Before you begin: Access Library in the Education sandbox

The Education sandbox is a shared, cloud-based environment to help you learn about and experiment with MicroStrategy Web and Library.

Use the Education sandbox to complete various report and dossier exercises. Complete the steps below to access the sandbox.

Access Library in the Education sandbox

1   In your browser, navigate to **education.microstrategy.com/MicroStrategy/servlet/mstrWeb**.

2   Log in to the sandbox with your **MicroStrategy Account** credentials.

    Open the Tutorial project

3   The MicroStrategy landing page opens. Click the **MicroStrategy Tutorial** project.

MicroStrategy Tutorial
MicroStrategy Tutorial project and application set designed to illustrate the platform's rich functionality. The theme is an Electronics, Books, Movies and Music store. Employees, Inventory, Finance, Product Sales and Suppliers are analyzed.
Server name   ENV-218880LAIOUSE1

    The MicroStrategy Tutorial home page opens.

4   Click **Go to MicroStrategy Library**.

5   If prompted, enter your **MicroStrategy Account** credentials, and then click **Log in with Identity**.

    Your Library home page displays.

Exercise: Create and format a ring chart visualization to view part-to-whole contributions

So far, your dossier has a grid for viewing precise details and a line chart to visualize change over time. Analysts also need to see how weather affects the total number of riders. Create a ring chart to display how the total number of riders is split into each weather scenario (clear, partly cloudy, or precipitation).

Prerequisites

This exercise builds on progress you've made with the dossier so far. Before you begin:

1   Access Library. For a reminder on how to do this, see *Exercise: Access Library in the Education sandbox*.

2   In Library, open the Golden Bikes dossier in Edit mode. For a reminder on how to do this, see *Exercise: Add the Golden Bikes dossier to MicroStrategy Library*.

3   Ensure that you have:

   •   Manipulated the grid visualization (*Exercise: Manipulate a grid visualization to meet analysis goals*).

   •   Formatted the grid visualization (*Exercise: Format a grid visualization to enhance readability*).

   •   Formatted the line chart (*Exercise: Format a line chart to support quick comparisons*).

Create a ring chart

1   To add a ring chart, click the **Visualization** icon ⅈⅼⅈ in the dossier toolbar, point to **Pie**, then click the **Ring Chart** icon. You prefer a ring chart over a pie

chart because the slices do not fill to the center of the chart, providing a less crowded visual display.
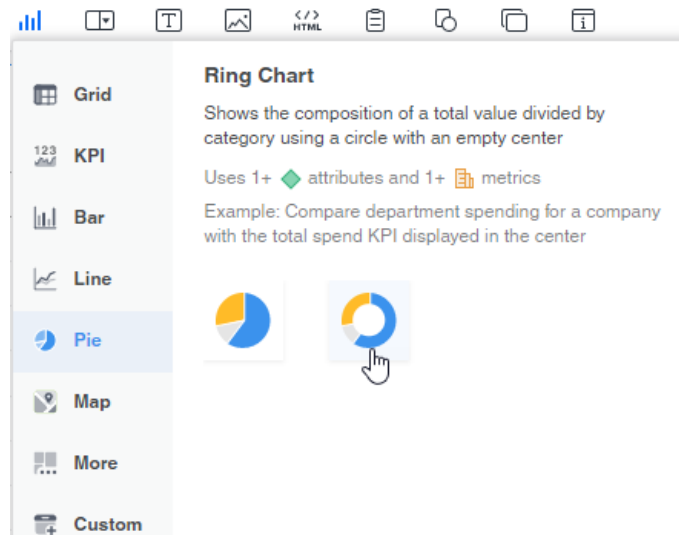

2 The new ring chart is added below the line chart. To work with this ring chart, you want to see it in more detail. Hover over the top right corner of the visualization's title bar and click the **Maximize** icon ⤢ .

