

# Building Line Charts

Line charts connect individual data points in a view. They provide a simple way to visualize a sequence of values and are useful when you want to see trends over time, or to forecast future values. For more information about the line mark type, see [Line mark](#).

**Note:** In views that use the line mark type, you can use the **Path** property in the Marks card to change the type of line mark (linear, step, or jump), or to encode data by connecting marks using a particular drawing order. For details, see [Path properties](#) in the [Control the Appearance of Marks in the View](#)

To create a view that displays the sum of sales and the sum of profit for all years, and then uses forecasting to determine a trend, follow these steps:

1. Connect to the **Sample - Superstore** data source.
2. Drag the **Order Date** dimension to **Columns**.

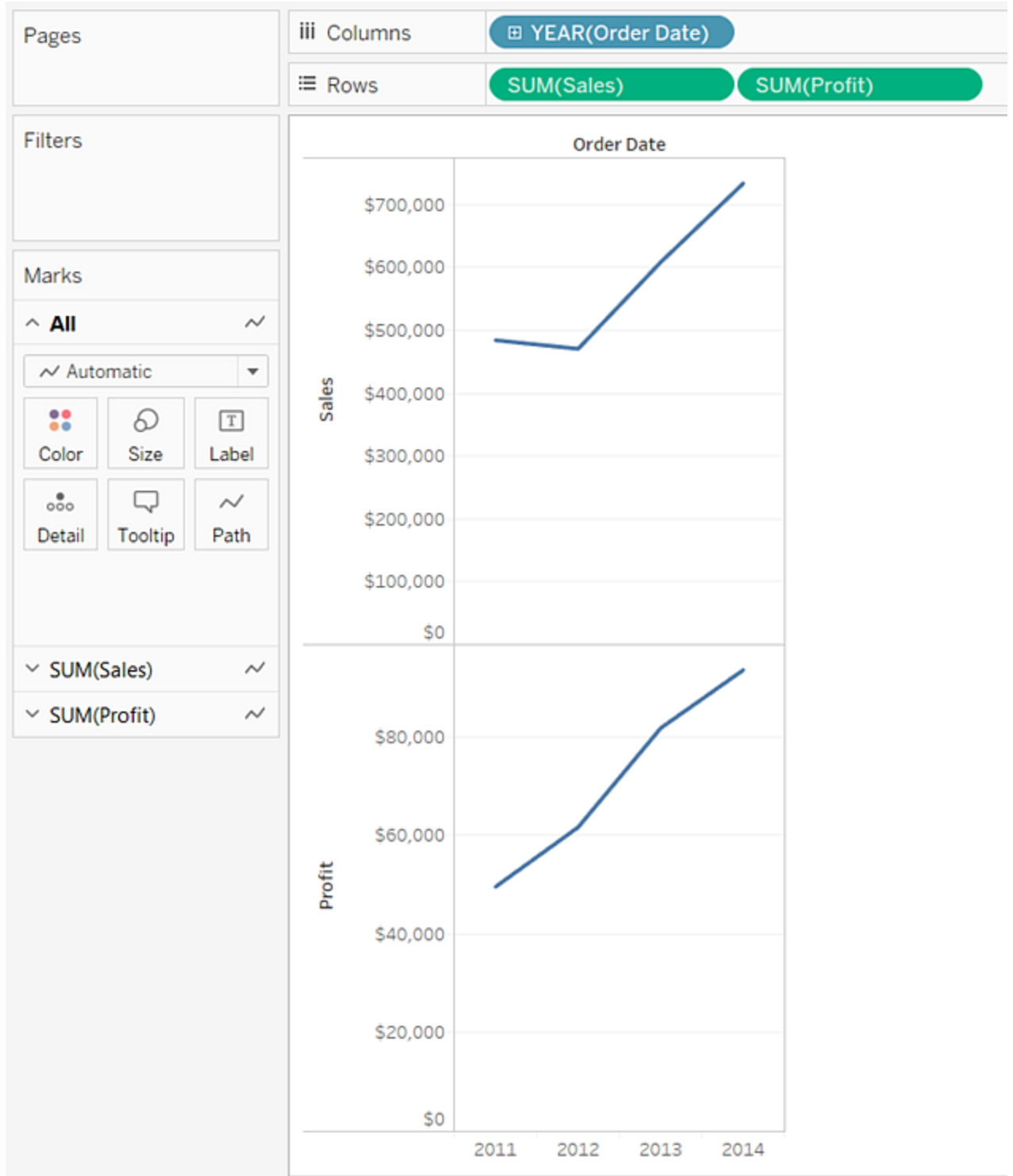
Tableau aggregates the date by year, and creates column headers.

