

PCS TOC Dashboards

Process Guide

Note: This guide is best [viewed on the web](#).

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Process Overview:

1. [Download data files](#)
2. [Convert data files with R script](#)
3. [Load converted files into Tableau and make data relationship](#)
4. [Populate dashboards](#)

1. Download Data Files

Our dashboards require **three** .CSV data files – an Insightly TOC report, an iPad Check-In data file, and an Insightly All Contacts data file. For the data conversion script to work properly, these files must be formatted and named as outlined below.

After downloading the reports containing the specified columns, rename them with the required file name. Place all downloaded and renamed files in a folder on your computer called **“PCS Dashboards.”**

1. Insightly TOC Report

Required File Name: insightly_TOC_report.csv

Necessary Data Fields

Note: Consistent field names are required, but the columns can be in any order.

- Contact ID
- First Name
- Last Name
- Theory of Change

- Equity Milestone Date
- Cohesion Milestone Date
- Gender
- Membership
- Race/Ethnicity
- High School Graduation
- Date of Birth
- Membership Start Date
- Squash Level
- Squash Rating
- Schools
- Member Number
- Country of Birth
- Season Record
- Languages

2. iPad Check-In Data

Required File Name: iPad_check_in_data.csv

Necessary Data Fields:

Note: Consistent field names are required, but the columns can be in any order.

- Date
- Type1
- Category
- Number1
- FirstName
- LastName
- RecordID
- Number2
- Binary1
- Binary2
- Number3

3. Insightly All Contacts File

Required File Name: all_contacts.csv

Necessary Data Fields:

Note: Consistent field names are required, but the columns can be in any order.

- RecordId
- FirstName
- LastName

2. Convert Data Files with R Script

If this is your first time completing this process, you will need to download and install R and R Studio.

[\[Instructions for Downloading and Installing R & R Studio\]](#)

Once you've downloaded both R and R Studio, open R Studio.

Follow these steps to convert the .CSV files using the R script.

1. *Place R Script into your "PCS Dashboards" folder.*

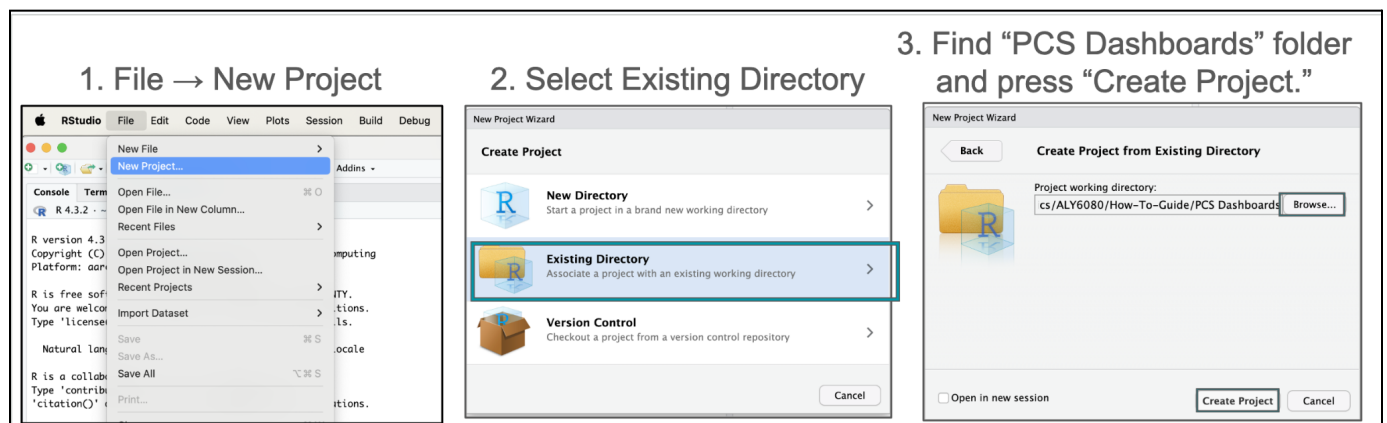
Make sure that the provided "PCS_dashboard_data_conversion.Rmd" file is on your computer. Move it into the same "**PCS Dashboards**" folder as your three .CSV files.

