




# Data Visualization With Tableau

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# Learning Outcomes

- Introduce the idea of data visualization and discuss options for creating them
- Introduce Tableau Public and demonstrate how it can be used to create data visualizations
- Experiment with a basic dataset and highlight how to get started to create a simple viz
- Discuss potential ways Tableau can be used at your library





# What Is Data Visualization?

“All data visualizations map data values into quantifiable features of the resulting graphic. We refer to these features as aesthetics” (Wilke, 2019)

Types of data visualization include:

- Scientific Visualization
- Information visualization
- Infographics

# Options for Data Viz

 Power BI	<p>Pros: Intuitive interface, integrates well with Microsoft products, affordable pricing</p> <p>Cons: Performance issues with very large datasets</p>
 + a b   e a u	<p>Pros: Strong support community due to high use (over 60, 000 accounts), easy public sharing, integrates well with large live updating datasets</p> <p>Cons: Advanced features have a steeper learning curve</p>
 QlikView	<p>Pros: Highly customisable, wide feature set</p> <p>Cons: Free option comes with limited user keys (i.e. you can't open your viz on different computers), better for experienced users</p>
 FusionCharts	<p>Pros: Large library of live templates, big range of export options, very mobile friendly</p> <p>Cons: Requires familiarity with Javascript</p>

# All about Tableau Public

Tableau Public is a free data visualization tool that can be used to:

- Tell a story with your data “vizzes”
- Find relevant & interesting data visualizations using hashtags
- Share vizzes on your Tableau Public profile

<https://public.tableau.com/s/>

# ChildrensLit

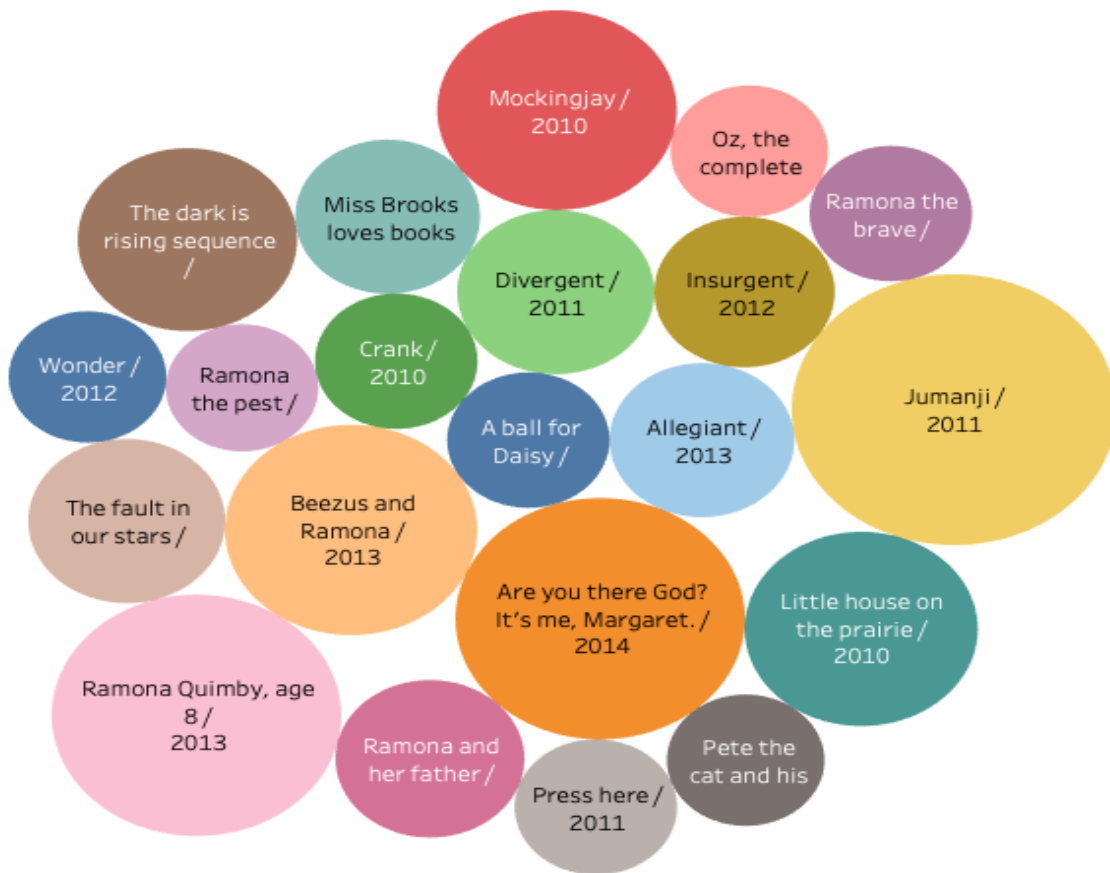
Jumanji / 2011	Beezus and Ramona / 2013	Divergent / 2011	The fault in our stars / 2012	Ramona and her father / 2013	Allegiant / 2013
	Mockingjay / 2010				
Are you there God? It's me, Margaret. / 2014		Miss Brooks loves books (and I don't) / 2010		Press here / 2011	Ramona the brave / 2013
	Little house on the prairie / 2010	Insurgent / 2012			
				Oz, the complete collection / 2013	Pete the cat and his four groovy buttons / 2012
Ramona Quimby, age 8 / 2013		A ball for Daisy / 2011			Wonder / 2012
	The dark is rising sequence / 2013				
		Crank / 2010			
					Ramona the pest / 2013