3. Drag the **Sales** measure to **Rows**.

Tableau aggregates **Sales** as SUM and displays a simple line chart.

4. Drag the **Profit** measure to **Rows** and drop it to the right of the **Sales** measure.

Tableau creates separate axes along the left margin for **Sales** and **Profit**.



Notice that the scale of the two axes is different—the **Sales** axis scales from \$0 to \$700,000, whereas the **Profit** axis scales from \$0 to \$100,000. This can make it hard to see that sales values are much greater than profit values.

When you are displaying multiple measures in a line chart, you can align or merge axes to make it easier for users to compare values.

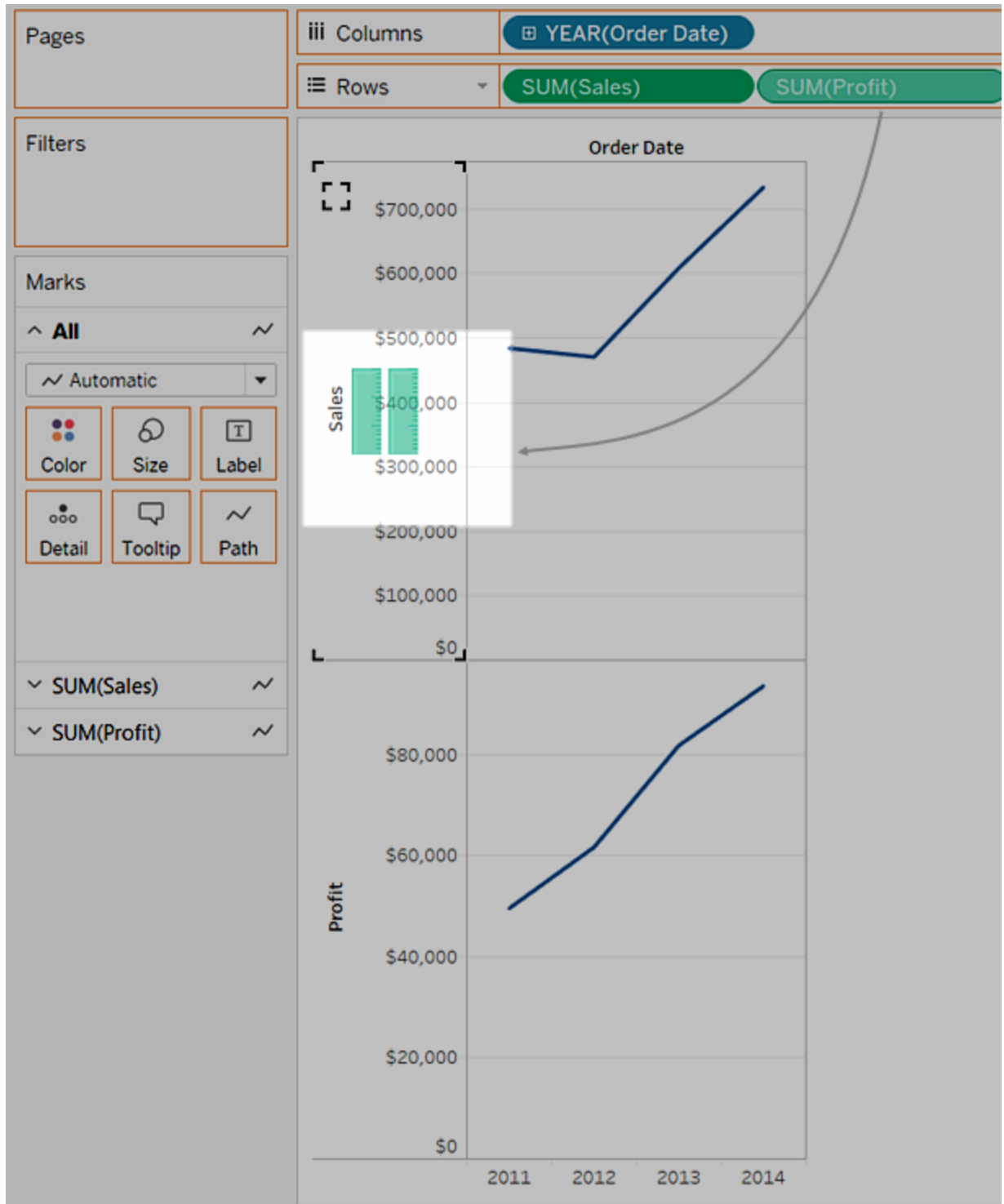
For more information about aligning the axes, see [Compare two measures using dual axes](#).