2. *Create or Open PCS_Dashboards project in R Studio.*

If this is your first time completing this process, select **File --> New Project** from the top-level R Studio menu. Click on **Existing Directory** from the pop-up menu and then use the **Browse** button to select your "**PCS Dashboards**" folder. Once you select the pathway to that folder, press the **Create Project** button. This will create an R project called "PCS Dashboards."

*Once you have created this R Studio project once, you can continue to open it as an existing project each time you need to run the data conversion script. **File --> Open Project**.

Creating a New Project in R Studio:

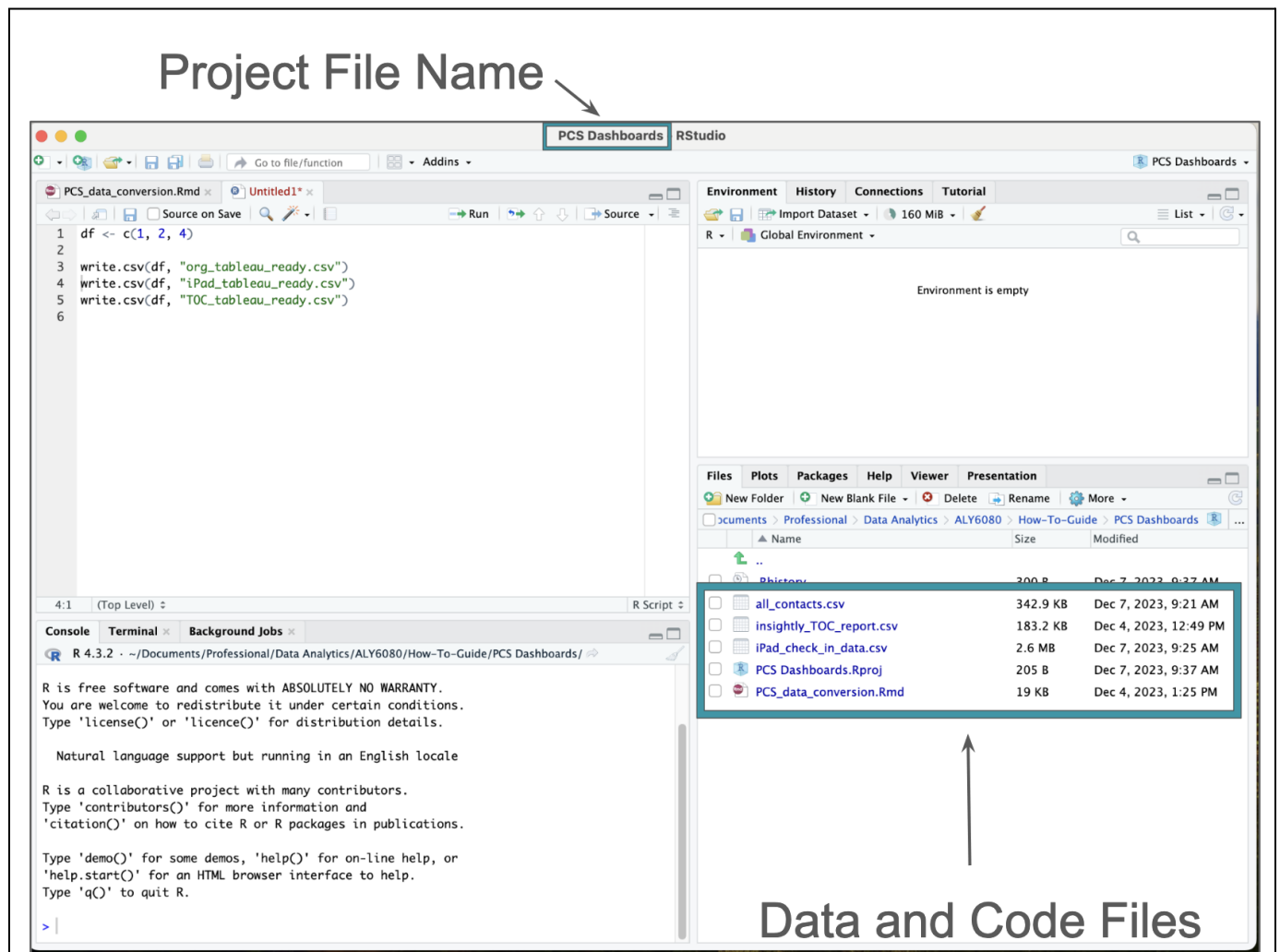


3. *Ensure the .CSV files and PCS_dashboard_data_conversion.Rmd are accessible in your R Studio Project.*

