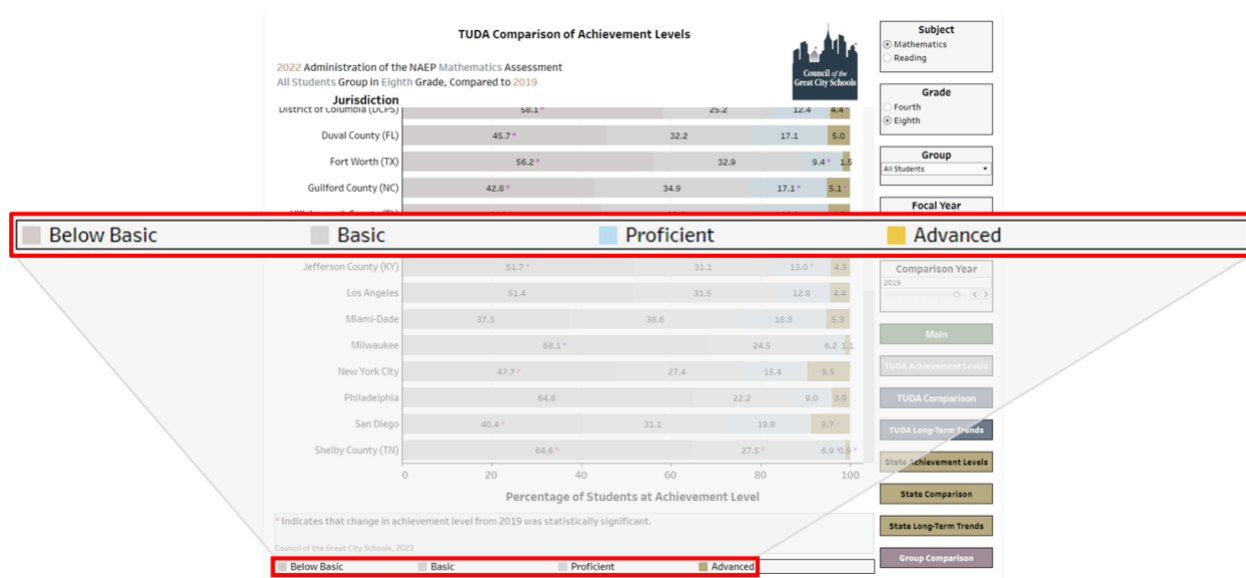


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Figure 17: Highlighting Jurisdictions, Achievement Dashboard



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Figure 18: Achievement Level Dashboard Legend

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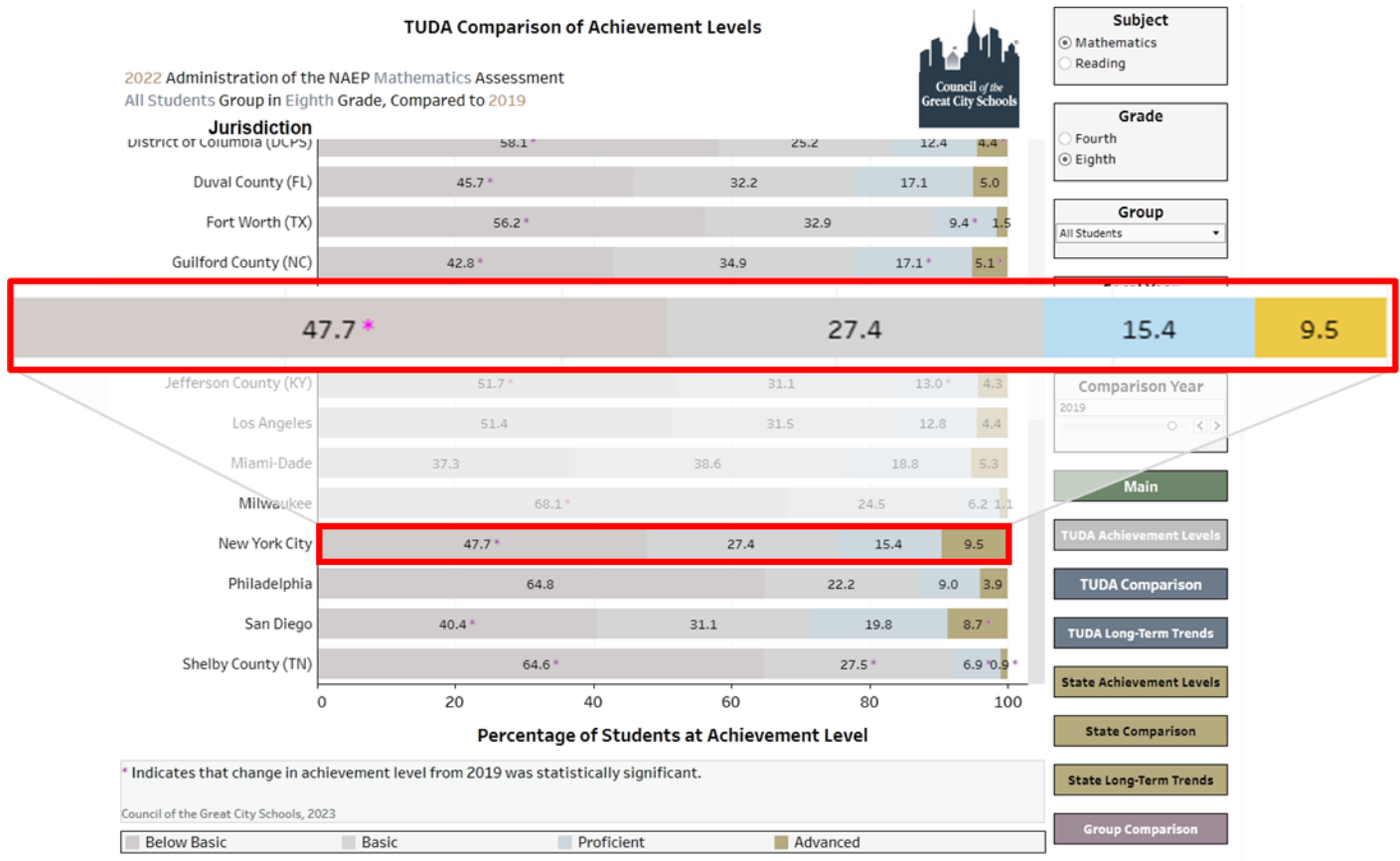
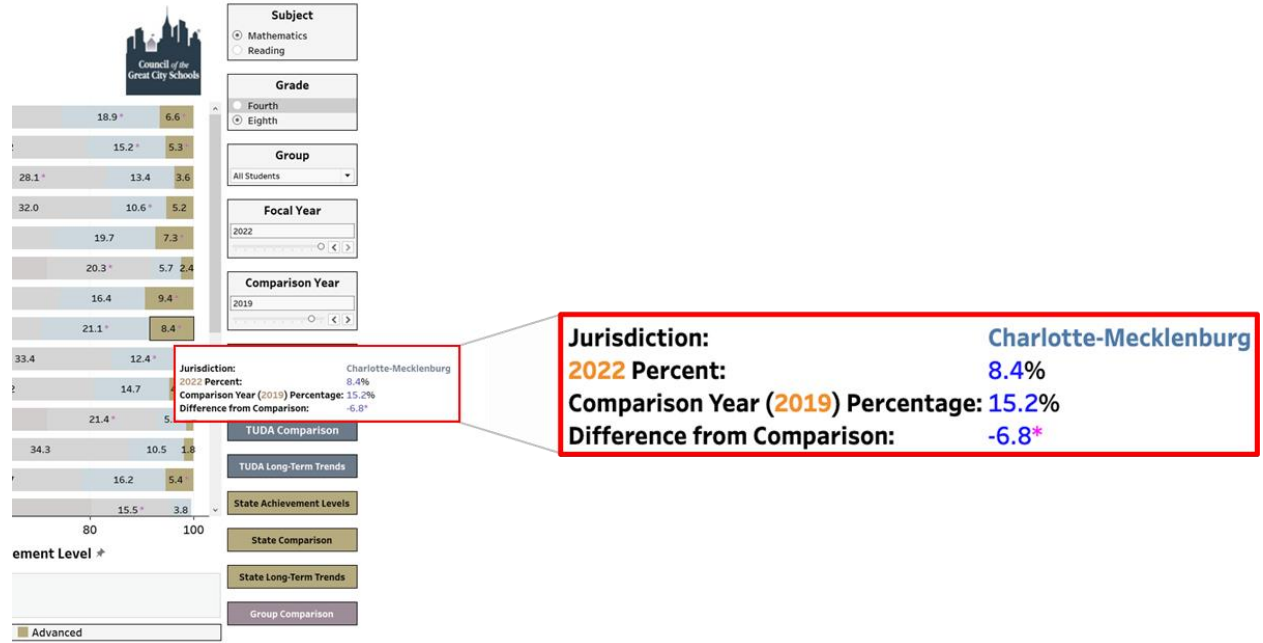
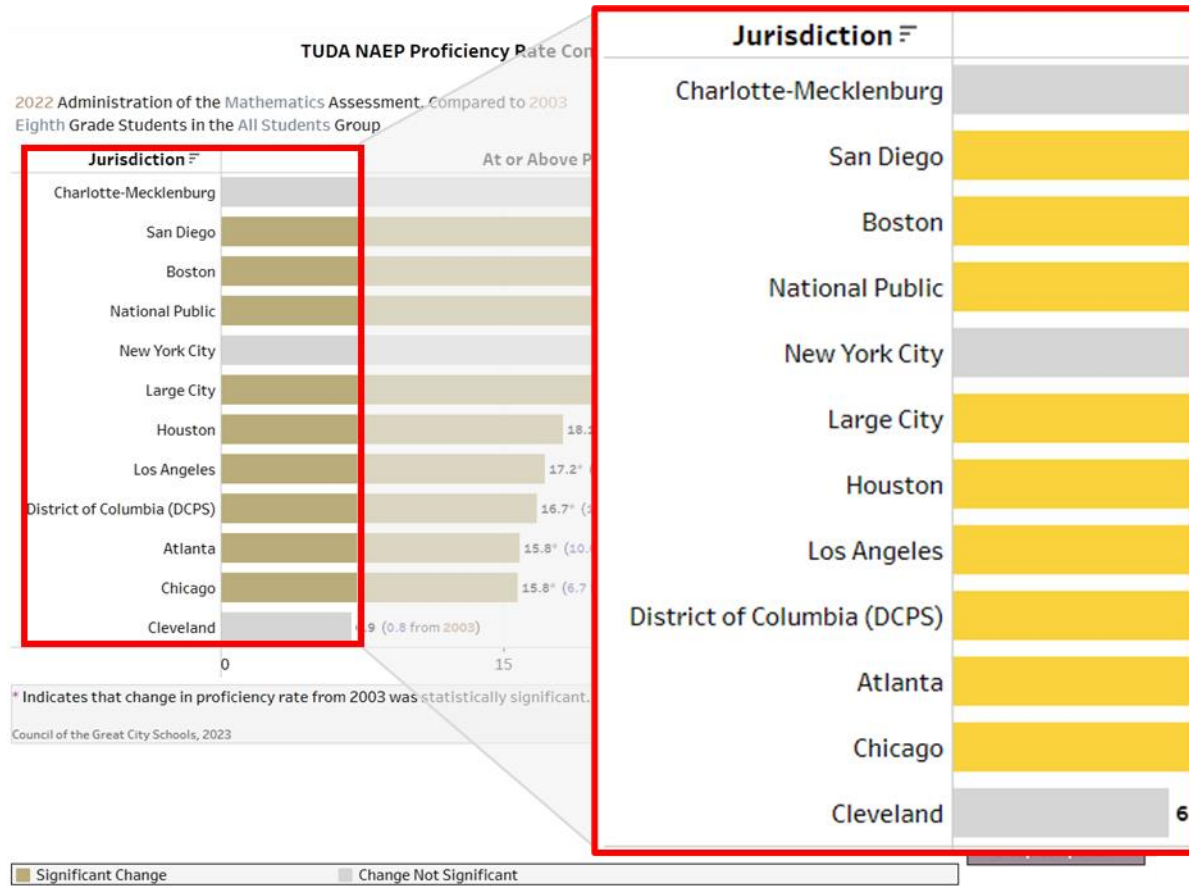
Figure 19: Horizontal Data Bar in the NAEP Achievement Level Dashboard
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Figure 20: Tooltip, Achievement Level Dashboard



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Figure 21: Jurisdiction Labels, Comparison Dashboards



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Figure 22: Highlighting Data, Comparison Dashboard

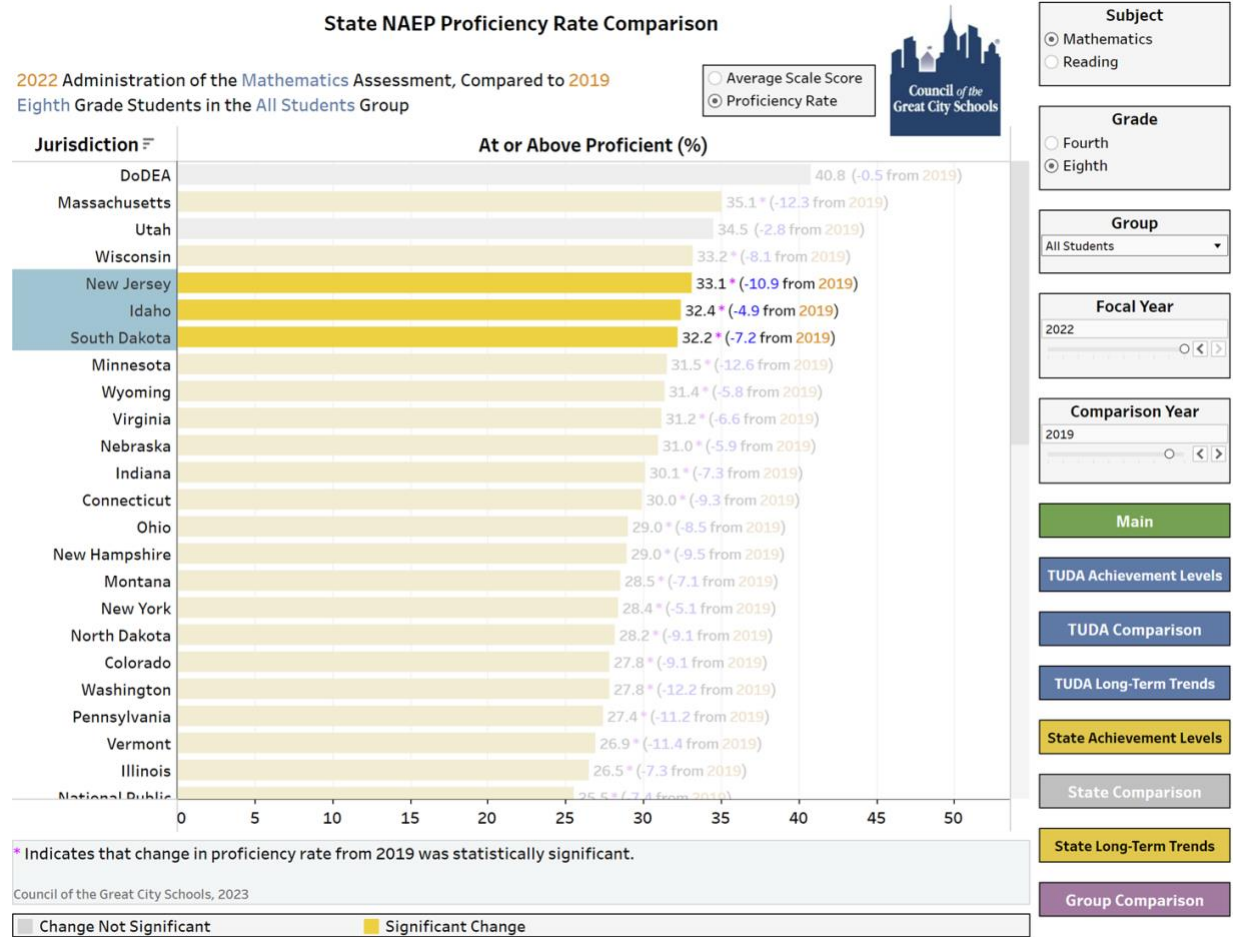

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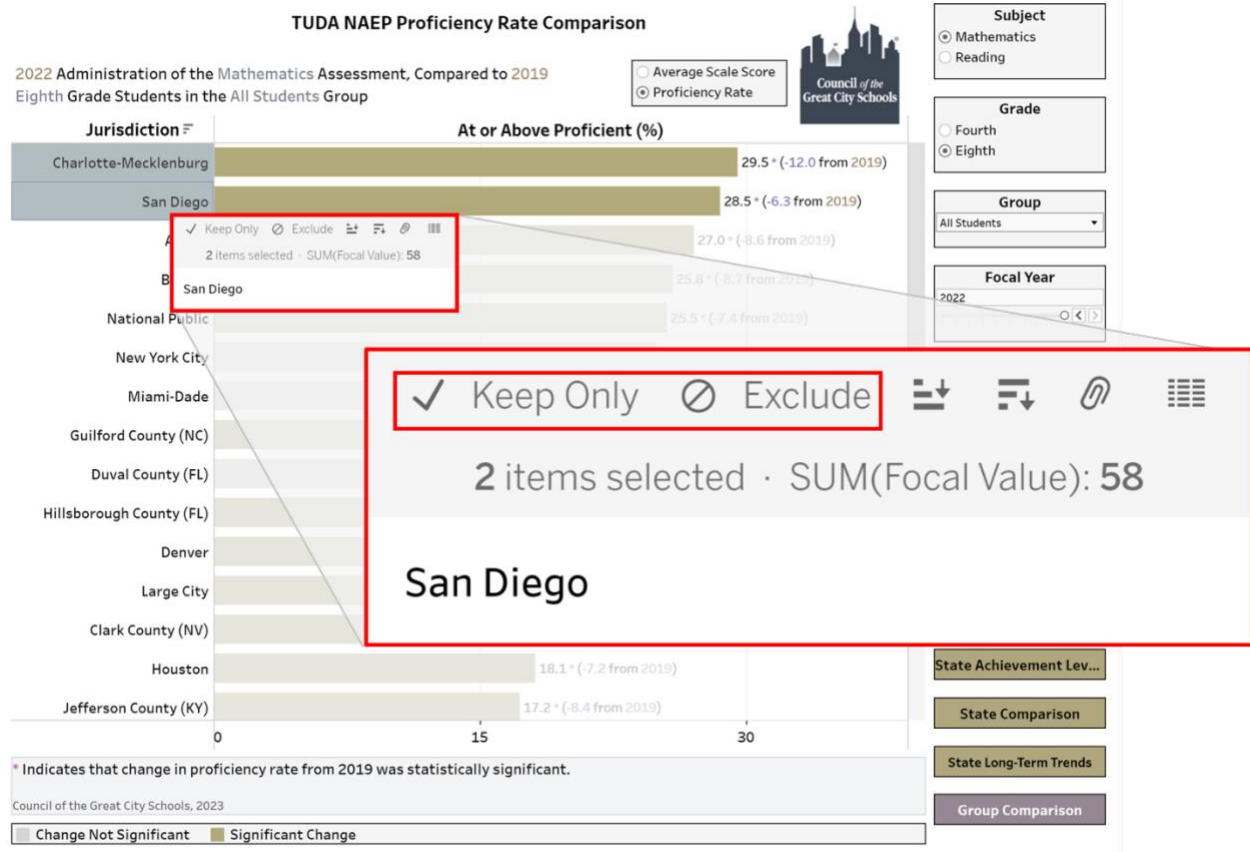