For more information about enforcing a single axis across multiple measures, see [Blend axes for multiple measures into a single axis](#).

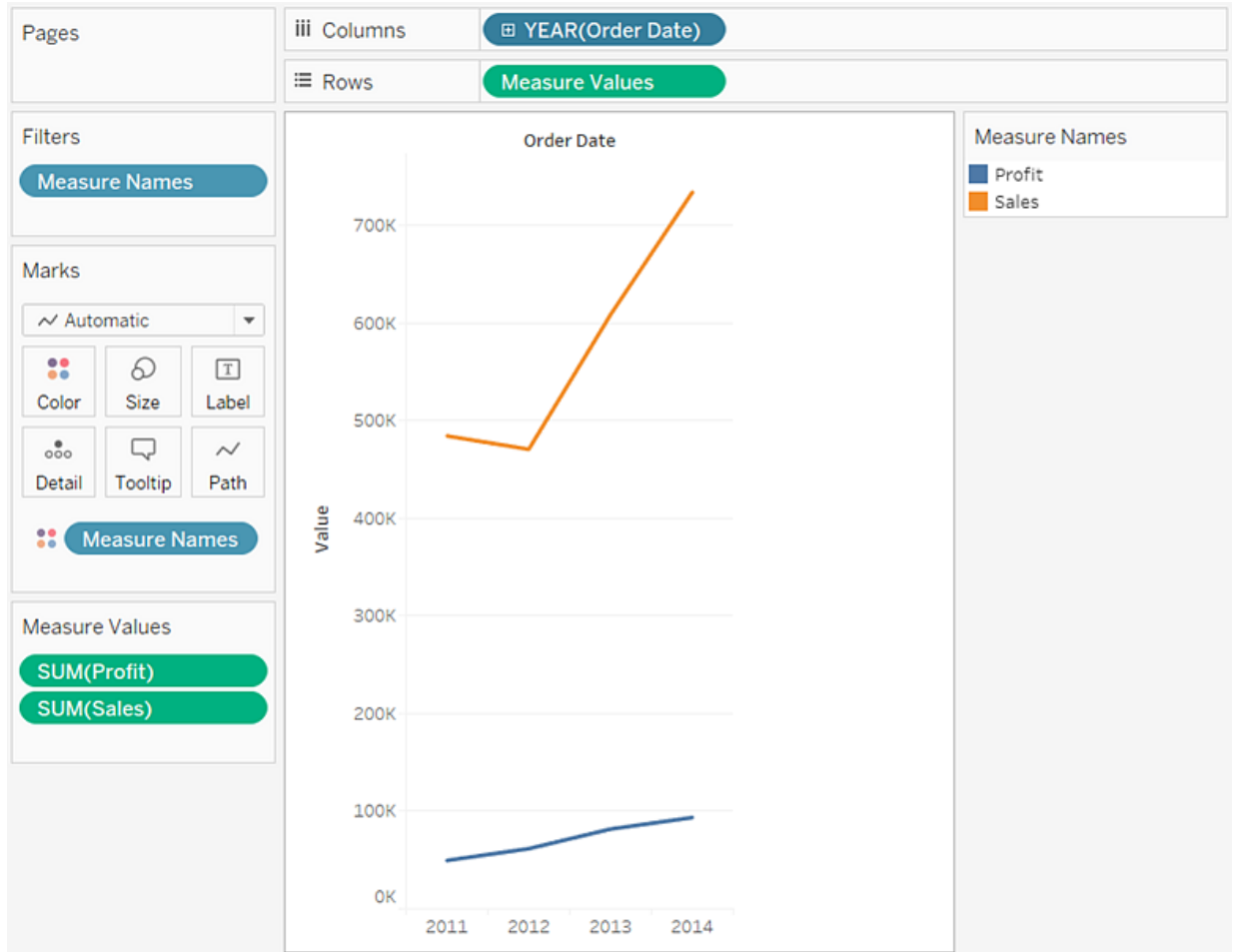
With either of these options, you can create a combination chart to change the mark type for one of your measures.