After creating or opening the "PCS Dashboards" project, verify that the project name "PCS Dashboards" appears on the top bar of the

RStudio window and that your three .CSV files and the .Rmd code file are all present in the “Files” panel of RStudio.

Checking that input data .CSV files and .Rmd script are properly loaded in R Studio.



4. Execute R script.

From the files pane in R studio, click on the “PCS_data_conversion.Rmd” file. The script will open in the console.

If you wish to alter the thresholds for the organizational goals on the Org_TOC dashboard or the activities included from the iPad check-in data, use the steps below to edit the script.

• A Quick look at the R Script

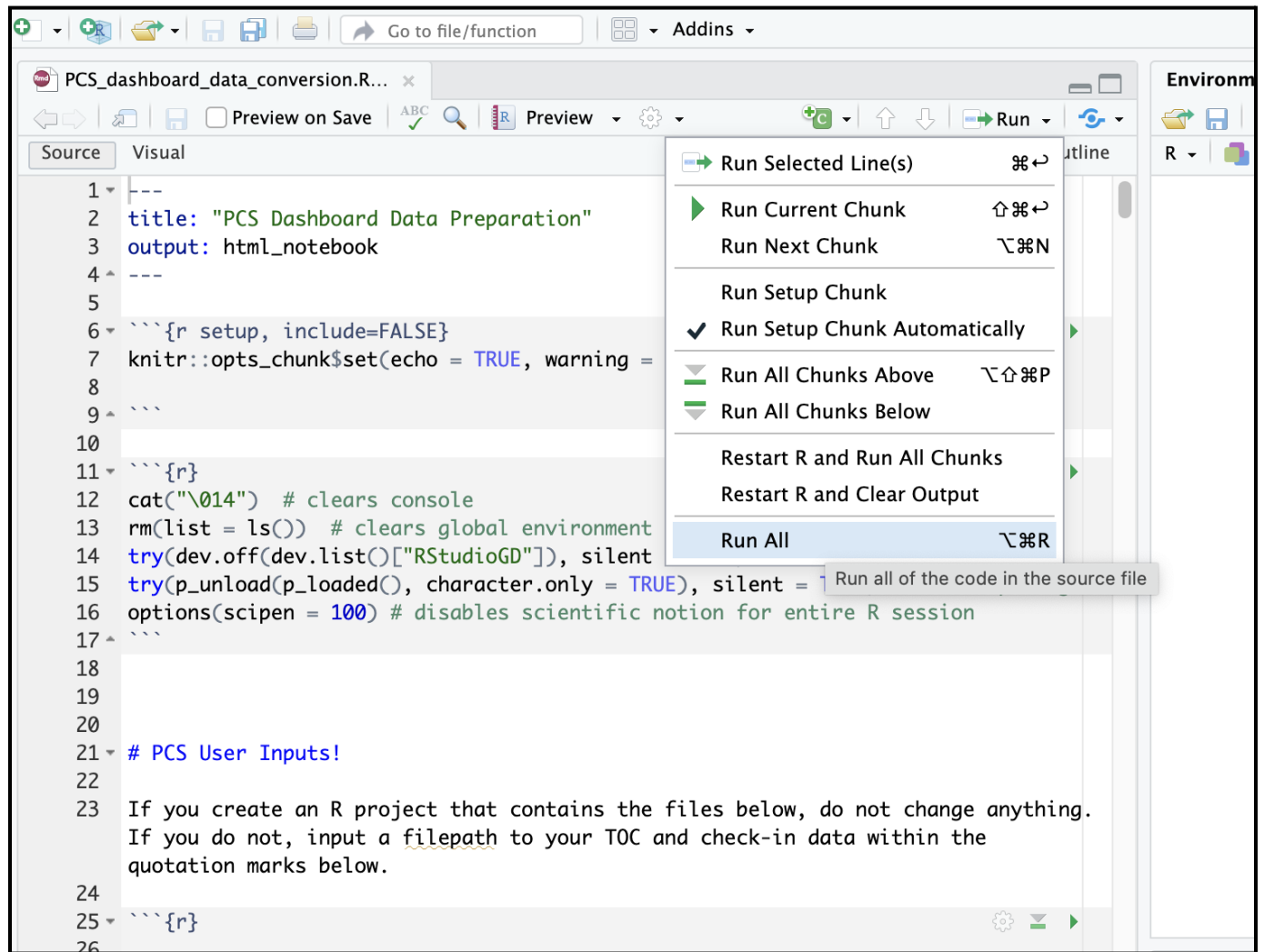
```
43 {r}
44 cat_of_int <- c("volunteer", "squash", "fitness", "cafestudy", "event")
45 {r}
46
47 Below are the goals set for each of the organisational level milestone.
48 - Guided and self guided milestone goals represent % Access.
49 - Equity and cohesion represent raw number of respective milestones achieved.
50
51 {r}
52 guided_access_milestone_goal <- 80
53
54 sg_access_milestone_goal <- 30
55
56 equity_milestone_goal <- 20
57
58 cohesion_milestone_goal <- 10
59 {r}
```