Figure 23: Advanced Filtering, Comparison Dashboard
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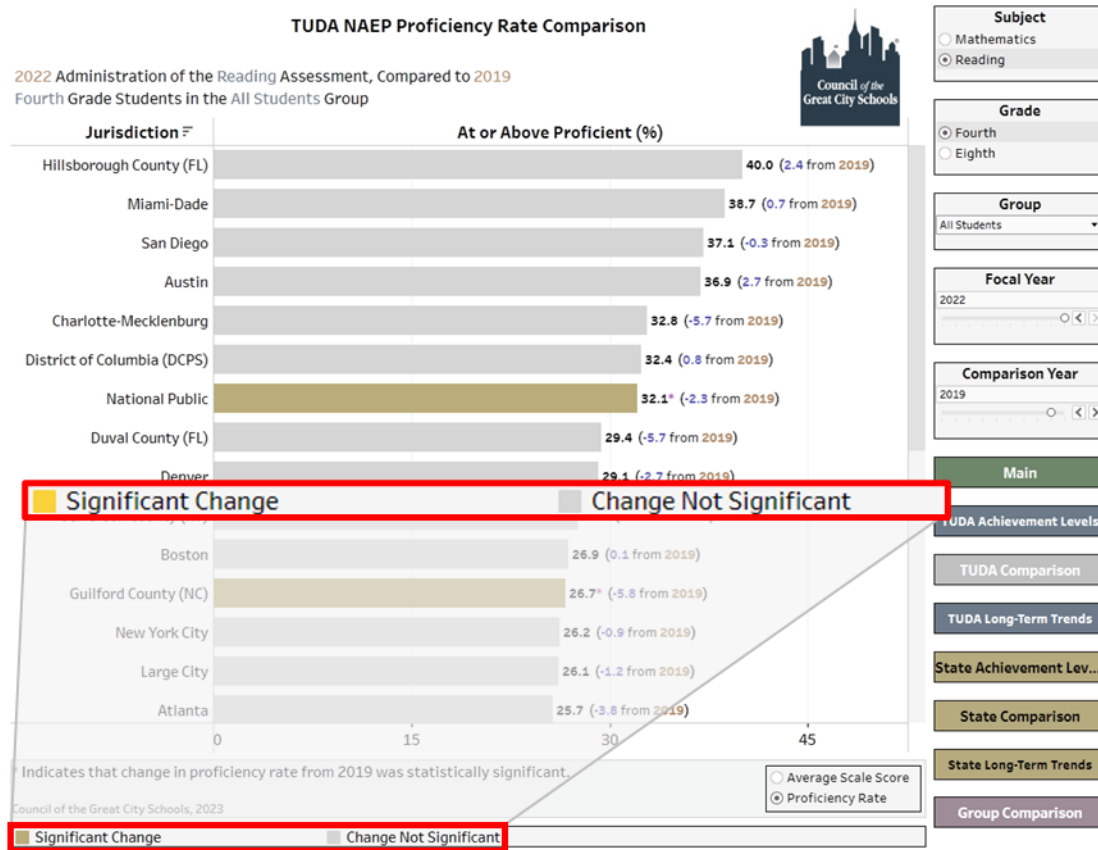
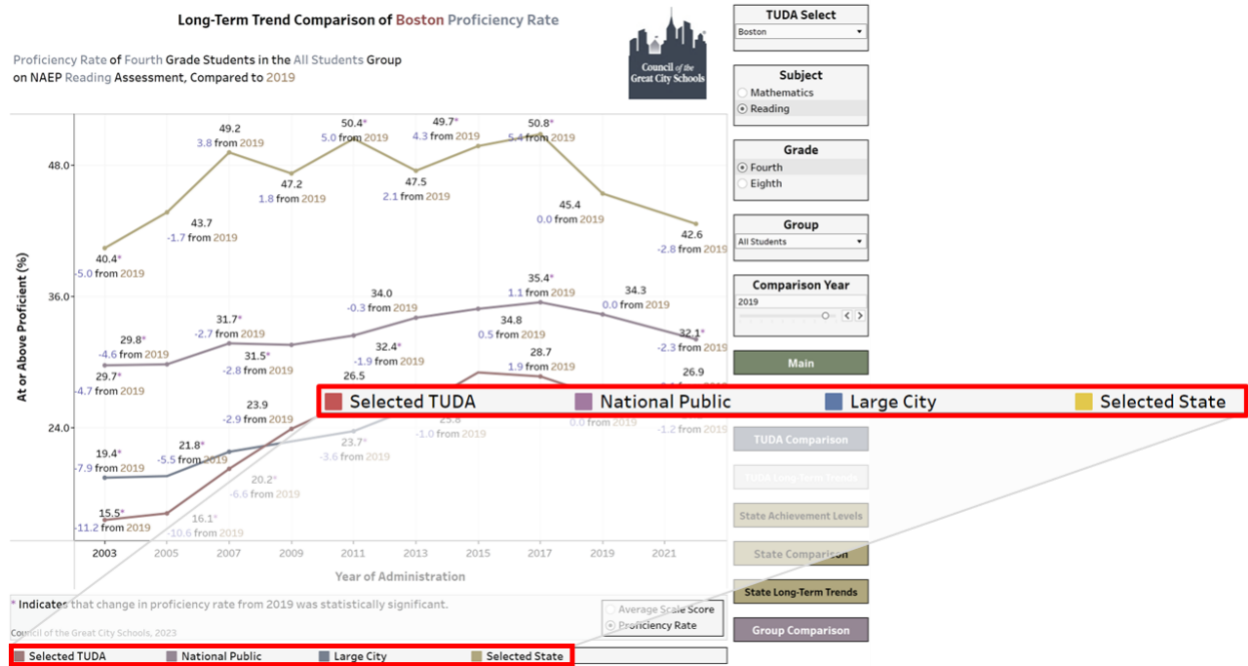
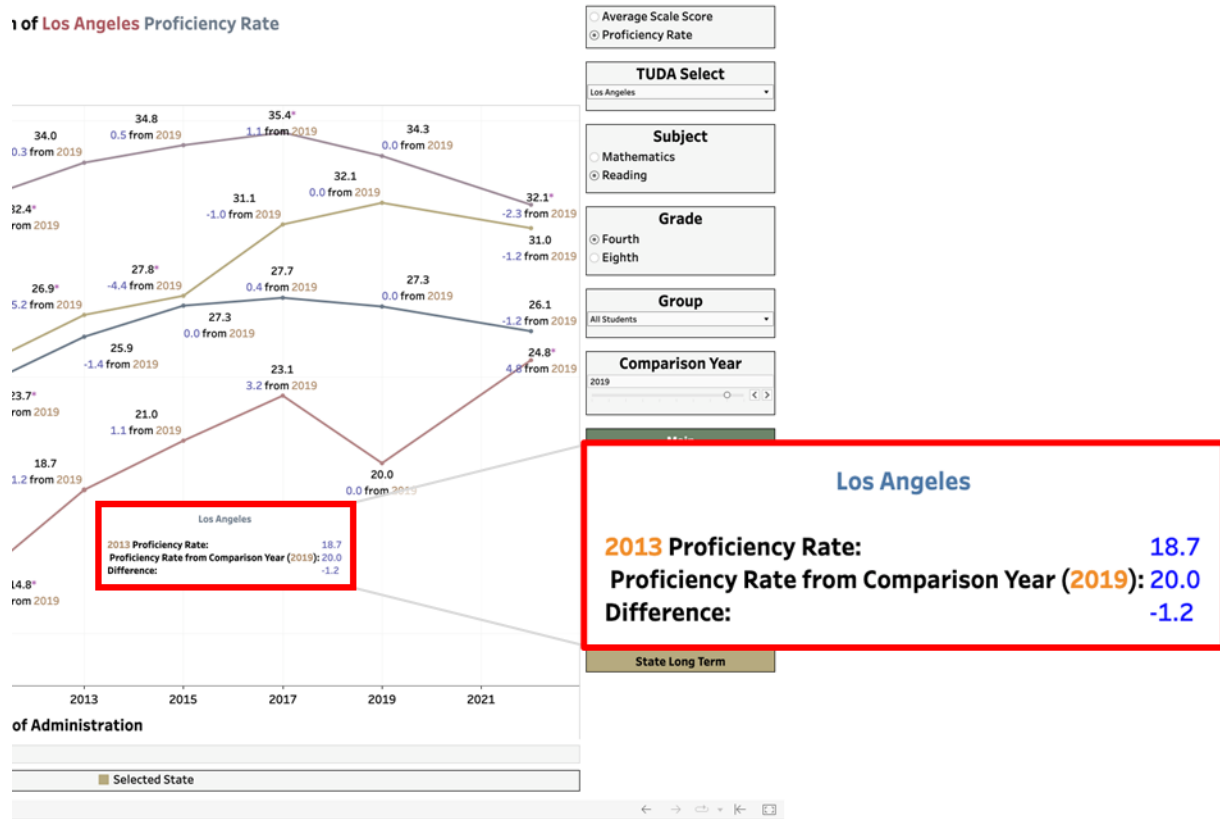
