

Visualizations: Targets and Actuals Graph

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DevResults has 3 main types of Indicator Visualizations:

- Graph (Targets and Actuals Graph)
- Map (Choropleth Map)
- Pie (Pie Chart)

The Targets and Actuals Graph is a time series graph designed to display indicator actuals and targets over time. It's the most complex indicator visualization we offer. (We affectionately call it TAAG.)

For all non-percentage indicators, the **Units** for the indicator are displayed in the upper left, above the legend.

The **Legend** provides the color/label categories that are displayed in the graph.

The horizontal axis measures time. The vertical axis is generated and formatted based on the data entered for the indicator and the number format defined for the indicator (e.g. percentages will show as percents).

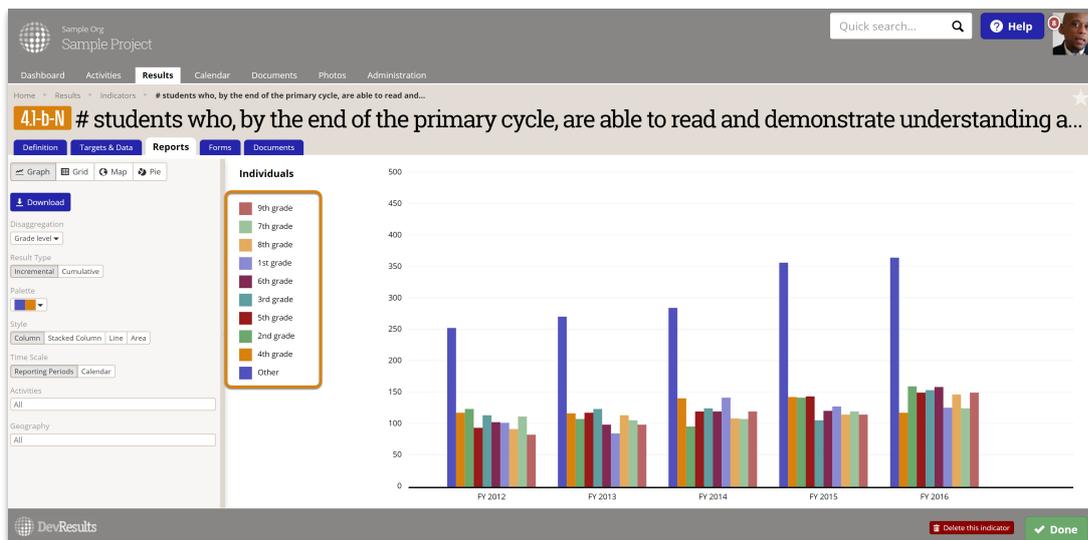
Though the Targets and Actuals Graph is downloadable, it is designed to be highly interactive:

- You can hover over items in the legend to highlight them in the graph
- You can hover over the graph itself to get details on individual data points

Legend: How disaggregations are displayed

The order of disaggregation values depends on the data totals for those values and the Style type selected. For Column and Line charts, the disaggregation value with the greatest total value is displayed at the *top* of the legend. For Stacked Column and Area charts, the disaggregation with the greatest total value is displayed at the *bottom* of the legend.

When a disaggregation has many values, we limit the number of values displayed to the top 10. Anything above that gets too visually cluttered and overwhelming. We do this by looking at the total reported for the disaggregation value over time. We take the highest 9 values and then group the remaining values together in the "Other" category. Let's look at this example from our demo site:



The disaggregation here actually has 12 values (1st grade - 12th grade), but we can only display 9 + Other.

The visualization takes a look at the data behind the scenes and selects the top 9 single grades based on their totals. In this case, that's 9th grade, 7th, 8th, etc. It then groups all the remaining grades together (in this case, 10th, 11th, and 12th) and adds them together for the "Other" category.

This display order is true for every visualization, so even if two indicators use the same disaggregation, the legend may order the disaggregation values differently depending on which one had the highest amount of data reported. So if I have two indicators collecting gender-disaggregated data, one indicator might have Male appear first in the visualization, and the other might have Female appear first.