For more information, see [Create a combo chart \(assign different mark types to measures\)](#).

5. Drag the **SUM(Profit)** field from **Rows** to the **Sales** axis to create a blended axis. The two pale green parallel bars indicate that **Profit** and **Sales** will use a blended axis when you release the mouse button.

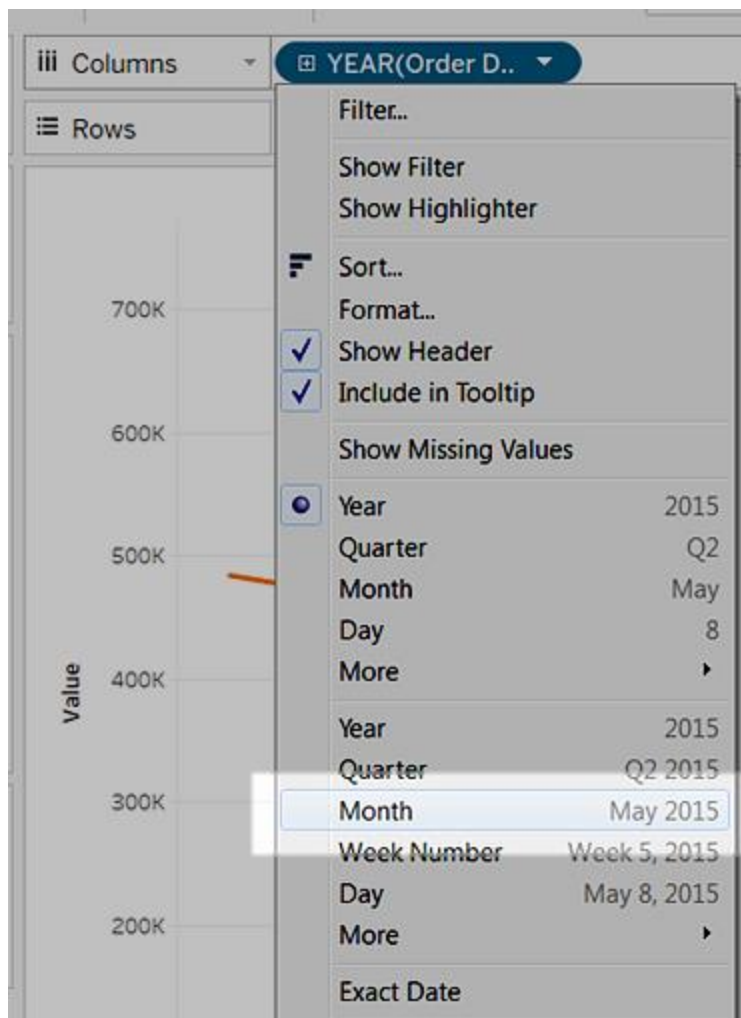


The view updates to look like this:

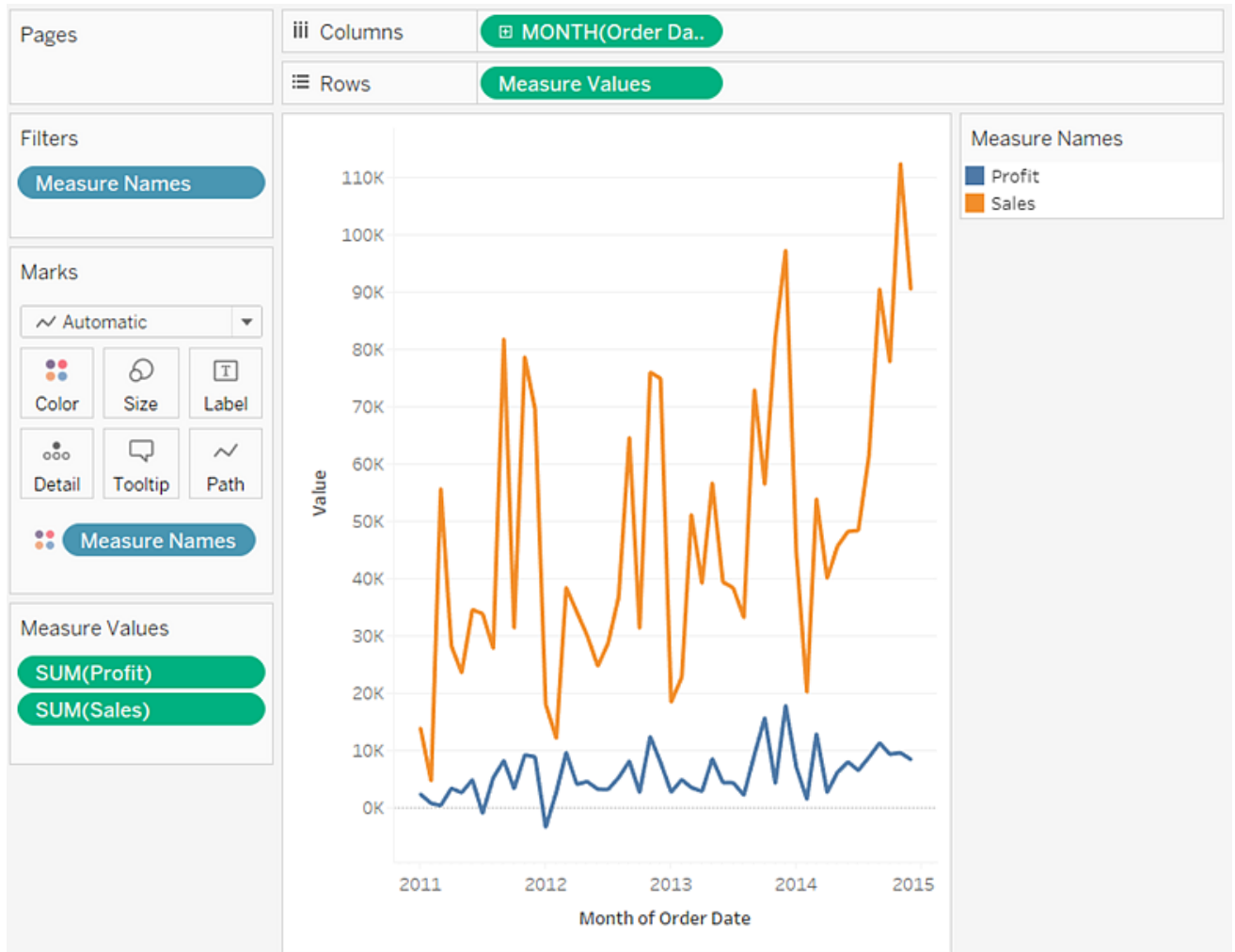


The view is rather sparse because we are looking at a summation of values on a per-year basis.

6. Click the drop-down arrow in the **Year(Order Date)** field on the **Columns** shelf and select **Month** in the lower part of the context menu to see a continuous range of values over the four-year period.

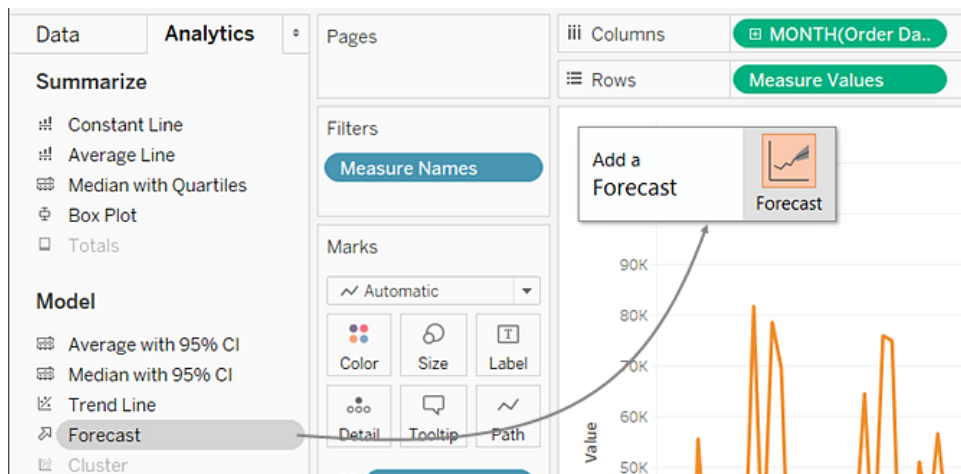


The resulting view is a lot more detailed than the original view:



Notice that the values seem to go much higher just before the end of each year. A pattern like that is known as *seasonality*. If we turn on the forecasting feature in the view, we can see whether we should expect that the apparent seasonal trend will continue in the future.

7. To add a forecast, in the **Analytics** pane, drag the **Forecast** model to the view, and then drop it on **Forecast**.



We then see that, according to Tableau forecasting, the seasonal trend does continue into the future:

