



Storytelling and Report Making with Data

Dr. Mikala Meize-Bowers, Washington State Center for Court Research (WSCCR)
October 2024

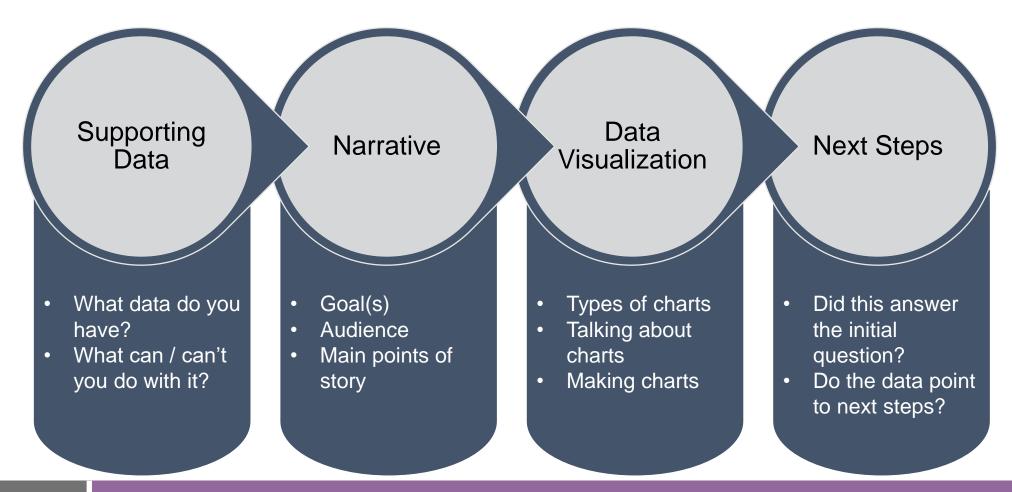
Objectives

Use Excel to organize data

Create charts, tables, and graphs to summarize data

 Tell a story using data visuals to clearly communicate data summaries







Supporting Data

- What data are you working with?
 - Participant data
 - Court records
- How much data do you have?
 - 1 year
 - 10 years
- What can / can't you do with this data?



- Example data format:
 - One participant per line
 - No missing data (i.e., all cells are filled in)
- What kinds of questions can we answer with this data?
 - What data do we have?
 - How far back does our data go?



- Example data format:
 - One participant per line
 - No missing data (i.e., all cells are filled in)
- What kinds of questions can we answer with this data?
 - What data do we have?

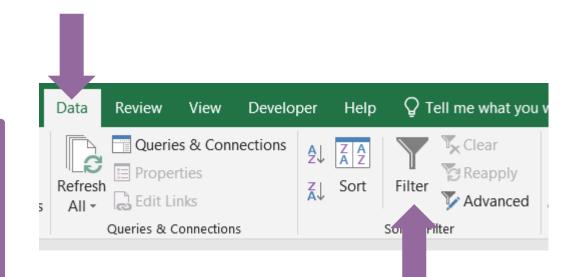
| 4 | Α | В | С | D | Е |
|---|-----------------|------------|----------------|--------------------|--------------|
| 1 | Community Court | Today: | 10/14/2024 | | |
| 2 | Name | Status | Case Number | Age at Referral | Race |
| 3 | Type Entry | Select One | Type Entry | Formula | Multi-Select |
| 4 | Participant 1 | Closed | 311485 | 45 | White |
| - | | | | | |

- 1. Right Click
- 2. Select "Copy"
- 3. Open new sheet
- 4. Paste "transpose"



- Example data format:
 - One participant per line
 - No missing data (i.e., all cells are filled in)
- What kinds of questions can we answer with this data?
 - What data do we have?
 - How far back does our data go?
- Practice Sorting & Filtering Data

| | Α | В | С | D | E |
|---|-----------------|------------|------------|----------|--------------|
| 1 | Community Court | Today: | 10/14/2024 | | |
| | | | Case | Age at | |
| 2 | Name ▼ | Status 🔻 | Numbe * | Referr * | Race 🔻 |
| 3 | Type Entry | Select One | Type Entry | Formula | Multi-Select |
| 4 | Participant 1 | Closed | 311485 | 45 | White |
| 5 | Participant 10 | Active | 189276 | 41 | White |
| 9 | i diticipant io | , ,,,,,,,, | | | |