The only part of the script you may want to interact with is shown here:

- “cat_of_int” (categories of interest) is a list that you can edit to capture specific activities in the iPad check in data. Anything not in this list will be converted to “other”.
- You can also edit the milestone goals. This will affect when trapezoids on the organizational tab change colors.

After making any desired changes above, you’re ready to run the script. Click **Run --> Run all** to execute the script.

Executing the “PCS_data_conversion.Rmd” file in R Studio



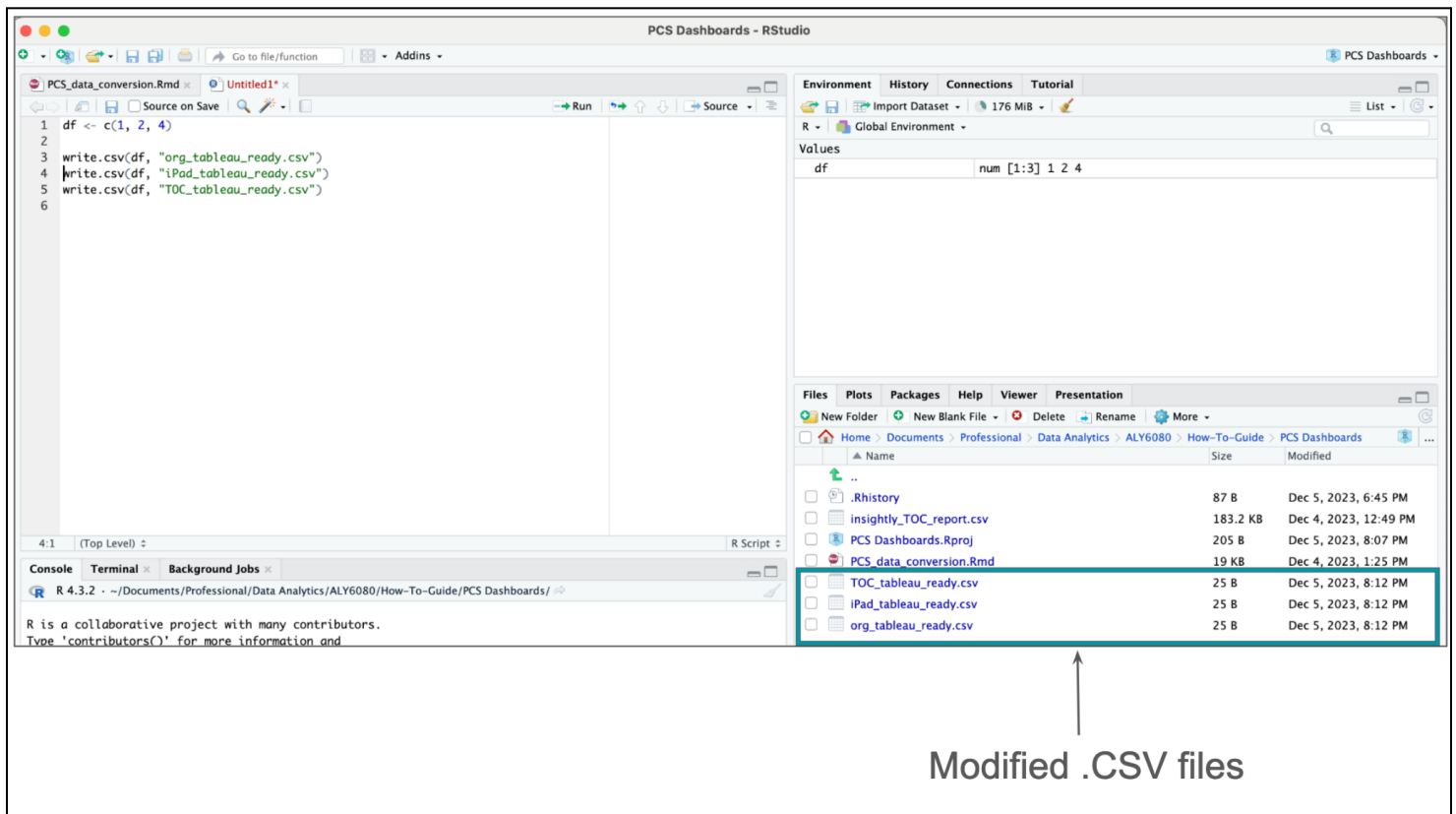
While the code is running, the console may occasionally show messages about “warnings” from specific functions – these can be ignored and are a normal part of the data transformation. The code will continue to run even with these “warning” messages – a more significant error would completely stop the code execution.

You will know that the script is finished (and ran successfully) when you see three new .CSV files in the “Files” panel of R Studio:

1. “TOC_tableau_ready.csv”
2. “iPad_tableau_ready.csv”
3. “Org_tableau_ready.csv”

These files will also be saved in the “PCS Dashboards” computer file.

Verifying code outputs three new .CSV files.



5. Exit R Studio

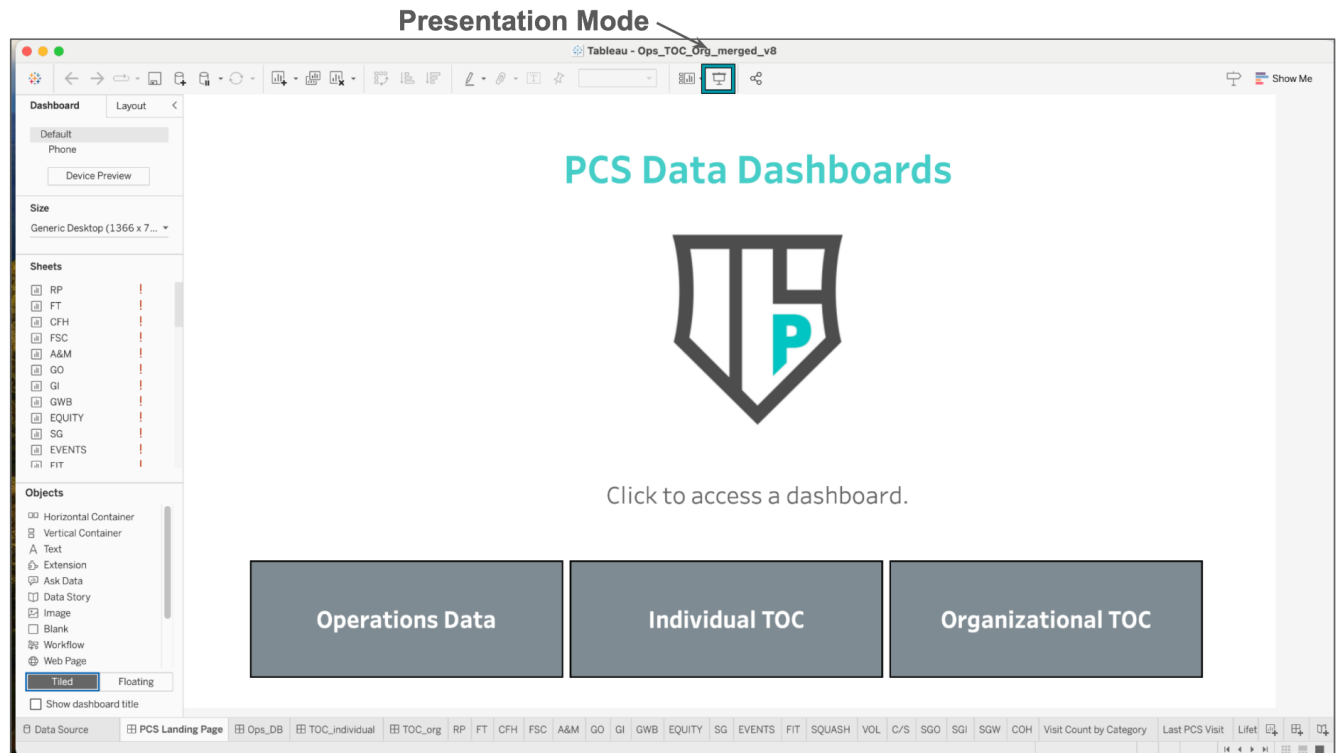
Once you verify the creation of the three new .CSV files in step 4, you can close R Studio.

3. Load Converted Files into Tableau Desktop

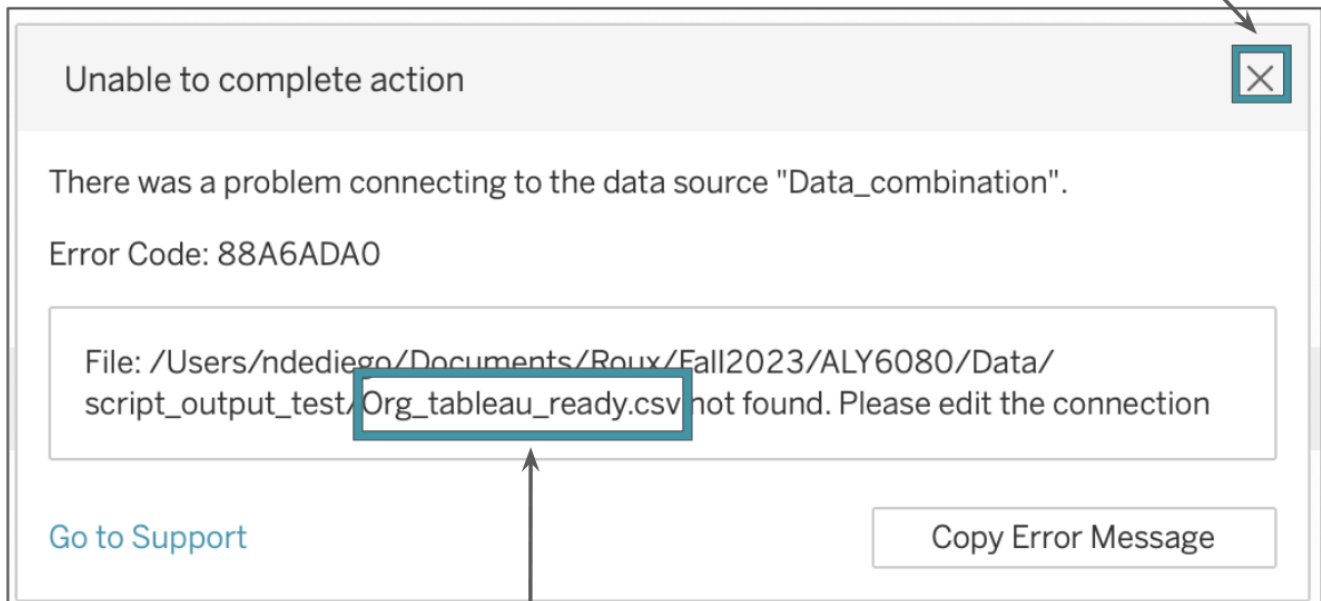
Click on the “PCS_Dashboards_TeamC.twb” file in your “PCS Dashboards” folder to open the Tableau workbook.

