



TABLEAU USER GROUP

June 11, 2019

Agenda

Welcome

- Contract Changes for Prep - **Katie**
- Tableau training videos link - **Katie**

- New user “How To” documents - **Kendal**
- Every 100 Students dashboard - **Kendal**

- Demo example of pyramid dashboard - **Jeremy**
- Demo of setting permission (SharePoint embedding issues if set permissions to all users) - **Jeremy**

- Set Actions - New features with upgrade - **Sushanth**
- Market Basket Analysis - **Sushanth**

- Data Digest Project - **Nichole**
- Tableau Conference Details - **Taylor**

Questions and Closings





Contract Changes - Prep

Katie Hendryx



Contract Changes - Prep

Now

- **Prep License**
 - FREE to the University
- **Desktop Licenses**
 - Centrally funded - maintenance fee

July 2020

- **Prep transitions into a Creator License**
 - **NOT** centrally funded
 - \$300 per year per license for 3 years
 - \$630 per year per license in year 4
- **Creator License**
 - **Users** will need to budget for the license
- **No Prep - Keep Desktop Licenses**
 - Continued central funding

Salesforce acquired Tableau yesterday and as we know more we will keep you informed.



Tableau Training Video Links

Katie Hendryx



FREE Tableau Training Videos

Free Tableau Videos

11 VIDEOS	Connecting to Data	62 MIN
24 VIDEOS	Visual Analytics	136 MIN
8 VIDEOS	Dashboards and Stories	40 MIN
▶	Getting Started with Dashboards and Stories	4 MIN
▶	Building a Dashboard	5 MIN
▶	Dashboard Objects	4 MIN
▶	Dashboard Formatting	4 MIN
▶	Dashboard Interactivity Using Actions	5 MIN
▶	Dashboard Extensions	4 MIN
▶	Device Designer	5 MIN
▶	Story Points	5 MIN



New User “How To” Documents

Kendal Kosta-Mikel



How To Documents

- Started by CoS student employees to document common Tableau practices for new hires
- Variety of topics
 - Conjoin Filters
 - Hex Map
 - Sankey
 - Viz in Tooltip
 - Ranked Line Graph
 - Color By filter
 - Sheet Selector Parameter
 - Format Totals on Stacked Columns
 - Replace Current Data Source with Updated Version



Every 100 Students

Kendal Kosta-Mikel





Pyramid Dashboard

Jeremy Sheiko





Setting Permissions (SharePoint)

Jeremy Sheiko



Market Basket Analysis

Sushanth Janagam



Market Basket Analysis

This is not the typical analysis used by supermarket giants as our data doesn't involve customer transactions.

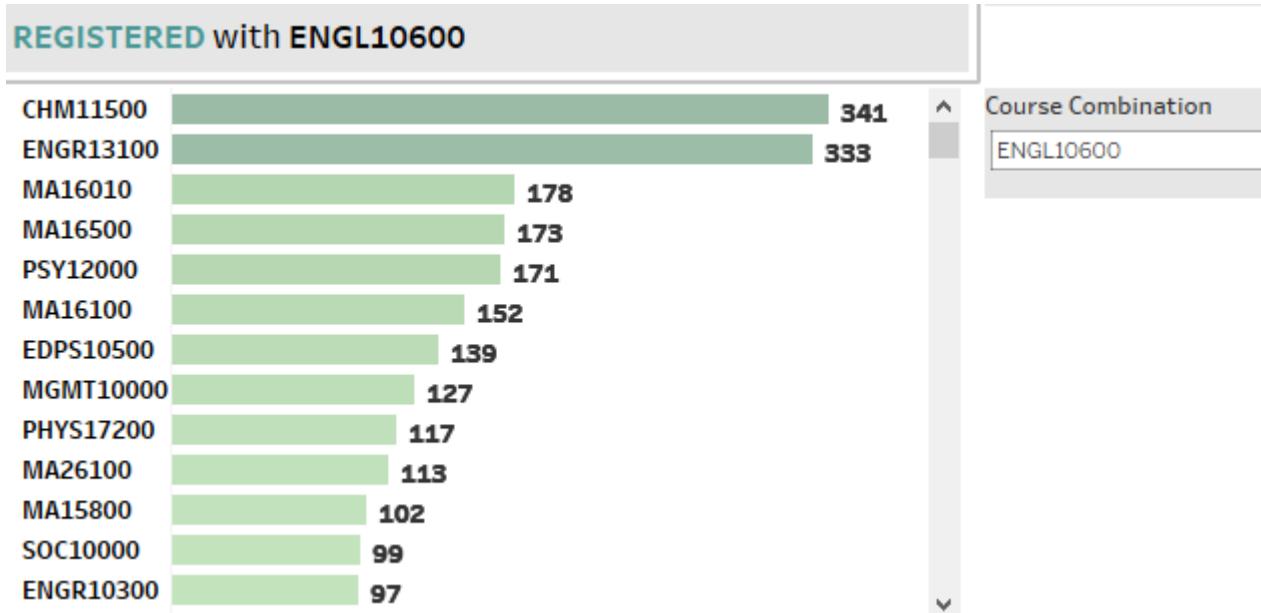
The compromise:

We can dynamically answer combination questions. This is the Market basket Analysis we can do in tableau.

Ex: How many students got/didn't get both X and Y. X and Y can be types of Scholarship, Grades, Course Enrollment etc.



Example



341 students Registered for both ENGL10600 and CHM11500

Steps:

Since most of our analysis is around student data, we assume the group is students.

Type	
Athletic Aid	Abc
Employment & Employme..	Abc
Federal Grants	Abc
Federal Loans	Abc
Federal Work Study	Abc
Fee Remissions	Abc
Forgivable Loans	Abc
General University Grants	Abc
Graduate Fellowships & T..	Abc
Non-Indiana State Awards	Abc
Private Awards	Abc
Private Loans	Abc
Purdue Loans	Abc
State Awards	Abc
University Incentive Gran..	Abc
University Scholarships	Abc

How many students got a combination of X and Y.

X and Y are dynamic and in this case let's assume they are AID related.

Create a parameter, two fields and a Set

Parameter :
Add from field ,
select the same
Dimension : TYPE

Create Parameter ✕

Name: Comment >>

Properties

Data type:

Current value:

Display format:

Allowable values: All List Range

List of values

Value	Display As
Athletic Aid	Athletic Aid
Employment & Employment Relat...	Employment & Employment ...
Federal Grants	Federal Grants
Federal Loans	Federal Loans
Federal Work Study	Federal Work Study
Fee Remissions	Fee Remissions
Forgivable Loans	Forgivable Loans
General University Grants	General University Grants
Graduate Fellowships & Trainin...	Graduate Fellowships & Trainin...

Add from Parameter Add from Field Paste from Clipboard Clear All

OK Cancel

Calculated Field:

ID MATCH

```
if [Type]=[Type combination ] then 1 end
```

Set **Right Click on ID-> Create Set**

Edit Set [Also contains] ✕

Name:

General **Condition** **Top**

None

By field:

=

Range of Values

Min: Load

Max:

By formula:

Create a parameter, two fields and a Set

Calculated Field 2 :

Type also contains

```
IF [Type] <> [Type combination ] then [Type] END
```

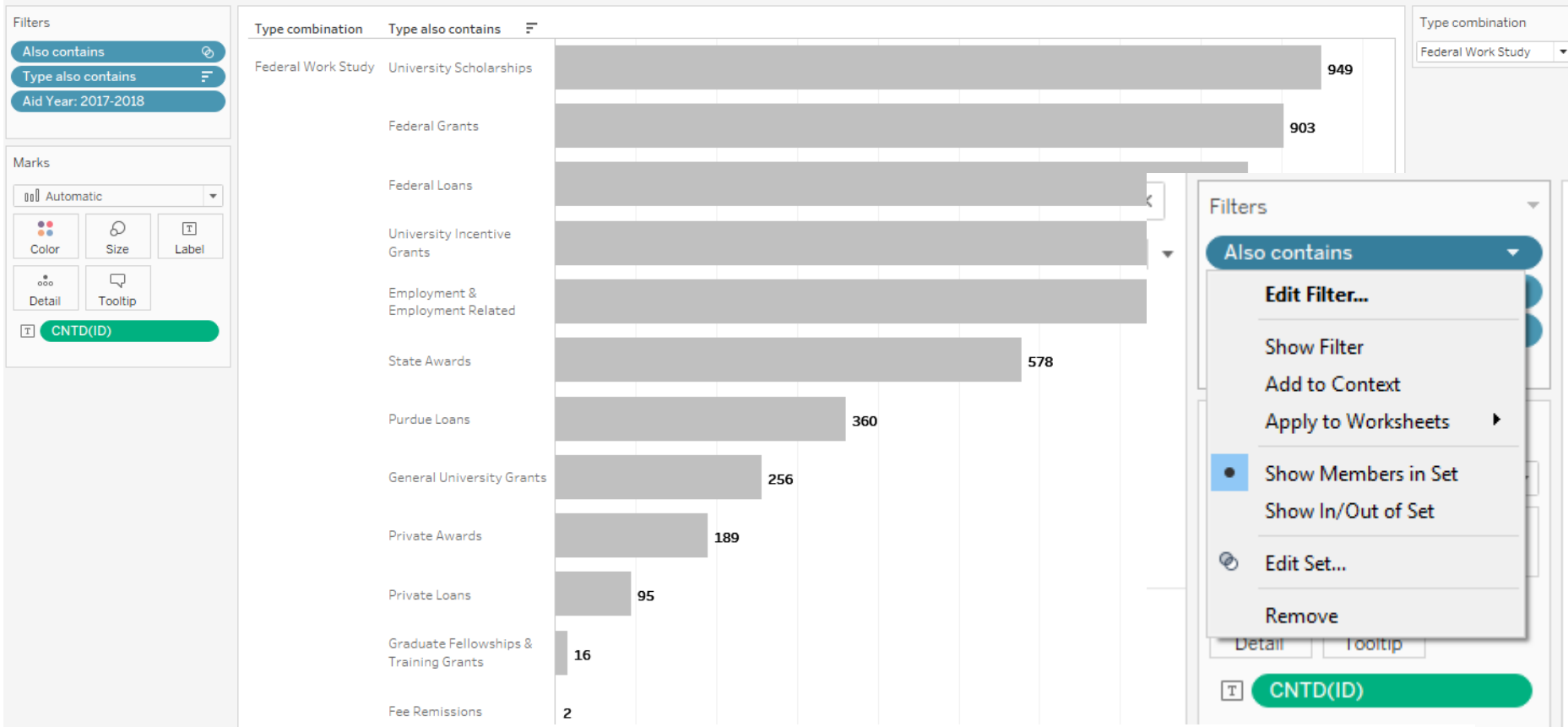
We create a parameter so we can have two axis with same fields.

The calculated field 1 (ID Match) is used to flag Id's that have the desired combinations.

Set is created to dynamically filter out the above flagged ID's.

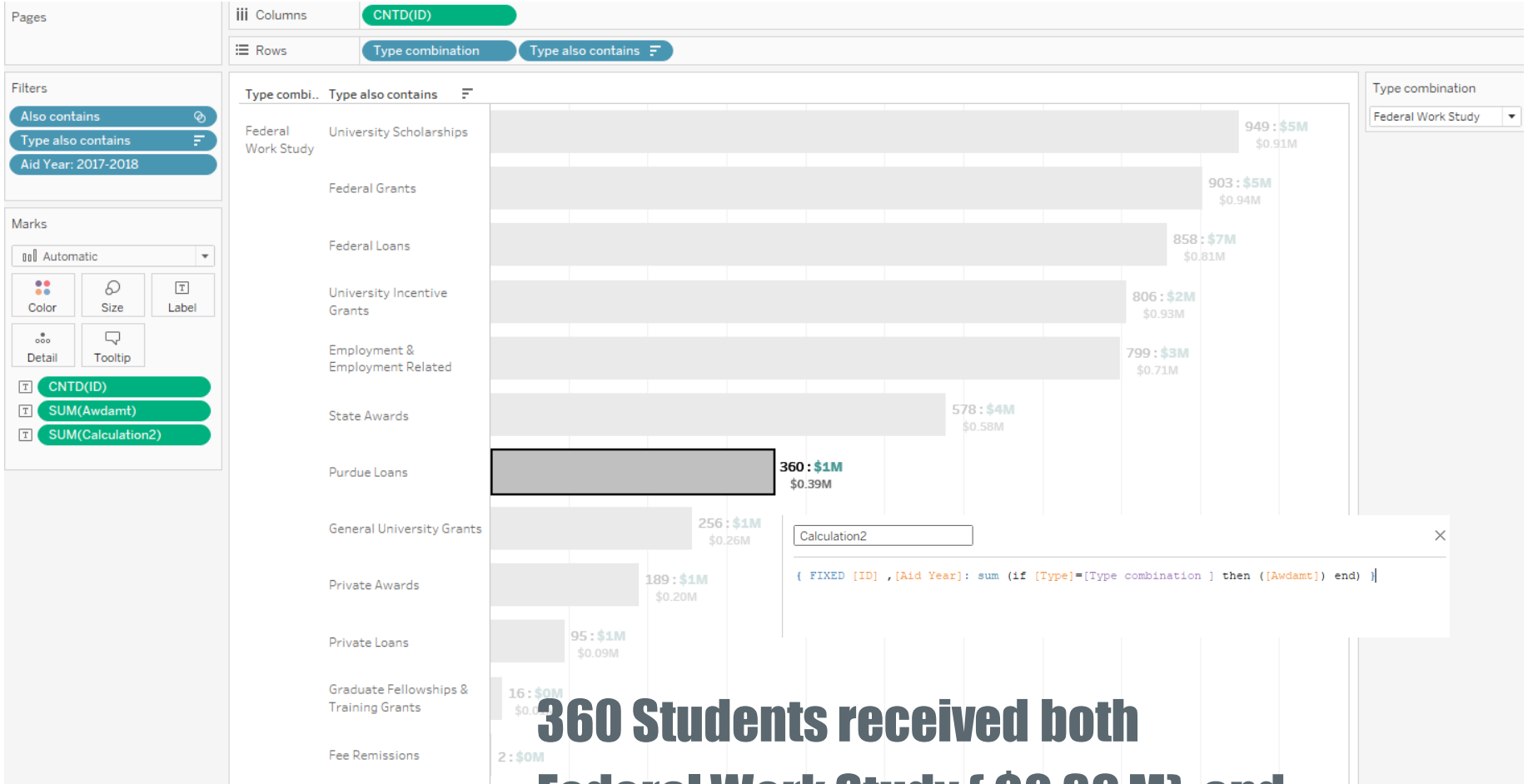
Calculated field 2 (type also contains) is used to filter out X-X and Y-Y combinations which are obvious.

Implementation



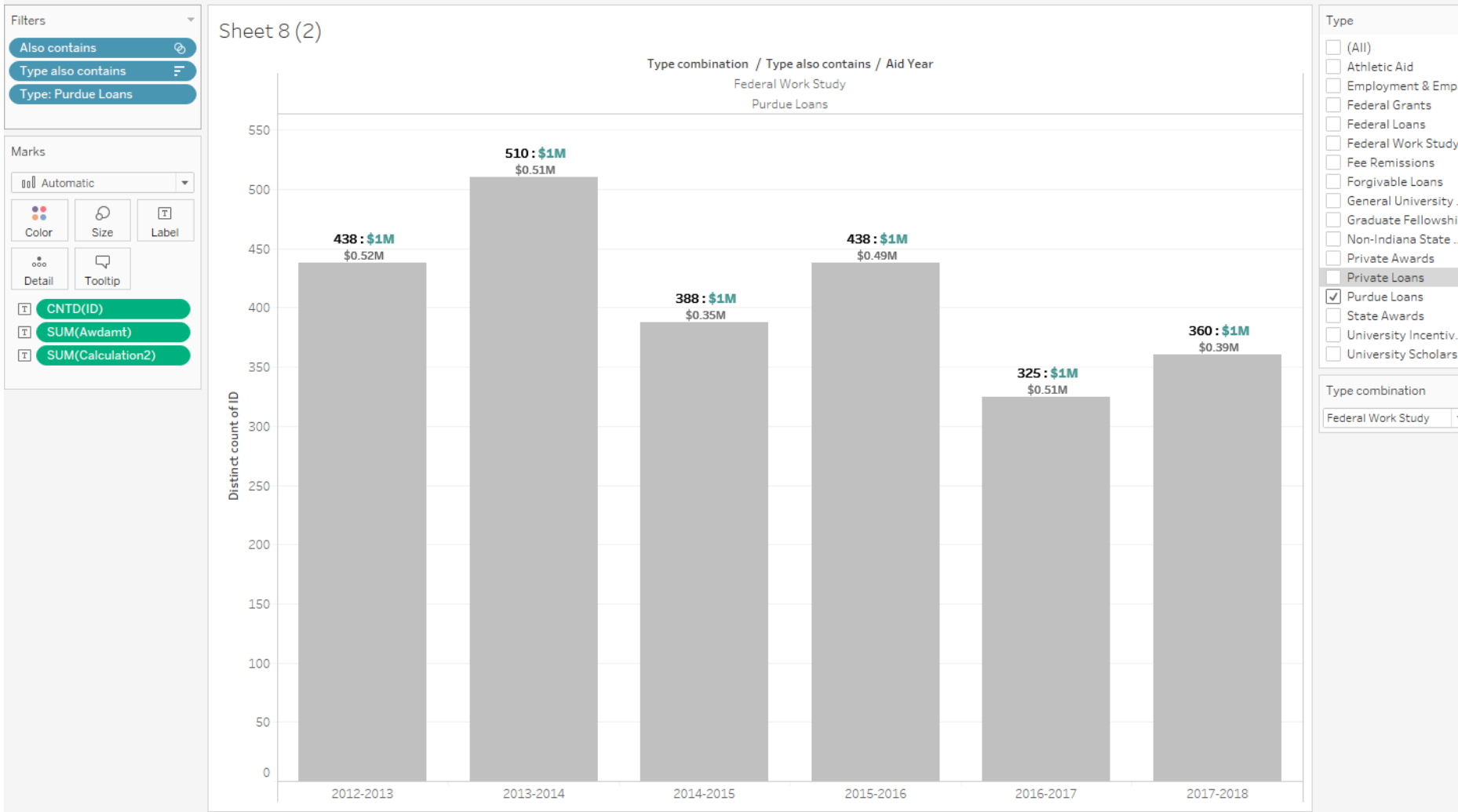
360 Students received both Federal Work Study and Purdue Loans

Further implementation 1:



360 Students received both Federal Work Study (\$0.39 M) and Purdue Loans (\$1M)

Further Implementation 2



Trends of Custom User combinations



Set Actions - New Features With Upgrade

Susanth Janagam



SETS

SETS are a way to custom group things in an Organization.

Region	
Central	In
East	Out
South	Out
West	In

They are categorized into two: IN SET , OUT of SET

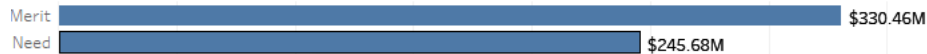
We had an option of custom defining the set by conditions. Ex: IF Profit > \$10,0000 then IN SET.

What if USER is given the power to custom group?

Tableau has recently released **SET ACTIONS, this is deemed to be the most powerful feature since LOD's.**

How to create SET ACTIONS?

For this example, we are using one sheet to group other sheets. There are ways to group and use actions with in each sheet.



Source Sheet:

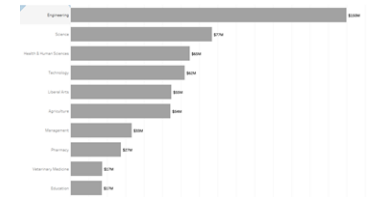
We need a dimension based on which we want to group the TARGET.

Example : Merit based Need Vs Non Merit based Need.

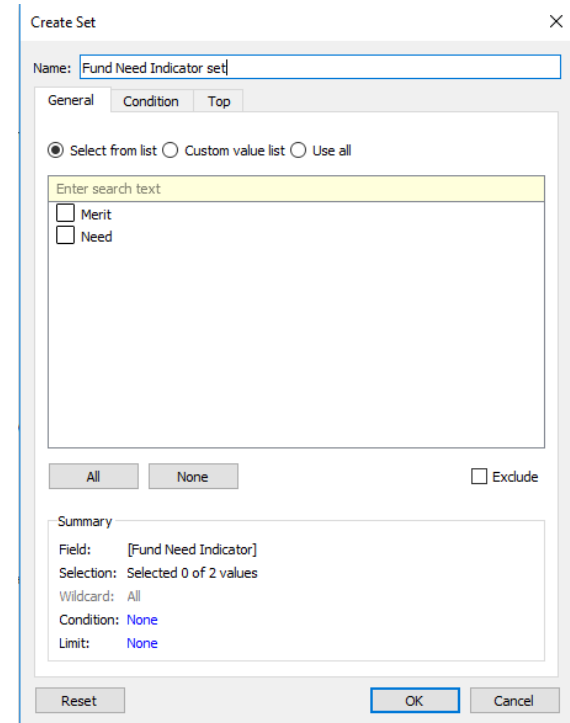
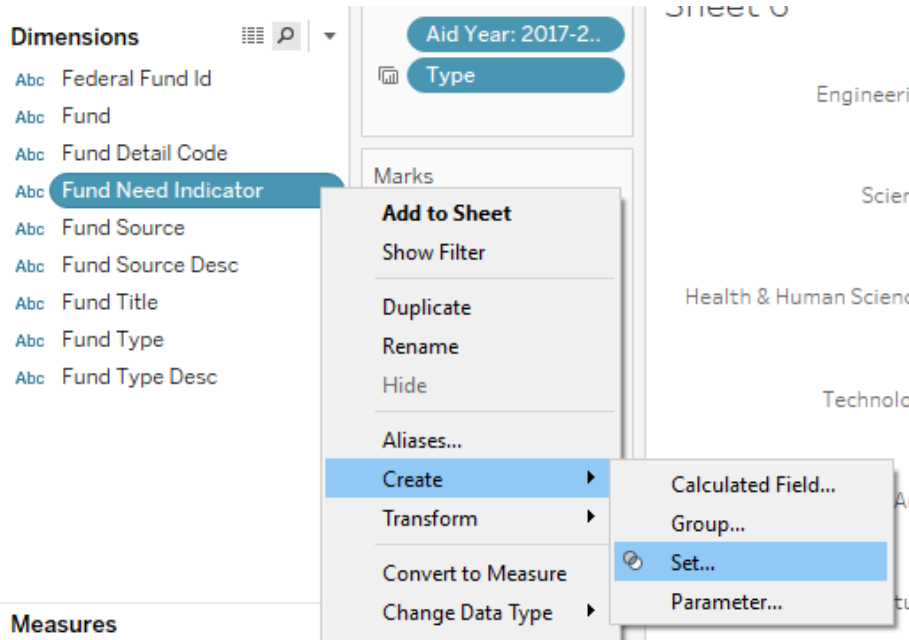
Target Sheet:

We need a dimension that groups based on SOURCE.

Example : Colleges



Creating Set



Here, Source sheet dimension or Merit/Need indicator should be used to create the set.

