

SC DSS Accountability Measures: Tableau Rebuild Guide

This guide rebuilds the accountability measures dashboard in Tableau Public from the data workbook in this package. It lists the data tables, calculated fields, parameters, sheets, and dashboard layout, with check totals to confirm the rebuild matches.

Source: South Carolina Department of Social Services, Annual Accountability Reports to the General Assembly, FY 2014 to FY 2018.

1. Connect the data

1. Open Tableau Public and connect to **SC DSS Accountability - Tableau Data.xlsx** (Microsoft Excel). The same tables are also provided as CSV files.
2. Drag **Results** onto the canvas, then drag **Measures** beside it. Tableau creates a relationship; set it to **Measure ID = Measure ID**. The Reports sheet is a lookup and does not need to be related.
3. Set field types: Measure ID, Value Year, Status, Scored Year, Unit, and Direction are strings. Value and Target are decimal numbers. Year Order is a whole number; sort Value Year by Year Order.
4. Percentages are stored as fractions (0.903 is 90.3 percent). Dollar amounts and counts are plain numbers, and the Family Independence timeliness measure is in days, where a lower number is better.

Table	Rows	Grain and key fields
Results	169	One row per measure per year, FY 2012-13 to FY 2017-18. Value, Value As Printed, Target, Target As Printed, Status, Scored Year, Value Basis, Time Applicable, Report Item, Source URL.
Measures	42	One row per measure series. Short Label, Program Area, Unit, Direction, Reports Present, Published Name, Calculation Method, Data Source, Crosswalk Note.
Reports	6	Report, URL, whether it has a Performance Measurement Template, and a cover note.

2. Parameters

Parameter	Type and values	Use
p Area	String list: All areas, Child Welfare, Adult Protective Services, Economic Services, Child Care, Child Support. Default All areas.	Program area filter on every sheet through the Area Match field. Show it as a single-value list.
p Measure	String list, filled from Short Label when the workbook opens. Default "Monthly visits in foster care".	Selects the measure on the trend sheet. Add a parameter action from the scorecard so clicking a row sets it.

3. Calculated fields

Field	Formula	Purpose
Year Label	RIGHT([Value Year], 7)	Short year label such as 2016-17 for axes and column headers.
Is Scored	[Status] = "Met" OR [Status] = "Not met"	True only for FY 2015-16 to FY 2017-18 rows with a numeric value and a numeric target.
Met (number)	IIF([Status] = "Met", 1, 0)	Row-level flag used by the counts below.
Scored (number)	IIF([Is Scored], 1, 0)	Row-level flag for the denominator.
Targets Met	SUM([Met (number)])	KPI tiles and scorecard bars.
Targets Scored	SUM([Scored (number)])	KPI tiles and scorecard bars.
Share Met	[Targets Met] / [Targets Scored]	Format as a percentage with no decimals.

Status Check	IF ISNULL([Value]) THEN "No value reported" ELSEIF ISNULL([Target]) THEN "No numeric target" ELSEIF [Scored Year] = "No" THEN "Not scored" ELSEIF [Direction] = "Lower is better" THEN IIF([Value] <= [Target], "Met", "Not met") ELSE IIF([Value] >= [Target], "Met", "Not met") END	Recomputes Status from Value and Target. Put it beside Status in a check sheet; the two columns should match on every row except the FY 2012-13 rows, which read Prior-year value.
Gap to Target	IF [Direction] = "Lower is better" THEN [Target] - [Value] ELSE [Value] - [Target] END	Positive means the result was on the better side of the target. Use only in tooltips, because units differ across measures.
Status Icon	CASE [Status] WHEN "Met" THEN "Met" WHEN "Not met" THEN "Not met" ELSE "Not scored" END	Put on Shape in the scorecard (check mark, cross, open circle) so status never relies on color alone.
Selected Measure Filter	[Short Label] = [p Measure]	Filter for the trend sheet. Set to True.
Area Match	[p Area] = "All areas" OR [Program Area] = [p Area]	Filter for every sheet. Set to True.
Unit Label	CASE [Unit] WHEN "pct" THEN "Percent" WHEN "dollars" THEN "Dollars" WHEN "days" THEN "Days" ELSE "Count" END	Axis caption on the trend sheet.