SUM(Circ Stats)

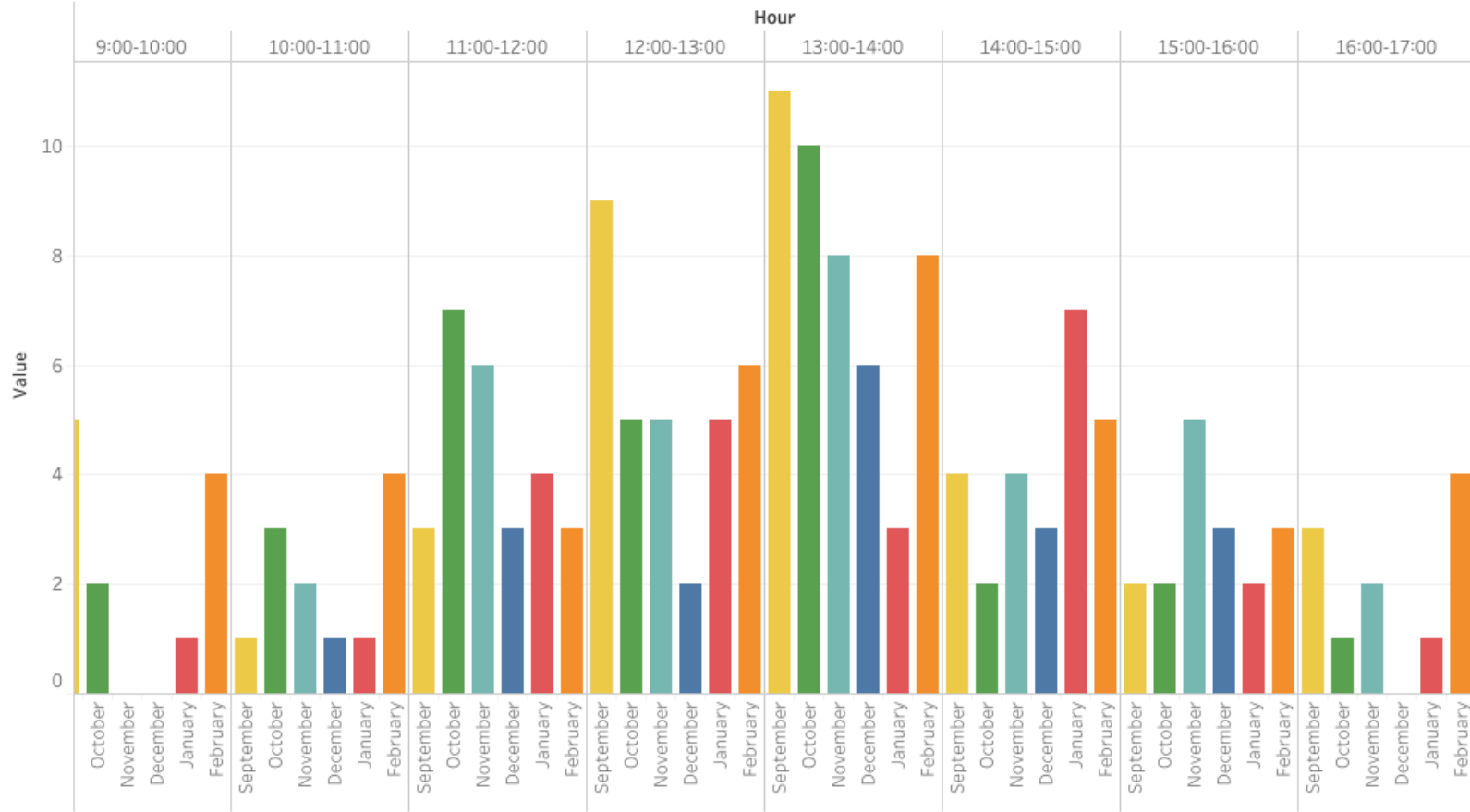
15

68

# ChildrensLit



QP



Measure Names

- September
- October
- November
- January
- February
- December



# 2019 Chester Fritz Library Floor Counts

Floor Count



These numbers represent the totals for daily floor counts at Chester Fritz Library. Counts are carried out at: 10:30 AM, 2:30 PM, 5:30 PM, 7:30 PM, and 9:30 PM. Some summer data is unavailable due to construction.