3 You want the slices of the ring colored by weather scenario. Double-click **Weather** in the Datasets panel to add it to the **Color By** and **Slice** drop zones in the Editor panel.
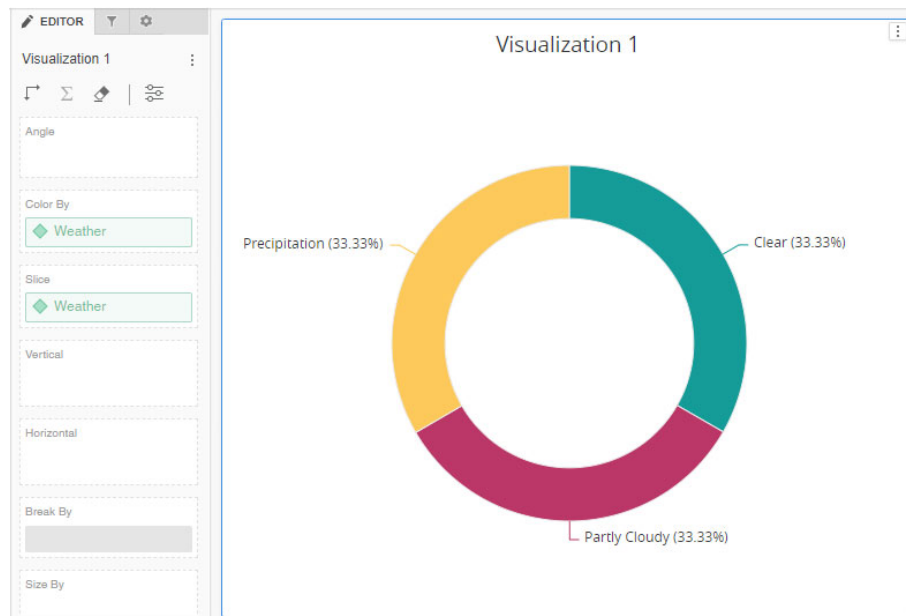
The slices are split by Weather, and the Weather labels display on the ring chart. The different colors help you distinguish the weather scenarios at a glance.

4   You want the slices of the ring chart sized by total riders. Double-click the **Total Riders** metric to add it to the **Angle** drop zone. Slices that represent larger metric values are displayed as larger slices than slices that represent smaller metric values.
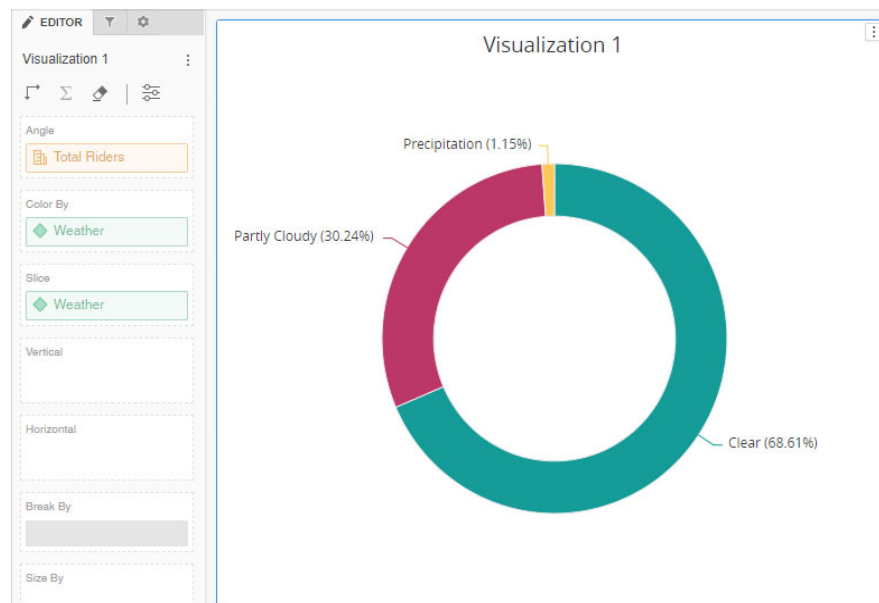

5   To see the precise number of riders and percent contribution for a given weather scenario, hover over a slice to display a tooltip.
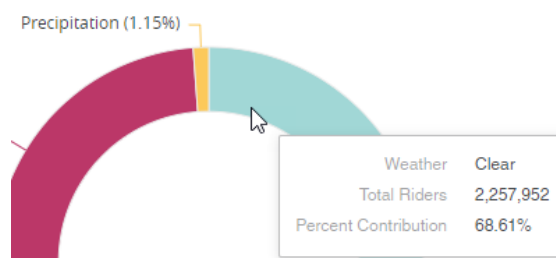
For example, in the image above, you can see from the tooltip that when the weather is clear, the total number of riders is 2,257,952, which is 68.61% of the total riders for all weather scenarios.