4. Sheets

Sheet	Build
KPI tiles	Five text sheets. Measures tracked: COUNTD([Measure ID]). Carried in 4 or 5 reports: COUNTD of Measure ID where Reports Present is 4 or more. Three tiles for FY 2015-16, FY 2016-17, and FY 2017-18, each showing [Targets Met] "of" [Targets Scored], filtered to that Value Year. Add Area Match = True to each.
Trend	Columns: Year Label (sorted by Year Order). Rows: Measure Values with Value and Target only, which keeps one shared axis. Marks: Line. Color by Measure Names (Value blue, Target grey); set the Target line to dashed in the format pane. Label: Value As Printed on the Value line. Filters: Selected Measure Filter = True. Tooltip: Value As Printed, Target As Printed, Status, Value Basis, Time Applicable.
Scorecard	Rows: Program Area, Short Label. Columns: Year Label, filtered to FY 2013-14 through FY 2017-18. Marks: Shape on Status Icon, with Value As Printed as the label to the left of the shape. Filter: Area Match = True. Add a parameter action (Select) that sets p Measure from Short Label.
Met by Year	Rows: Year Label filtered to the three scored years. Columns: SUM([Met (number)]) and the not-met count as a stacked bar using Status on Color (Met green, Not met red). Label each segment with its count.
Definitions	Text table. Rows: Program Area, Short Label, Published Name, Calculation Method, Data Source. Add Source URL to Detail and a URL action named "Open source report" that opens it.

5. Dashboard layout (1600 by 1000)

Header (text object): title "SC DSS Accountability Report Measures, FY 2014 to FY 2018" and, on the right, the source line: "Source: South Carolina Department of Social Services, Annual Accountability Reports to the General Assembly, FY 2014 to FY 2018."

Filter row: p Area parameter control shown as a single-value list across the top.

KPI row: the five KPI tile sheets in a horizontal container, equal widths.

Left (about 46 percent): p Measure control, then the Trend sheet, then a text box with the selected measure's published name and calculation method (use a sheet with Published Name and Calculation Method filtered by Selected Measure Filter).

Right (about 54 percent): Met by Year above the Scorecard. Set the scorecard to fit width so it scrolls vertically.

Footer: the source line again with the five report links, and the note "Values are shown exactly as printed. FY 2013-14 and FY 2014-15 targets are not scored because those templates do not say which year the target applies to."

Add a second dashboard tab named Measure definitions that holds the Definitions sheet at full width, with the same header and source line.

6. Colors and type

Role	Hex	Use
 Result	#2a78d6	Value line and points
 Target	#8a8f98	Target line, dashed
 Met	#0ca30c	Status, always with the check shape
 Not met	#d03b3b	Status, always with the cross shape
 Not scored	#b9bcc2	Open circle shape
 Accent	#7a2e2a	Selected row, headings, links
 Background	#f6f4ef	Dashboard background; sheets on white

The file **SC DSS Accountability Palettes for Tableau.tps.txt** holds these colors as a custom palette. Copy its contents into Preferences.tps in your My Tableau Repository folder and restart Tableau. Use a serif font such as Georgia for titles and Tableau Book or Arial for everything else.

7. Check totals

Check	Expected
Rows in Results / Measures	169 / 42
Targets met, All areas	FY 2015-16: 7 of 25; FY 2016-17: 7 of 24; FY 2017-18: 4 of 24
Child Support, targets met	FY 2015-16: 6 of 8; FY 2016-17: 6 of 7; FY 2017-18: 2 of 7
Child support collected, FY 2017-18	\$301,419,050 against a target of \$305,000,000 (Not met)
Monthly visits in foster care, FY 2012-13 to FY 2017-18	97.66%, 96.00%, 93.70%, 95.30%, 97.40%, 97%
Status Check vs Status	Identical on all rows except the 29 FY 2012-13 rows

If a count differs, check that Value Year is sorted by Year Order, that the Area Match filter is set to True, and that the relationship uses Measure ID on both sides.