Great For

As with most time series graphs, TAAG is ideal for viewing progress over time, either overall or split out by disaggregation. When targets exist for the indicator, it will also display those targets relative to the actuals when it can.

Note: Since targets cannot currently be entered per disaggregation, when the graph has individual columns or lines for each disaggregation value, it does not display targets.

Different style options work best for different purposes, so we'll highlight those below in the Configuration Option section.

Bad For

While TAAG is great for many things, it is designed to identify relative trends in data and to

provide specific data points only through interactivity (by hovering over a point). For true detailed comparisons of data over time, use the Grid option to view the numbers behind the visualization.

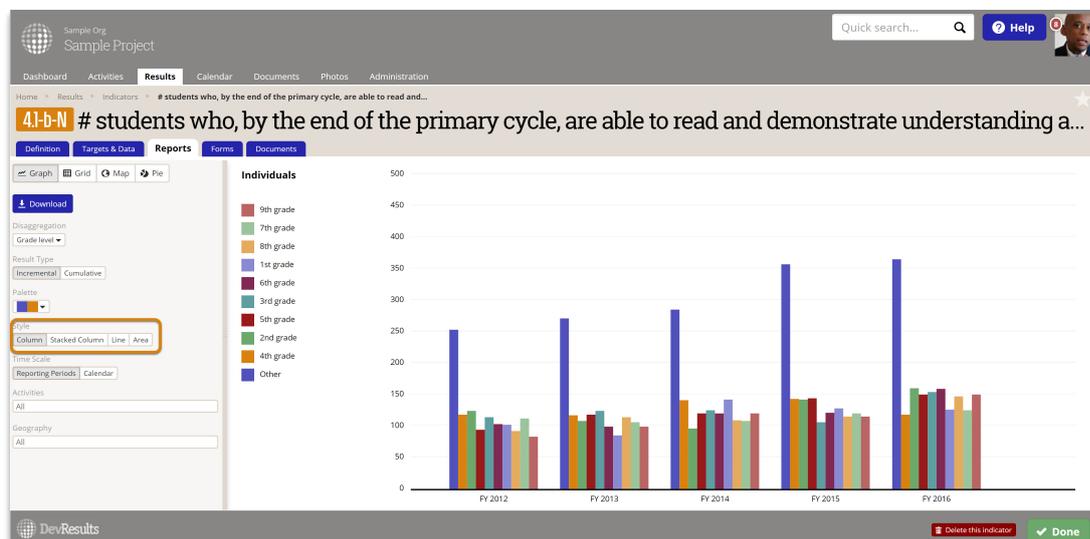
Configuration Options

You can select which disaggregation to view, view data incrementally or cumulatively, select a color palette, and filter it by Activity and Geography.

TAAG has a few unique configuration options:

Style

You can opt between one of four styles: Column, Stacked Column, Line, and Area.



Column Style

Column creates a grouped column display, displaying each disaggregation as the same color column over time, and in the same column order, so you can easily compare disaggregations to each other over time. If a disaggregation is selected, the disaggregation value with the greatest total is displayed at the top of the legend and will be the column furthest to the left.

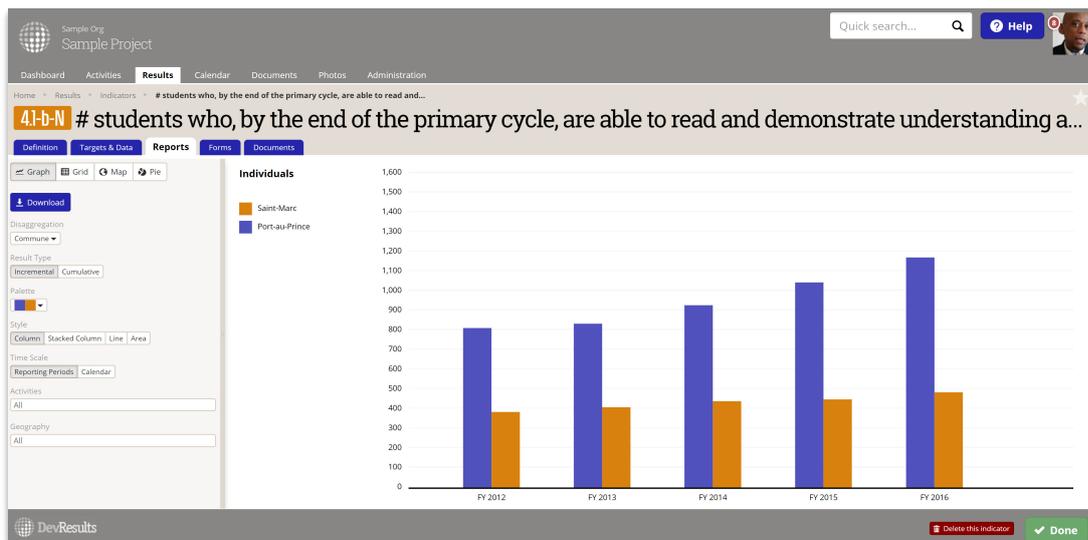
Great For

- Easily comparing different disaggregation values' actuals over time, using the same baseline

Bad For

- Comparing disaggregation values' total actuals together over time

- Identifying small differences over time



Stacked Column Style

Stacked Column creates a stacked column display, displaying each disaggregation as the same color column block over time, and in the same vertical order. This is a great way to maintain the visual simplicity of a non-disaggregated column display, while providing some insight as to how that total is broken down by disaggregation value. If a disaggregation is selected, the disaggregation value with the greatest total is displayed at the bottom of the legend and will be the column that begins from the horizontal axis.

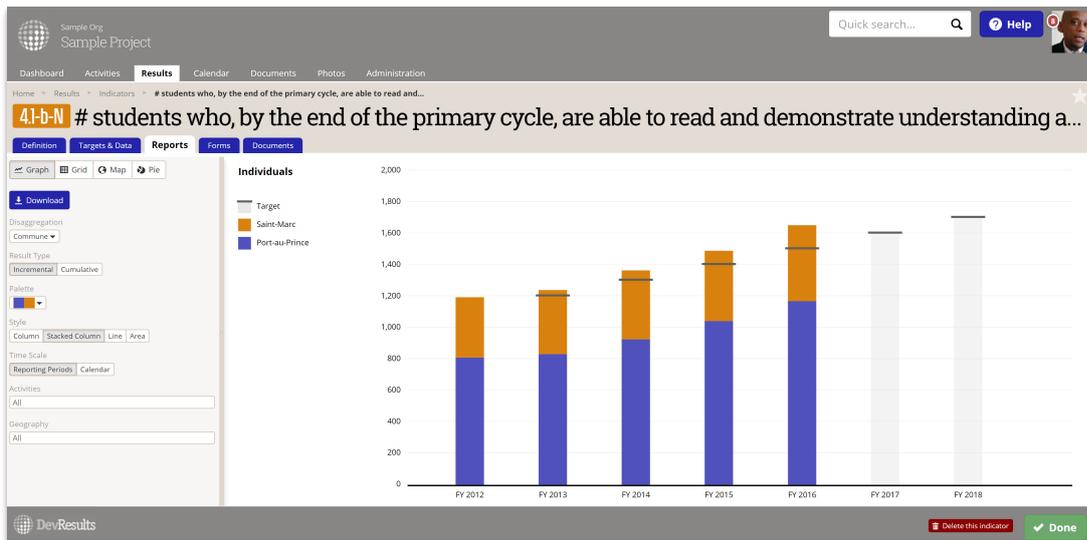
Great For

- Displaying totals for individual reporting periods over time, visually broken down by disaggregation
- Comparing the total actuals against the overall targets

Bad For

- Comparing disaggregation values' individual actuals against a common baseline
- Easily comparing disaggregation values' actuals against themselves over time (since they aren't displayed at the same baseline consistently)
- Identifying small differences over time

Because the sweet spot for Stacked Columns is to display different disaggregation values and to add them up together visually into a single stacked column, we do not allow you to select this option for non-sum indicators (such as percents or other averages). Visually displaying something as a sum when it's actually an average is very poor form in data visualization, so we prevent you from doing it here.