Follow these visual directions to establish connections to the data files on your computer.

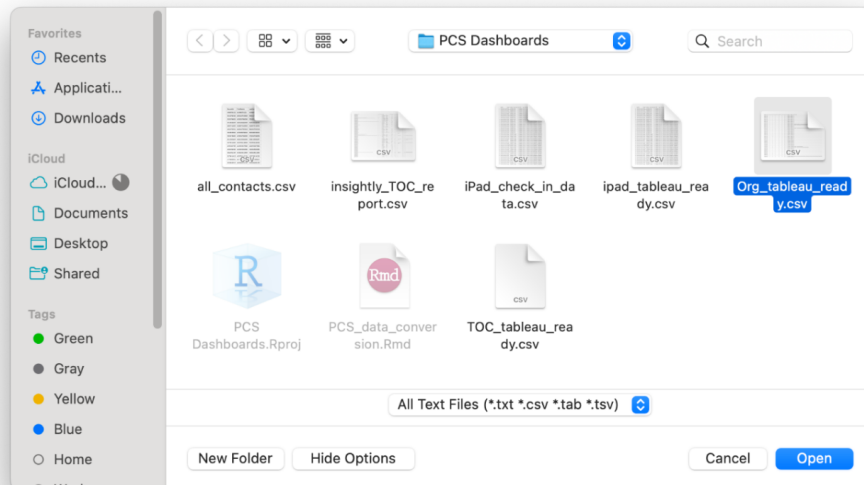
1. Open workbook. It should open on the PCS Landing Page tab.
2. Click presentation mode and click on the “Operations Data” button.