6 To see a separate ring chart for each year, displayed next to each other horizontally, double-click **Year** to add it to the **Horizontal** drop zone.
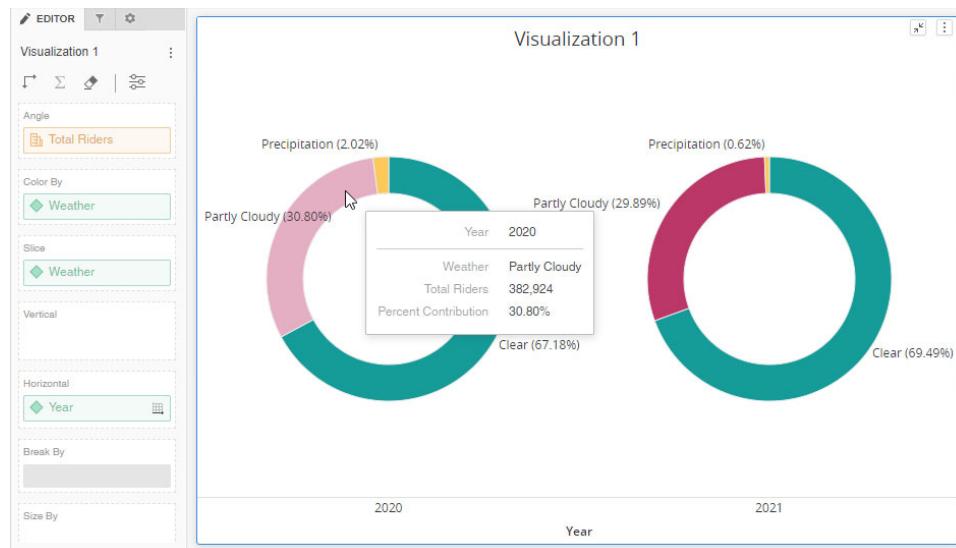
The pie charts are labeled by year on the horizontal axis. When you hover over a slice, the tooltip now also displays the year. The size of the slices in each ring chart are determined by the total number of riders for each weather scenario for that year, rather than across both years.

7 The size of the slices are very similar in the 2020 and 2021 ring charts. This means that the percent contribution of the total number of riders for each weather scenario is not very different between the two years. As such, you decide to display the data in a single ring chart for both years, as you had before. Right-click **Year** in the **Horizontal** drop zone, and click **Remove**.

The single ring chart displays again, with the percent contributions calculated across both years in the dataset.

8 To provide quick context on what the ring chart represents, double-click **Visualization 1** in the title bar of the line chart and rename it **Total Riders by Weather**.

Change the ring chart title formatting

9 For a clean, consistent look, you want the ring chart title formatting to match the other visualizations' formatting. Use the Format panel to change the Total

Riders by Weather title font size to **16** and the font style to **Bold**. For a reminder on how to do this, see *Change the line chart title formatting*.
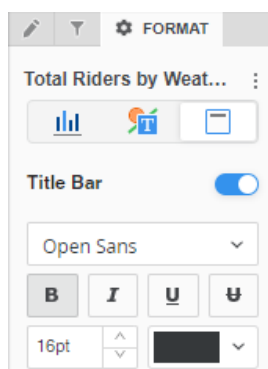

10 Save your dossier.

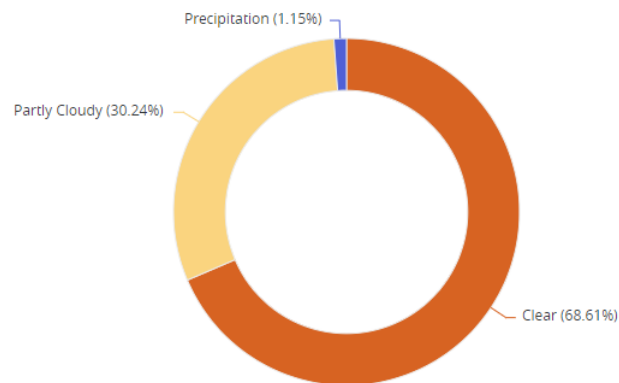**Change the color of the slices**

Golden Bikes' corporate colors include yellow and orange, and blue as an accent color when necessary. To match this color scheme, change the colors of the slices in the ring.

1   In the Format panel, select **Text and Form** .

2   From the first drop-down list, select **Data Labels and Shapes**.

3   To format the slice for clear weather, in the Shape area, from the first drop-down list, select **Clear**.

4   From the **Fill** drop-down list, in the Essential area, select **Orange #D76322** .

5   To format the slice for partly cloudy weather, in the Shape area, from the first drop-down list, select **Partly Cloudy**.