## Monthly Totals

January	2,539
February	3,764
March	4,015
April	5,498
May	2,931
June	145
July	205
August	543
September	3,956
October	4,955
November	3,781
December	4,372

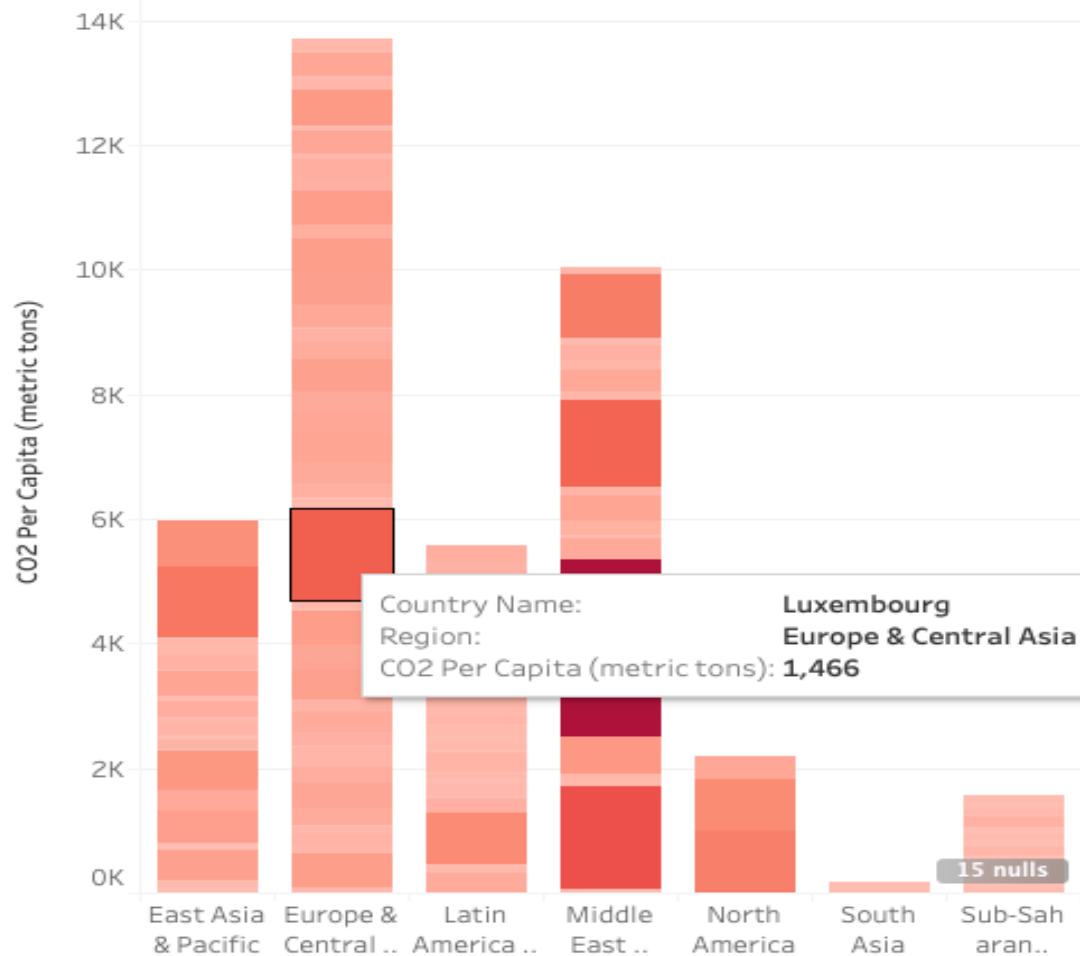
## Location

- (All)
- 1st Floor-14 Study Area (i...
- 1st Floor-15 Study Table (...)
- 1st Floor-16 Study Area (i...
- 1st Floor-17 North Wall (i...
- 1st Floor-18 Study Area (i...

## Time Range

10:00:00 AM 9:39:00 PM

## Region



Title

Make sure your viz has a good title so people don't pass it by when they're browsing Tableau Public.

Permalink

Plan on embedding your viz? This is an excellent way to drive traffic to your site.

Inspiration

Did you leverage the community for your creation? Don't forget to give a shout out to those who helped!

Description

A great description and relevant **#hashtags** can help people discover your viz.