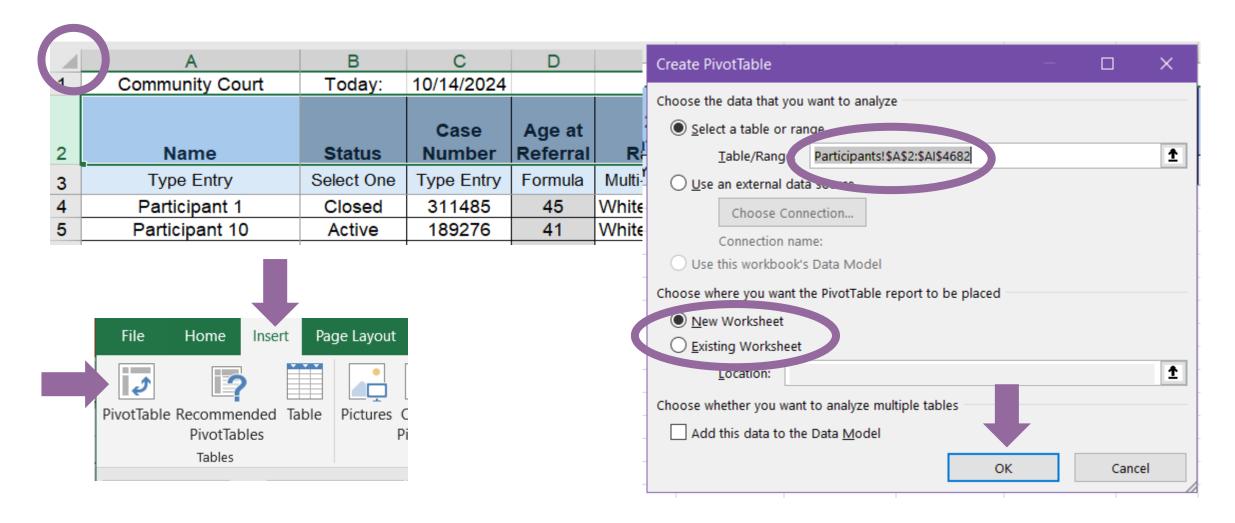




- Example data format:
 - One participant per line
 - No missing data (i.e., all cells are filled in)
- What kinds of questions can we answer with this data?
 - What data do we have?
 - How far back does our data go?
- Practice Sorting & Filtering Data
- Practice creating pivot tables with Excel
 - Change outcomes to sums, counts, averages, maximums

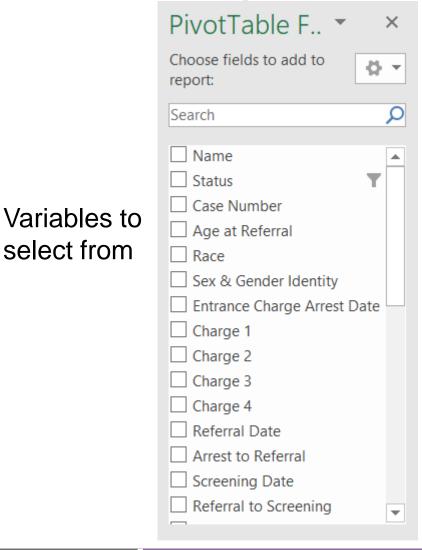


Supporting Data – Pivot Tables

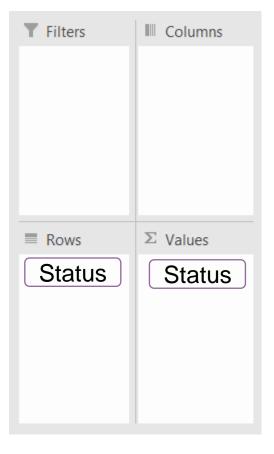




Supporting Data – Pivot Tables

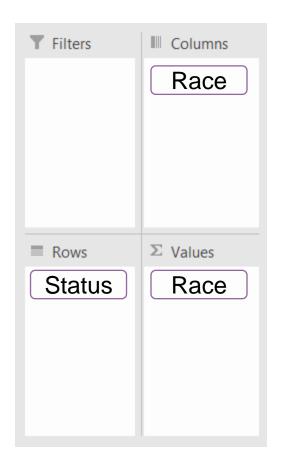


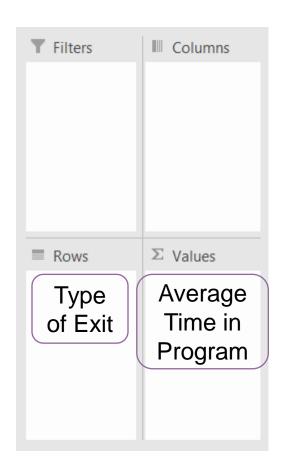
Ways to organize variables

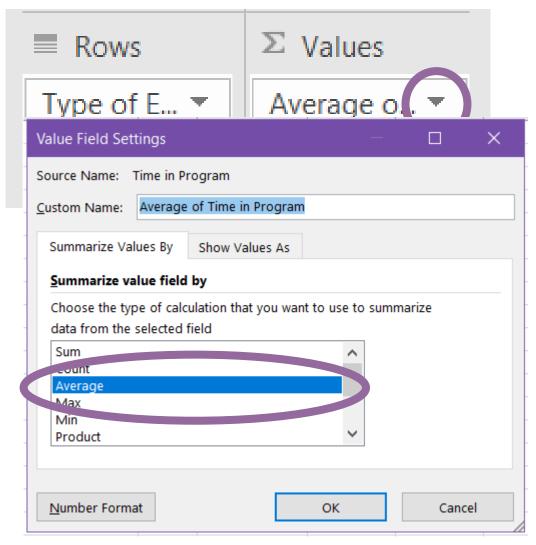


select from

Supporting Data – Pivot Tables







Narrative

Goals

- What question do we want to answer?
- What impact do we want to have?
- What outcomes are we hoping for when we present this information?

Example data

- Focus on program entry
- Goal is to identify strengths and challenges in program entry based on the example data



Narrative

- Audience
 - Who will take in this information?
 - How long will they have to review the information?
- Example data
 - Presenting to the team, and then an advisory board or steering committee to get help addressing the challenge areas.
 - You'll share this information at the meeting, but not before, so we want to make sure the key points are easy to identify and understand.

Narrative

Story

- What is the main point(s) of this story?
- How are these topics usually talked about?
- How does data integrate with how people feel about the topic?

Example data

- What kind of information are they likely to want to know?
- Do we have the data necessary to talk about that?
- What can we share with the data we have?

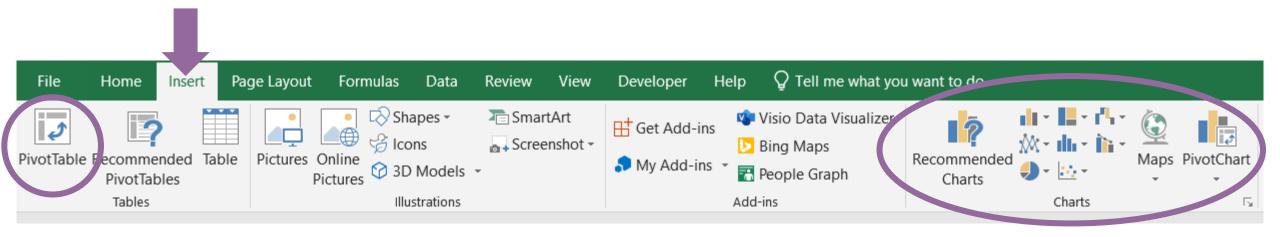


Data Visualization

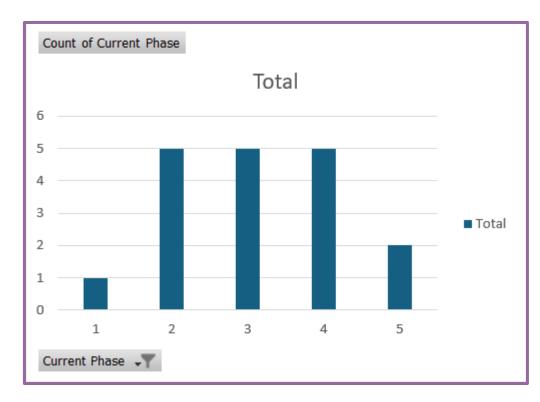
- Remember the main point(s) of the story.
- What charts highlight the main point? What charts hide the main point?
- What charts are you comfortable with talking about?
- What charts are easy to take in by the audience (remember who the audience is)?