3. Note the file name in the error message.
4. Press “x” on the error message to dismiss it.



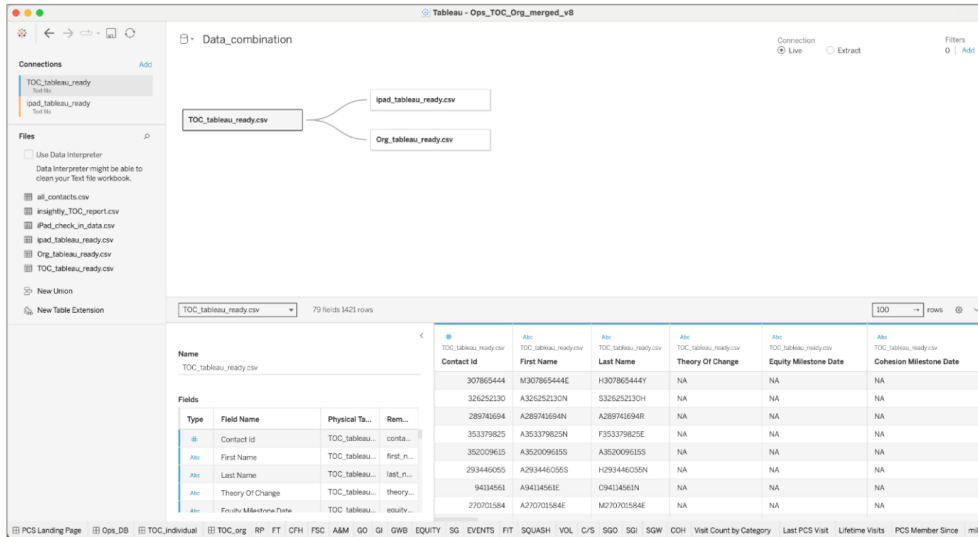
File name



5. If the file selection box doesn't open automatically, click "Locate File."

6. Select the correct file name (the one referenced in the error message) in your PCS Dashboards folder.

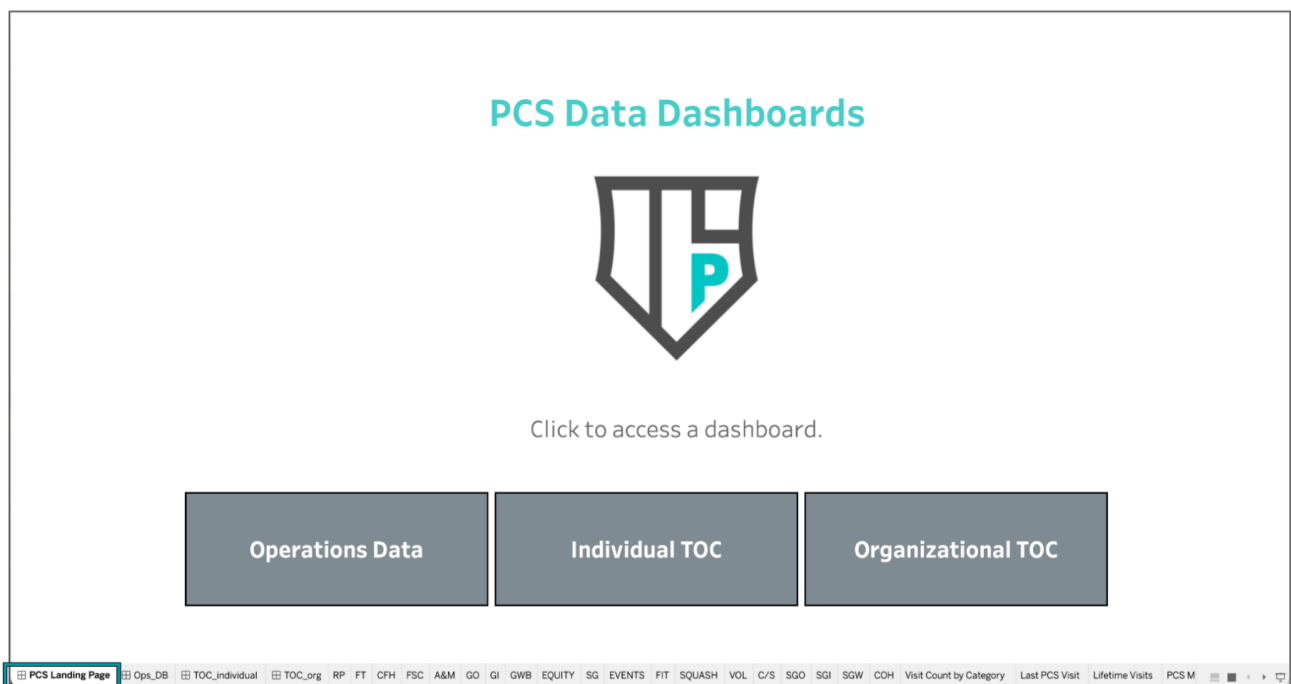
* You may need to select this file and click open twice.



7. You will be sent to the “Data Source” pane.

You don’t need to do anything on this page because the remaining data connections should happen automatically.

8. Use the bottom tab navigation bar to select “PCS Landing Page.”
9. If it doesn’t automatically open in presentation mode, select this mode again to make the view fullscreen.



You now have connections between your data files and the Tableau dashboards – all dashboards should work fully.

A couple of helpful notes:

- When you're finished interacting with dashboards, you can press "ESC" to quickly exit the full-screen presentation mode.
 - Once you've made the data connections the first time, subsequent connections should be easier to make, as the default folder Tableau searches in will be your "PCS Dashboards" folder.
 - The only tab along the bottom that you should need to access is the "PCS Landing Page" tab. The other tabs are the three dashboards – Ops_DB, TOC_individual, and TOC_org – and a series of worksheets (hidden) that are all pulled onto the dashboards to populate different views of the data.
 - The workbook and dashboard may need some time to fully load and execute.
 - When you quit Tableau and press save, the program will reopen on the tab that you had open when it was last closed. If you always leave the "PCS Landing Page" selected, it should always be the dashboard showing when you open the Tableau file.
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[Troubleshooting Assistance](#)

We are happy to help if this guide doesn't successfully allow you to access the PCS Dashboards or if you run into any challenges in the future.

Please don't hesitate to reach out to us for help!

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