Toolbar Settings

- Show view controls *Undo, Redo, Revert*
- Show author profile link
- Allow workbook and its data to be downloaded by others

Other Settings

- Show workbook sheets as tabs



# Heather Rogers

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2 vizzes 1 follower 7 following

More About Me

Save your vizzes to your profile

Make them public and findable by adding hashtags

Community of Practice aspect allows you to follow others

Vizzes 2

Follower 1

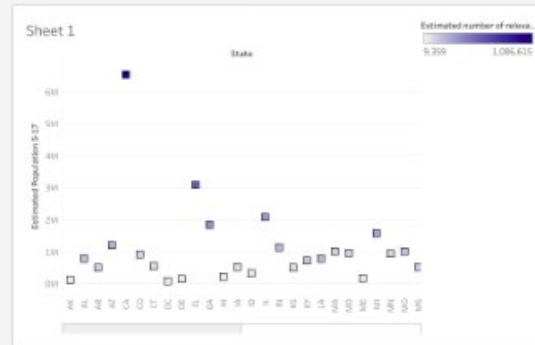
Following 7

Favorites 5



World CO2 emissions - example

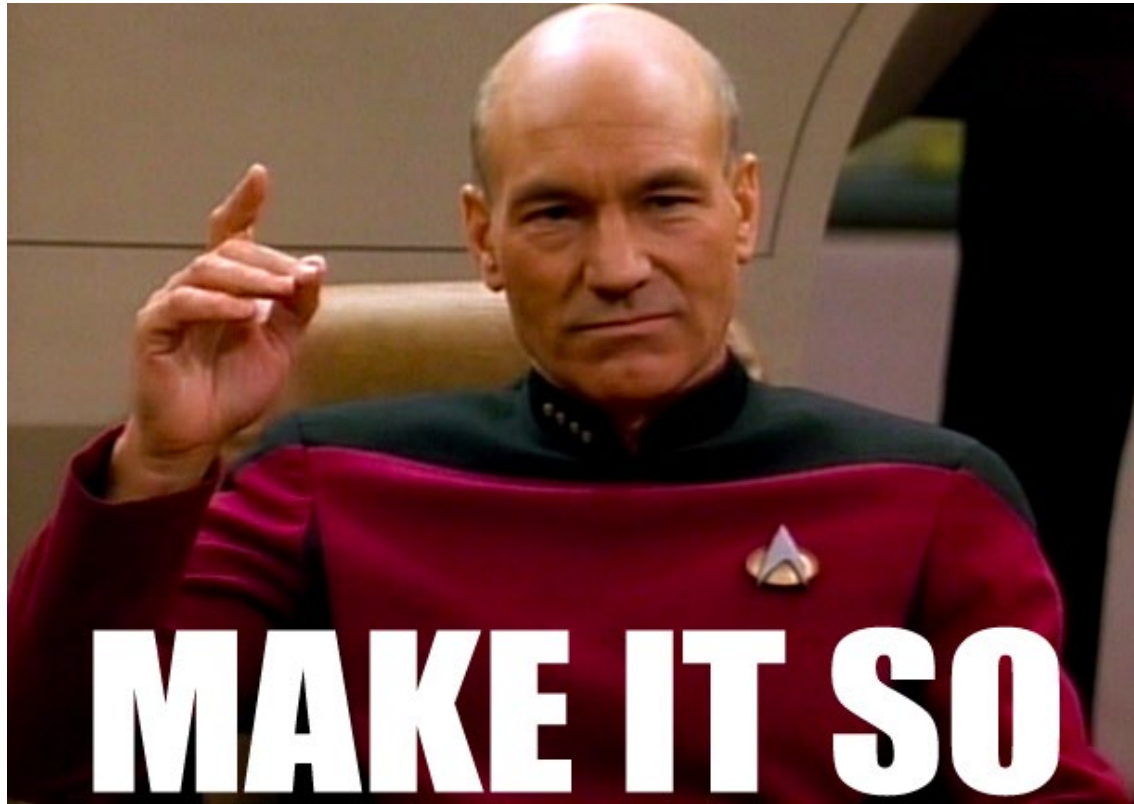
0 views



Census\_USPoverty\_2018\_Example

2 views

# Experimenting with Tableau Public



# Tableau Public Experiment Goals

- Connect to a dataset
- Start a new worksheet with the data
- Experiment with different combinations of measures & dimensions
- Find a data viz for your dataset
- Try using the color and details options in your marks box

Thoughts?

# Further Resources

**InfoVis Wiki:** [https://infovis-wiki.net/wiki/Main\\_Page](https://infovis-wiki.net/wiki/Main_Page)

**Data Visualization Catalog:** <https://datavizcatalogue.com/>

**Tableau Tutorials for Beginners:** <https://data-flair.training/blogs/tableau-tutorial/>



# Bibliography

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