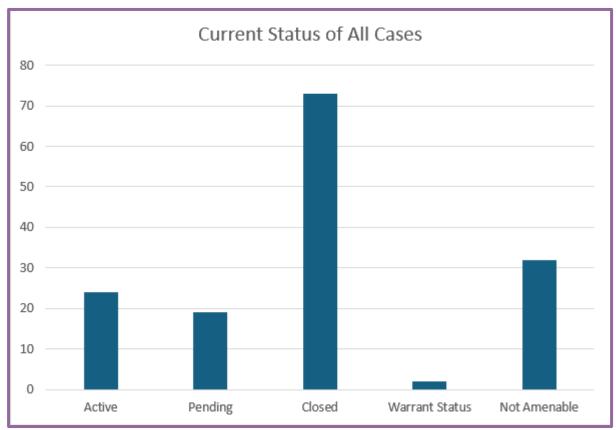


- Practice
 - Pivot table to chart
 - Bar charts
 - Pie charts
 - Line charts

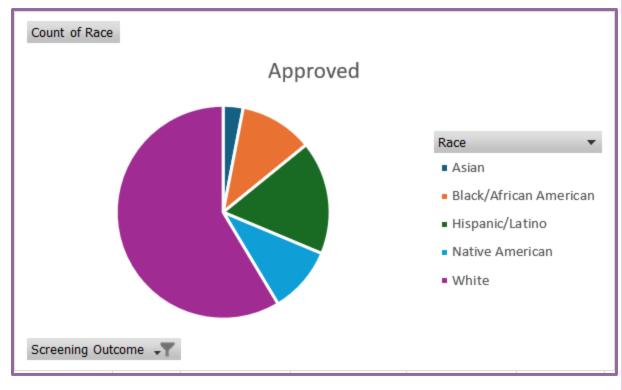


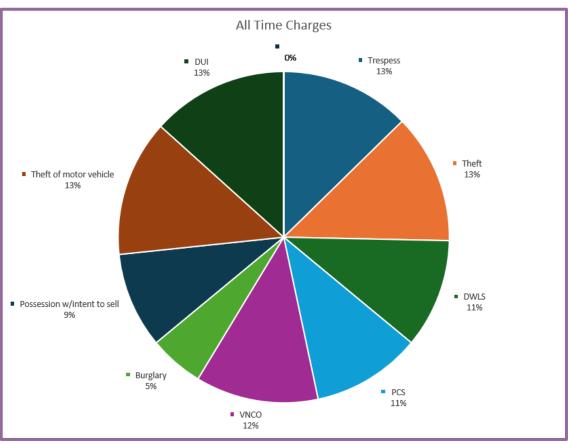
Bar charts



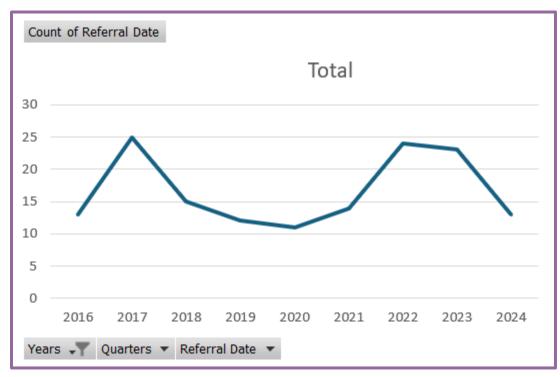


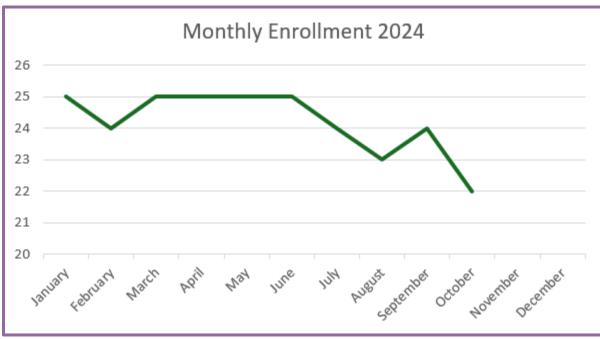
Pie charts





Line charts





Data Visualization – Example Data

- What kind of chart gets our main points across?
 - Which one immediately says to you "this is the main point?"
- Do we need multiple charts?
- Can we make them work together?
- Can we show the process?

Practice

- Pick a chart (or two or three) and place in a document.
- Add labels and descriptions.



Next Steps / Recommendations

- What impact or outcomes were you hoping for with this data?
- Does this data point to the next steps?
 - Explicitly state the next steps.



Q & A

Mikala Meize-Bowers, PhD

Senior Research Associate | Washington State Center for Court Research

Administrative Office of the Courts

mikala.meize-bowers@courts.wa.gov

www.courts.wa.gov