Figure 24: Jurisdiction Comparison Dashboard Legend
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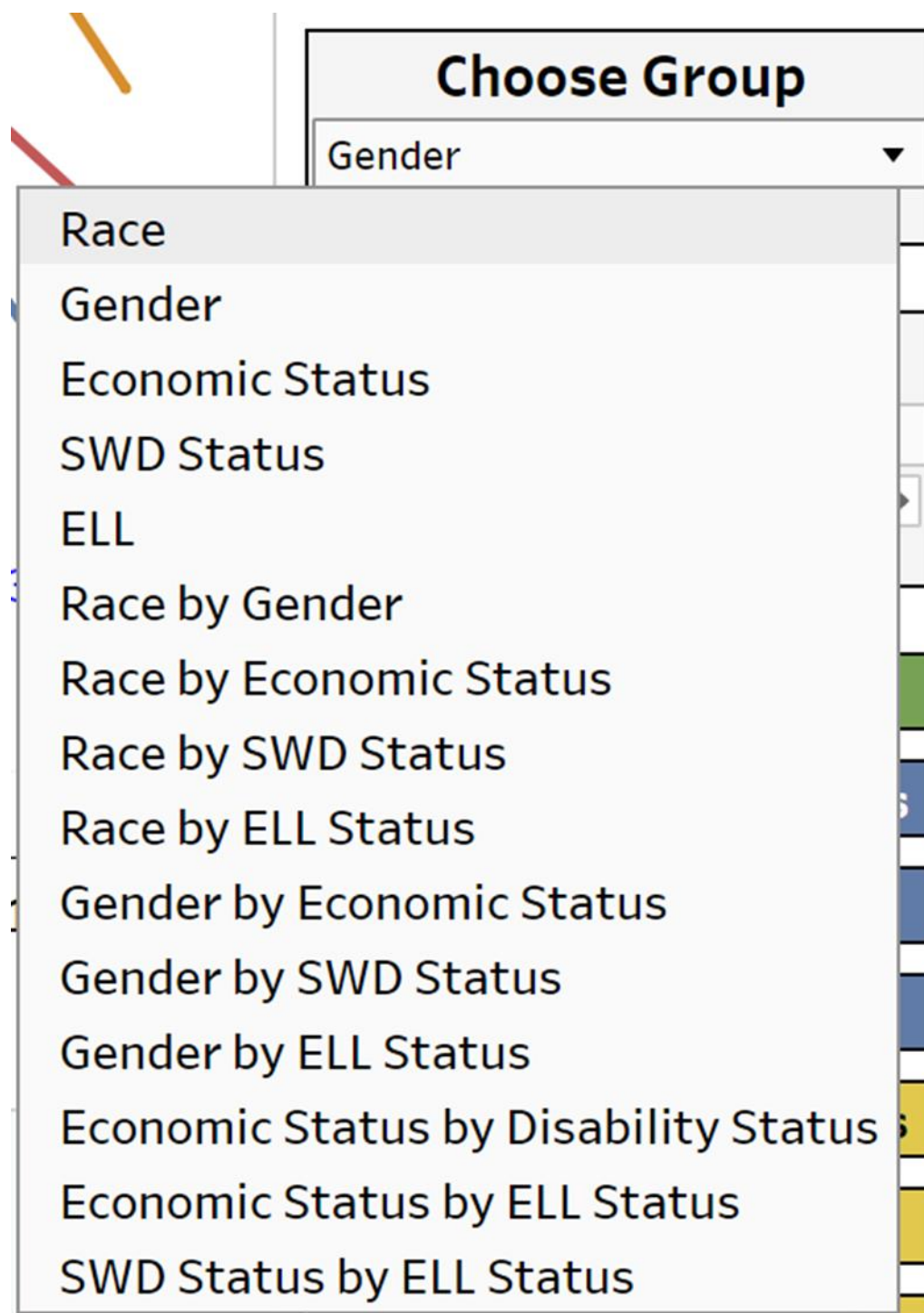
Figure 27: Long Term Trends Dashboard Legend



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Figure 28: Long Term Trends Dashboard Tooltip