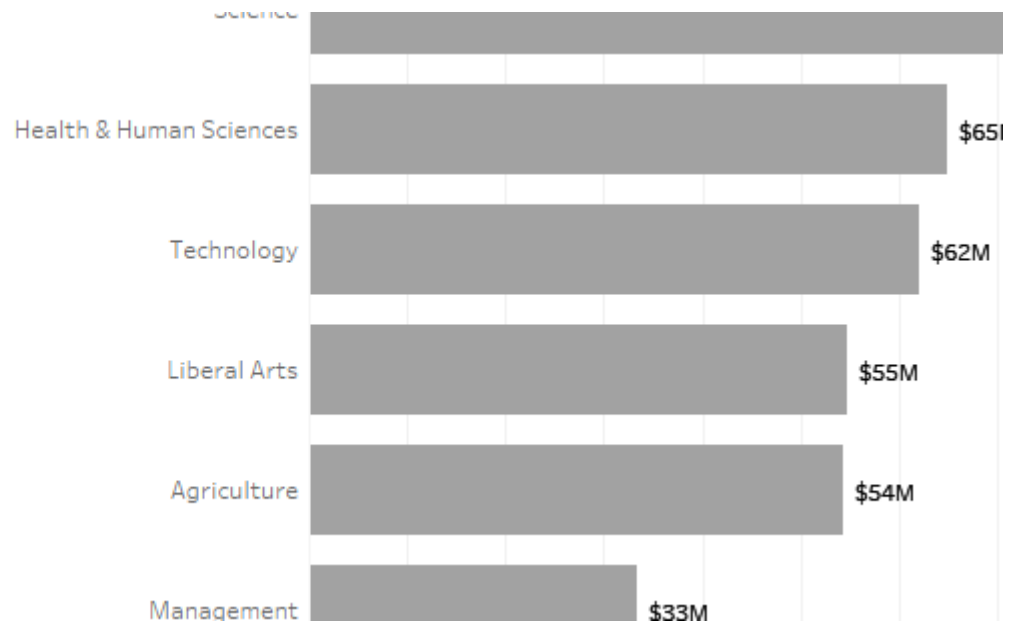
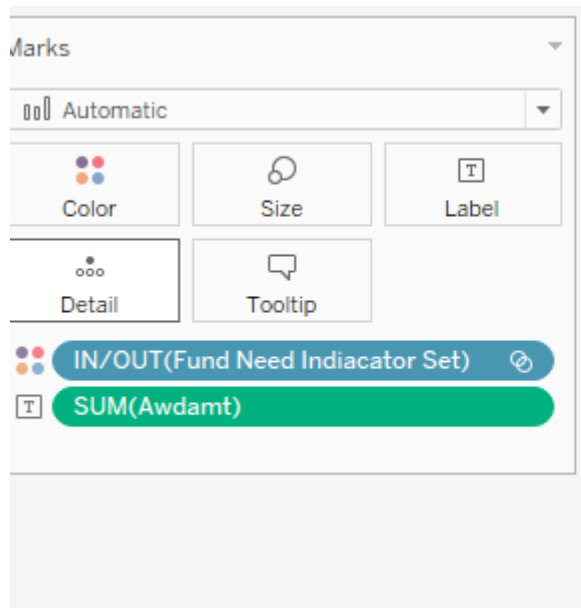
Using the set

Drag the set on to the TARGET SHEET into Color.

IN SET (Whatever User Clicks) = BLUE

OUT SET (Remaining) = Grey

Since we didn't set any actions yet, all the colleges in TARGET are in grey color.



Set Actions in Dashboard

Edit Set Action

Name: Set1

Source Sheets

Dashboard 1

Run action on:

Hover

Select

Menu

Sheet 5 (2)

Sheet 6

SOURCE

TARGET

Target Set

atabshonors

Fund Need Indicator Set

Clearing the selection will:

Keep set values

Add all values to set

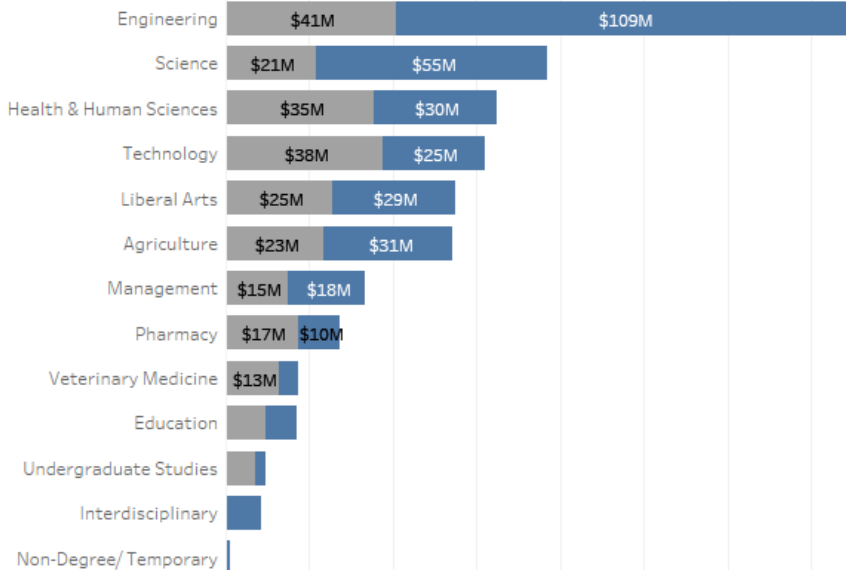
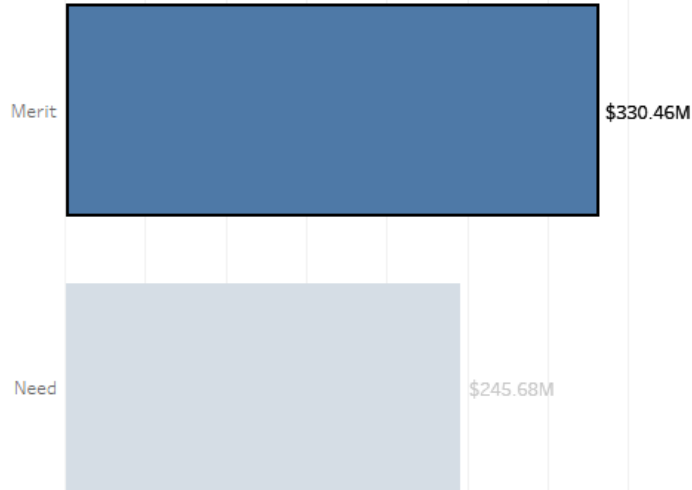
Remove all values from set

OK Cancel

Put both the SOURCE and TARGET sheets on the dashboard.

Steps:
Dashboard -
Actions -
Add Action -
Change Set Values.

Implementation:



The bottom half is split between merit and need based on our selection.

As mentioned before,
BLUE: IN SET
(MERIT based Aid)

https://tableau.itap.purdue.edu/views/SetActionsExample/Dashboard1?iframeSizedToWindow=true&embed=y&:showAppBanner=false&:display_count=no&:showVizHome=no



Data Digest Project

Nichole Ramirez



Data Digest Improvement Project

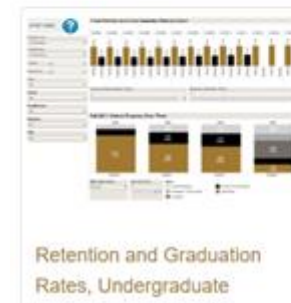
What's going to change?

Accessibility
Transparency
Functionality

Technical feedback on functionality

Tableau Users Group:
Evaluate current dashboards and new demos

Want to provide feedback? Contact:
nramire@purdue.edu -or-
datadigest@purdue.edu





2019

Tableau Conference

Taylor Stayback



2019 Tableau Conference

\$600 DISCOUNT CODE: VEGASTC19EDU

Prices increase August 16





Community Feedback and Questions





THANK YOU

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WE ARE PURDUE. WHAT WE MAKE MOVES THE WORLD FORWARD.