## Data Visualization Application Exercise

Being able to see the story within the numbers makes data visualization a powerful tool for sharing and communicating information. Data visualization can be used for demonstrating performance, communicating trends, understanding the impact of new strategies, showing relationships, and beyond. These representations can be powerful tools for communication and collaboration, bringing greater value to reports, journalism, apps, or any context where sharing information is required.

The below six activities are adapted from Storytelling by Design (Fnaflic, 2020)

**Discover the Context**

**1. 3-minute story.**

This is a 3-minute story about what you think your audience needs to know. You could provide details. This is generally a very large paragraph in writing. However, stating it would take about 3 minutes.

***Activity***

* Complete a 3-minute story – 20 minutes
* Explain your Big Idea to the Group – 10 minutes



**2. Big Idea**

This is boils down your 3-minute story to a single sentence. It must articulate your point of view, convey what is at stake, and be a complete sentence.

* Who is your audience?
* How are they motivated?
* What do you want to tell them?

***Activity***

* Complete the Big Idea Worksheet – 30 minutes
* Explain your Big Idea to the Group – 10 minutes



**3. Write a Storyboard**

Tell the story with a clear beginning (Plot, middle (twist), and end (call to action). Consider the order and manner of your narrative. Remember repetition helps your story stick.

***Activity***

* Create a story board – 15 minutes
* Explain your story board to the Group – 10 minutes



**4. Choose Visuals**

Now that you have thought through you project in a low-tech version, how do we show it in an effective manner? When focusing on one or two numbers, simple text is best.

Line charts are best for continuous data.

Bar charts great for categorical data.

Remember, let the relationship you want to show guide the type of chart you choose.

* Decide your main points
* Draw to help you discover how it looks.
* Show others, incorporate comments.
* Re-Draw…pencil and paper.

***Activity***

Create your visual

**5. Focus Attention**

This is where you think about size, color, position, white space. Remember, declutter

* Where do you want your audience to look?
* Where are your eyes drawn?

***Activity***

* Update your visual. It is not uncommon to have many iterations.

**6. Design**

Look at what you have created, thus far.

Read through the below and modify your data visualization.

**Form follows Function**…

1. What do you want to enable your audience to do with your data?
2. How can you best visualize to allow for this ease?

**Affordances**

What aspects of the design can you eliminate?

What aspects of the design need enhancements?

**Accessibility**

Design that is usable by people widely varying technical skills

**Aesthetics**

More visually appealing designs are perceived as easier to use and are more readily accepted.

**Acceptance**

For your design to be effective, it must be accepted by the audience.

1. **Overall Project Evaluation**

Share the end results with each other and discuss.

Use the below rubric for evaluation.