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Figure 29: Alternate Student Group Filter, Group Comparison Dashboard

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Figure 30: Group Comparison Dashboard Legend

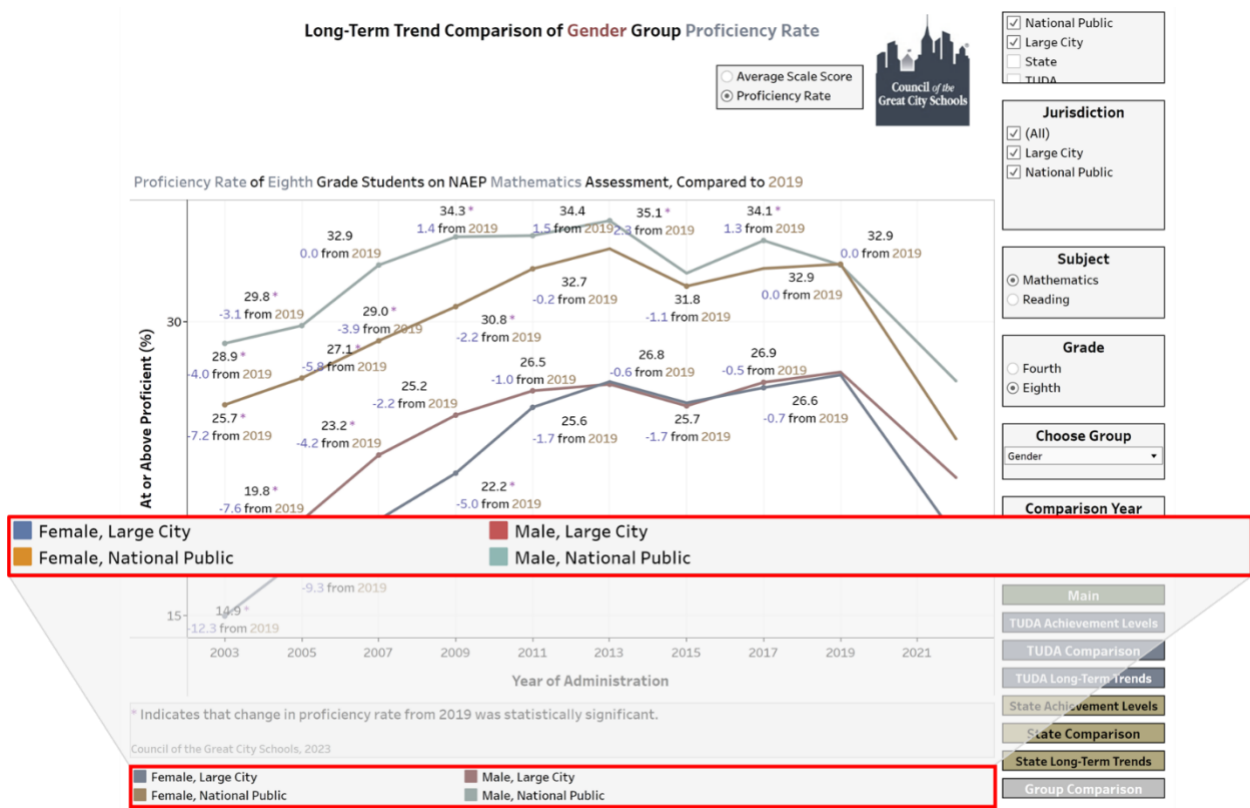
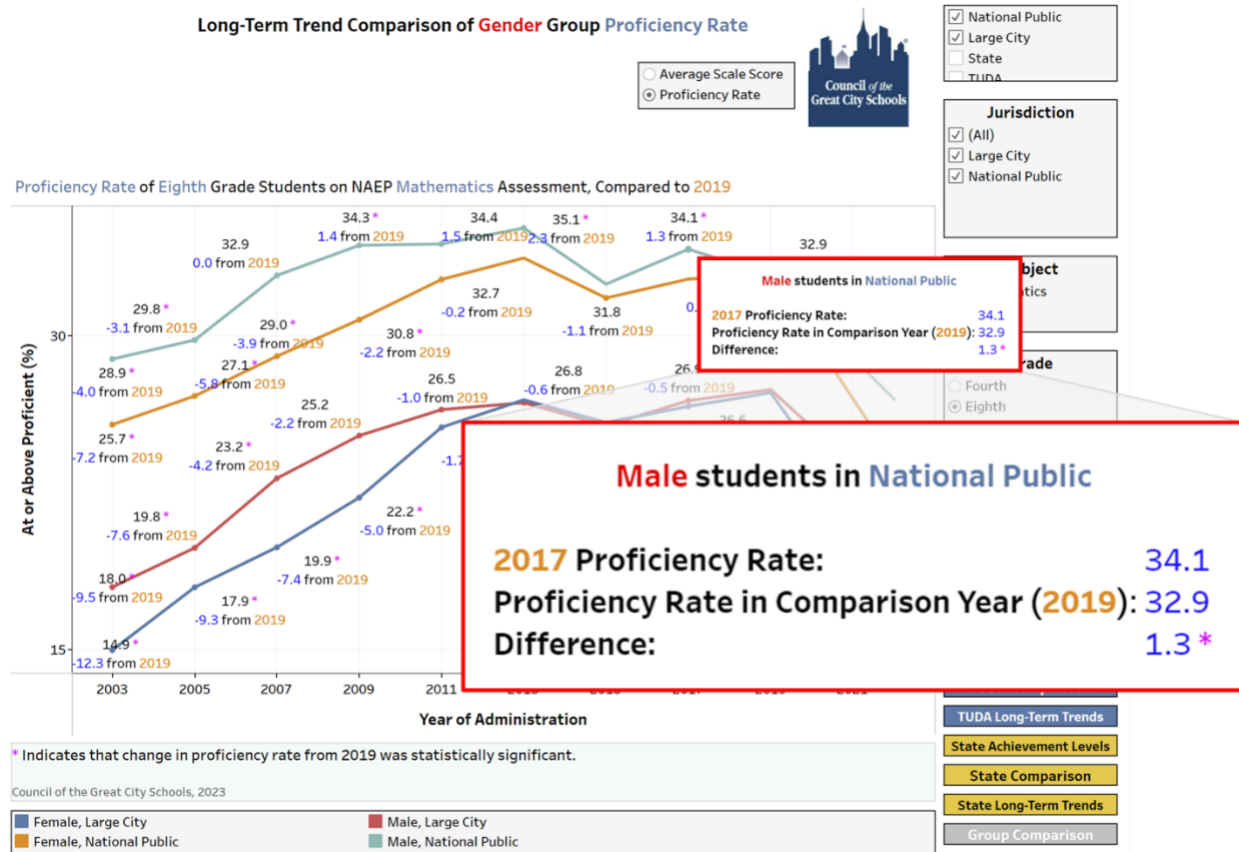

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Figure 31: Group Comparison Dashboard Tooltip


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