Line Style

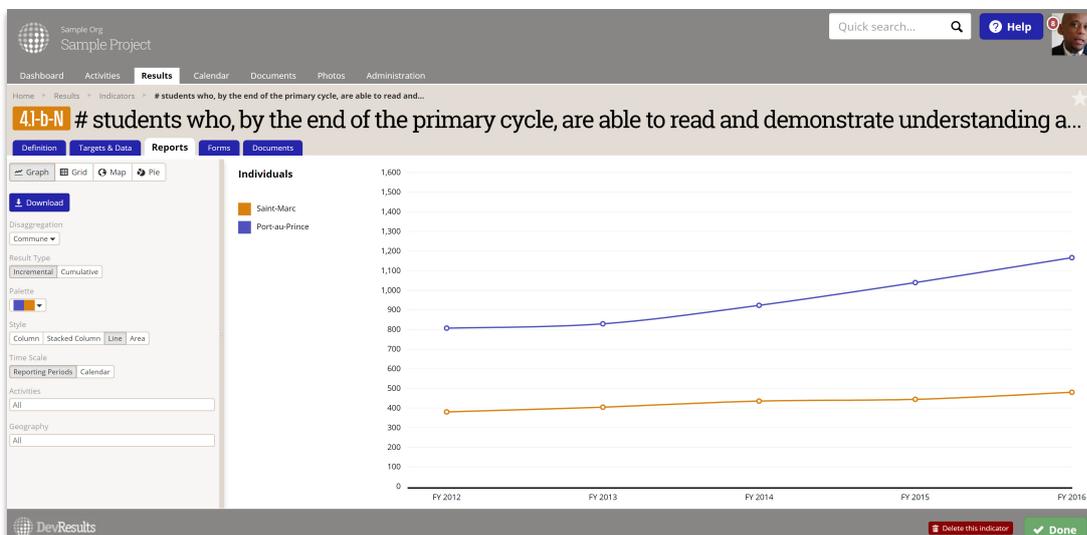
Line creates a continuous line graph over time. If a disaggregation is selected, the disaggregation value with the greatest total is displayed at the top of the legend.

Great For

- Displaying small differences in data over time
- Displaying data that is continuously captured at the same intervals (e.g. quarterly, annually, etc.)
- Displaying trends over time (e.g. is this upward or downward trending?)

Bad For

- Data that is erratically captured or only captured once at the start or end of an activity.
- Data that is only captured once, such as at the start or end of an activity--this shows up as a single point, which is not very useful.



Area Style

The Area chart creates a stacked area display, similar to the line chart. But, like the stacked column chart, it allows you to compare each line's area in relation to the total or whole. This combines the trend analysis of a line chart with the part-to-whole comparison of a stacked chart. If a disaggregation is selected, the disaggregation value with the greatest total is displayed at the bottom of the legend and will be the area that begins from the horizontal axis as a baseline.

