October 1, 2024

Virtual 1:30 to 3:30 pm – Recorded

1:30 Welcome & Workshop Introduction

Instructor introductions

We will do participant introductions in person on October 9th when we review your homework assignment.

Thank you to the <u>Midwest Big Data Hub</u> for providing funding to develop this workshop that focuses on *Data Science Education and Workforce Development*.

The goals of this workshop are

- 1) Increasing local capacity for data literacy
- 2) Increasing technical skills to access data
- 3) Increasing ability to share local data

Session 2 and 3 overview

October 9, 2024 - 9:00am-4:00pm - Onsite Hands-on Workshop in Dubuque, Iowa where we will learn how to use Tableau

October 17, 2024 - 2:00pm-4:00pm - Online Zoom where we will learn a few more Tableau skills and share a viz worked on

1:40 Overview of Community Data and Sharing that Data (case examples)

https://indicators.extension.iastate.edu/projects/training/Community_Data_Sharing.pdf

1:55 Discussion – Data topics and formats of community data (Mentimeter) <u>menti.com</u> use code 89487742



2:20 <-Brief 5 min break->

- 2:25 Tabular Data: Often the format available from existing sources Census, State data, Open Gov
 - Powerpoint: <u>https://indicators.extension.iastate.edu/projects/training/working_with_data.pptx</u>
 - Data Formats
 - \circ $\,$ Common table-based file types $\,$
 - \circ $\,$ Common spatial data file types $\,$
 - Wide Data vs Long Data
 - Putting it all together

2:50 Preparing for in-person workshop 9-4:00 October 9th.

Logistics: Parking & Lunch; Equipment; WiFi Dubuque County Extension Office 14858 West Ridge Lane, Suite 2 Dubuque, Iowa 52003

2:55 What is the Tableau family of software - Tableau Public?

From Tableau: "*Tableau* is a visual analytics platform transforming the way we use data to solve problems

- empowering people and organizations to make the most of their data."

- Software suite that is now part of Salesforce
- Paid Products But they also provide a Free software called Tableau Public which we will use!
 - <u>https://public.tableau.com/app/discover</u>
- Overview: https://store.extension.iastate.edu/product/16808

Bailey's Examples:

- World No. 1's at Wimbledon by Scott Teal
 - What I like: The timeline showing the No. 1 ranking for all players, popups have a lot of detailed information, color.
 - $\circ~$ I wish the visual showed the number of Wimbledon wins by player instead of only showing that in the popup
- Iowa WARN Notifications by Iowa Workforce Development Labor Market Information Division
 - $\circ~$ A more typical data dashboard with a lot of information and multiple ways to filter the data
- <u>Disposed Violent Crime Charges by County by The Des Moines Register</u>
 - Example of a dashboard embedded into a website/news article
 - \circ $\,$ Simple map showing counts with more details and a time trend in the popup $\,$
 - o https://public.tableau.com/app/profile/amber.staples/viz/law-enforcement-agencies/ViolentCrime

Chris's Examples:

• Iowa DOT Crash Data – days of the week

https://public.tableau.com/app/profile/christopher.seeger/viz/Crashesdemoofdaysofweek/Sheet12

- Simple interactive of a Sheet
- City Park Locations

https://public.tableau.com/app/profile/henry.m.lopez/viz/CityParkslocations/Parksratingsdashboard

- A Basic map and table combo example
- <u>River Conditions</u>
 - \circ ~ Nice compact interface with a graphic header
- <u>Recreational Visits to National Parks (1966-2016)</u>
 - $\circ \quad \ \ \, \text{Several interactive mini timeline charts}$
- <u>US National Parks Visitation Trends</u>
 A Busier interface but main data points are in the top header
- State of Nebraska Community Health Data
 - Toggle multiple indicators by selecting a single menu item
- Maine school costs poorer vs wealthier towns
 - Scatter plot
 - Easy to select county

Jay's example will be revealed next week!

Setting up a free Tableau Public and GitHub account.

Desktop vs Web Based interface – we are using Web Based

Scribe <u>Demo</u>

What is Git Hub? (Optionally Setup an account)

Scribe <u>Demo</u>

3:25 Homework

- Setup Tableau Public account, Confirm your access to Google Sheets, Optional Git Hub account setup
- \circ Look at the Vizzes Chris and Bailey shared during presentation
- Find a different visualization that you like Does not have to be Tableau, email link to the viz to Chris before end of workday October 7
- Optional, bring a dataset you are interested in visualizing to the workshop

3:30 Conclude