6 From the **Fill** drop-down list, in the Essential area, select **Royal Blue #4F60D6** ▇.

Precipitation (1.15%)

Partly Cloudy (30.24%)

Clear (68.61%)
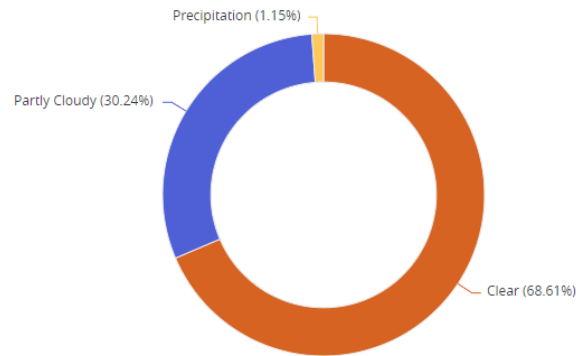
7 You decide that it is hard to see the Precipitation slice because it is so small and it is the lightest color. Change the **Precipitation** slice to **Royal Blue #44F60D6** ▇ and the **Partly Cloudy** slice to **Sweet Corn #FAD47F** ▇.

Precipitation (1.15%)

Partly Cloudy (30.24%)

Clear (68.61%)

It is easier to see the small Precipitation slice when it is a darker color, and the ring chart matches the corporate color scheme.

Explore using direct labels and a legend

You can label the slices of the ring with the category that they represent, or the metric value. You can also use a legend to display the category represented by

each slice. Explore these possibilities to see what works best for your analysis goals.

1   To display the weather scenarios in a legend rather than as labels next to each colored slice, from Format panel, select **Visualization Options** 📊 and then enable **Legend**.
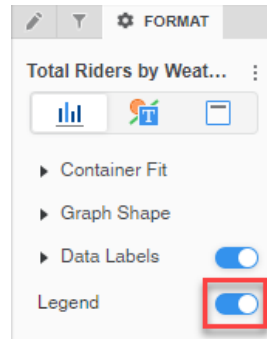

The legend displays to the right of the ring chart, identifying the weather scenario that each color represents.
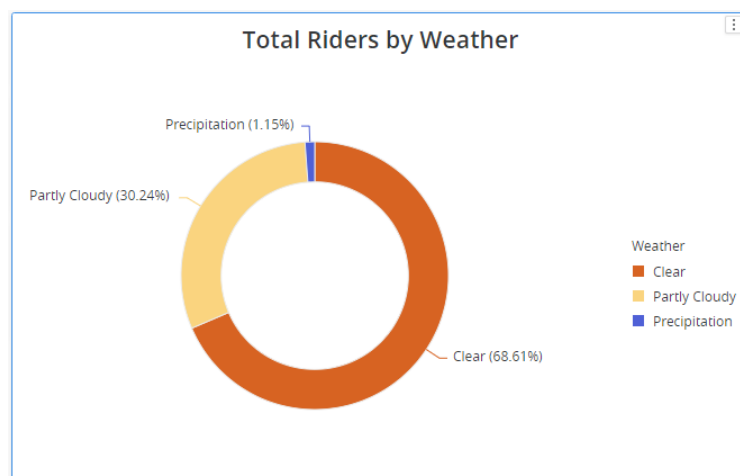
2   Now that the legend identifies the weather scenarios, the weather scenario labels next to the slices are redundant and could be better utilized by displaying the values. To change the labels to values, in the Format panel, expand **Data Labels**.

3   In the Data Labels area, select **Value** 123 , and clear **Text** abc and **Percentage** % .

The values displayed next to each slice now display the total riders for the weather scenario represented by that slice. Analysts can use the legend to determine the weather scenario that the color of each slice represents.

Total Riders by Weather
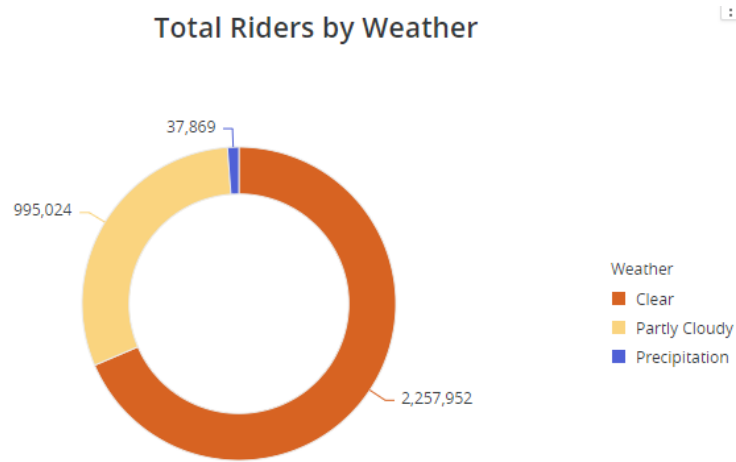
Formatting visualizations is an iterative process that involves exploring the design possibilities to see what works best for your analysis. You decide it is easier to analyze the data when the weather scenario labels are directly next to the total rider values.