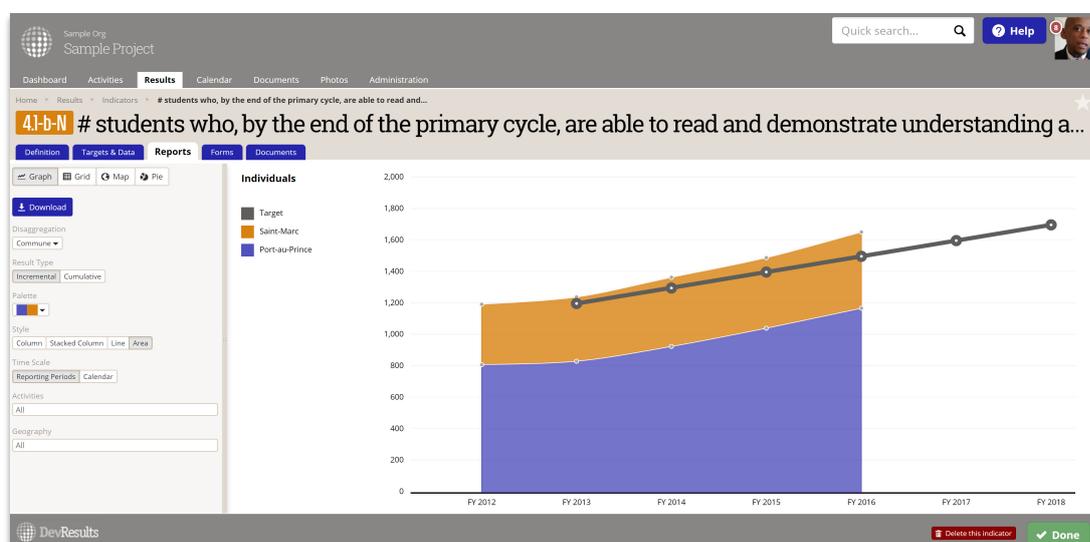
Great For

- Displaying continuous totals for individual reporting periods over time, visually broken down by disaggregation
- Comparing the total actuals against the overall targets

Bad For

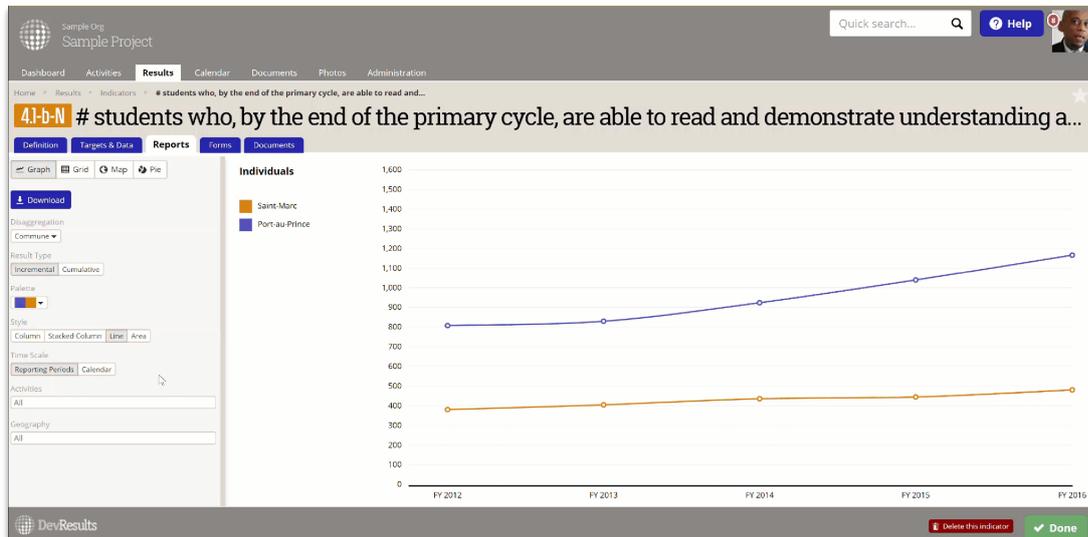
- For pure trend analysis of how each line varies over time, the line chart is a better choice. It takes more mental processing to make sense of individual lines in Area because the higher lines are based off of the lines below them.
- Comparing disaggregation values' individual actuals against a common baseline (line or column is better)
- Easily comparing disaggregation values' actuals against themselves over time (since higher lines are based off of other lines rather than the axis baseline)
- Identifying small differences over time

Like Stacked Columns, because the sweet spot for Area is to display different disaggregation values and to add them up together visually, we do not allow you to select this option for non-sum indicators (such as percents or other averages). Visually displaying something as a sum when it's actually an average is very poor form in data visualization, so we prevent you from doing it here.



Time Scale

The horizontal axis measures time. You can toggle the **Time Scale** here to change the horizontal access between **Reporting Periods** and **Calendar**. If Calendar setting is used, the data is placed using the relevant reporting period's **End Date**.



The Calendar setting is also responsive to the size of your screen, so you can resize your browser window to make it smaller or larger.

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