4   Change the data labels to add back the weather scenarios. In the Format panel, in the Data Labels area, select **Text** abc .

Total Riders by Weather
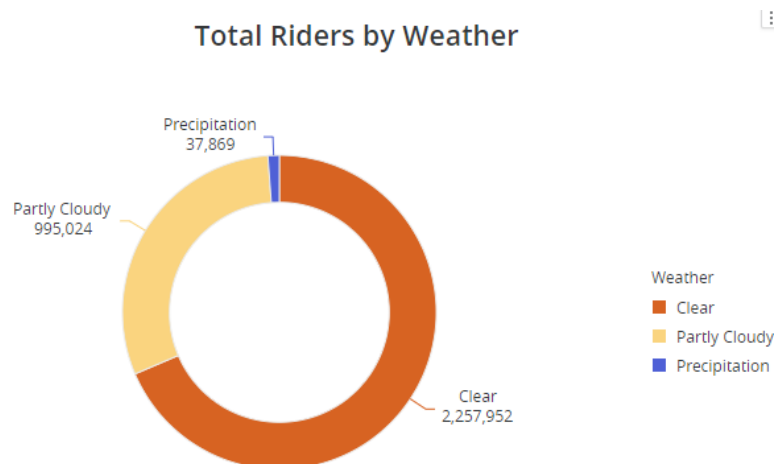
The legend and the direct labels display the same information, so it is redundant to display both. It is easier for analysts to see the weather scenario represented by slice with direct labels rather than the legend because they do not need to look back and forth between the ring and the legend. For these reasons, you decide to remove the legend.
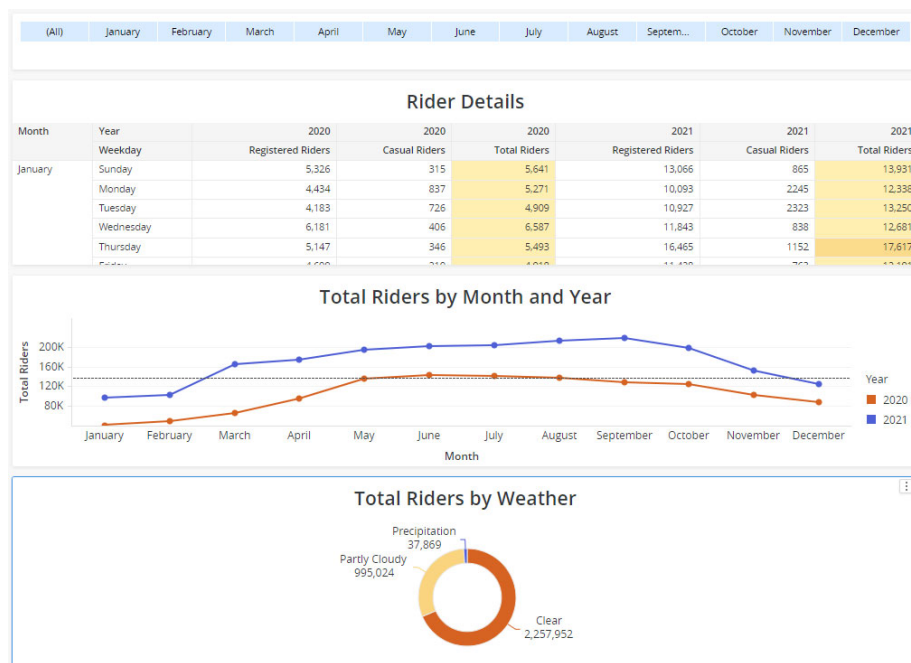
5 To remove the legend, in the Format panel, disable **Legend**.
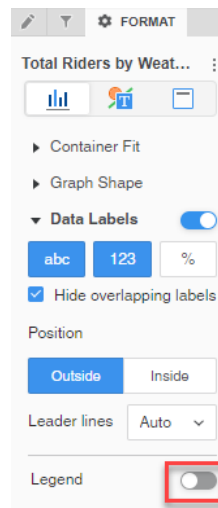
View all of the visualizations on the dossier page

6 The maximized ring chart covers the dossier canvas. To view all of the visualizations on the page at once, hover over the top right corner of the visualization's title bar and click the **Restore** icon ⤢ .

The ring chart visualization displays smaller, below the line chart visualization. Your dossier looks similar to the image below.

7 **Save** your dossier.