# 2.2 Visual Design Basics & Tableau

Visualization: How Far Can You Walk, Cycle, or Drive from Brisbane

## Visualization Review:

## Text

• Are the title and text descriptive enough? (i.e., do you understand what the visualization is trying to convey just by looking at the title and text?)

The title is very explicit, stating clearly exactly what is in the visualization.

• Are there text labels?

There are labels of nearby towns and cities, a clear legend showing which colors are used in the graph, and labels for each mode of transportation.

• Does the text portray any redundant information that could be gotten rid of?

No, it is concise, but detailed, showing relevant information and more without appearing cluttered.

• Do colors, shapes, and size scales come with legends?

The colors come with legends, there is no usage of shapes or sizes to represent scale.

## Color

• What does the color scheme signify?

The color scheme signifies how long it would take you, in increments of 15 minutes, to travel to that location.

• Are there more than five colors?

No, four colors are used.

• Does the color scheme make sense? Are colors analogous, complementary, monochromatic, or intuitive?

Not completely, it uses the three primary colors and green (with altered tone) to show the scale from 15-60 minutes, starting with green, then going to yellow, then red, then blue. Having blue after red is what seems inconsistent with an otherwise intuitive and understandable color scheme.

• If color is used to draw attention to important information, is the darkest color representing the most important information?

No, the map is a dark color to begin with, and uses bright colors to show the text, but somewhat dull tones of colors to show the data.

#### Other

• Are different sizes used? If so, is there meaning behind the sizes?

There is no use of different sized points, as it is covering whether an area is reachable or not within specific timeframes.

• Are there groupings in the data that can be portrayed through color, size, or position?

Many cities/towns are labeled with a yellow outline and transparent text, while some landmarks and cities/towns (presumably smaller towns due to their smaller text size and less bright colors), are in blue text with no outline. Larger cities are also in a larger font size.

• Is there (enough) whitespace?

The empty space of this is dark rather than white, but there is sufficient "whitespace", though there could be more, although doing so would sacrifice some size and readability of the visualizations.

Is the visualization accessible?

The color scheme being dull could be hard to differentiate for someone with colorblindness, although the outlines and scaling nature of the timeframes, as well as the interactive feature revealing the time increments could compensate for that.

Does the visualization teach you something?

It teaches you what you'd expect based on the title, being how far, within a range you can walk, cycle, or drive from Brisbane. Further than that, you get an indication of where high speed access roads are in the area, with some areas very far west of Brisbane being accessible within an hour, whilst areas twice as close are not (likely due to a lack of roads/natural obstacles). The same can be seen on a smaller scale with walking and cycling, with longer paths representing more accessible pathways.

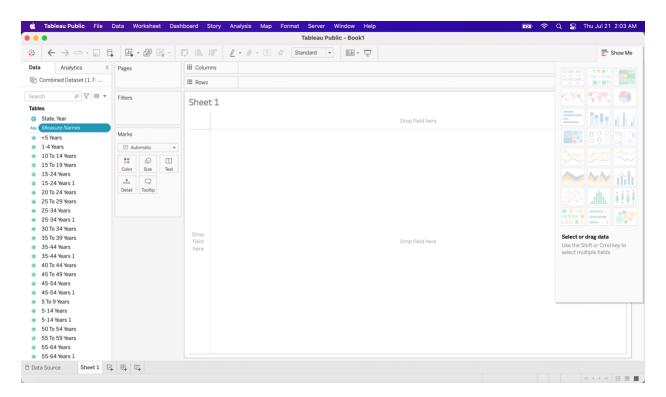
## Suggestions for Improvement

- Use a more congruent color scheme. Perhaps scaling from green-yellow-orange-red for distance proximity
- Use brighter colors so that the key data stands out more.

## Additional Point for Checklist

Does the visualization have interactive features?
Yes, scrolling over each time increment reveals which time increment it is, as well as where the Brisbane Central Business District (CBD) is located.

## **Tableau Dataset**



## **Dimensions:**

State, Year (Combined Key)

## Measures:

- < 1 year (Influenza Deaths)
- 1-4 years (Influenza Deaths)
- 15-24 years (Influenza Deaths)
- 25-34 years (Influenza Deaths)
- 35-44 years (Influenza Deaths)
- 45-54 years (Influenza Deaths)
- 5-14 years (Influenza Deaths)
- 55-64 years (Influenza Deaths)
- 65-74 years (Influenza Deaths)
- 75-84 years (Influenza Deaths)
- 85+ years (Influenza Deaths)
- Total population (US Census)
- Male Total population (US Census)
- Female Total population (US Census)
- Under 5 years (US Census)
- 5 to 9 years (US Census)
- 10 to 14 years (US Census)
- 15 to 19 years (US Census)
- 20 to 24 years (US Census)
- 25 to 29 years (US Census)
- 30 to 34 years (US Census)
- 35 to 39 years (US Census)
- 40 to 44 years (US Census)
- 45 to 49 years (US Census)
- 50 to 54 years (US Census)
- 55 to 59 years (US Census)
- 60 to 64 years (US Census)
- 65 to 69 years (US Census)
- 70 to 74 years (US Census)
- 75 to 79 years (US Census)
- 80 to 84 years (US Census)
- 85 years and over (US Census)

- <5 years (Normalized Death Rate)
- 5-14 years (Normalized Death Rate)
- 15-24 years (Normalized Death Rate)
- 25-34 years (Normalized Death Rate)
- 35-44 years (Normalized Death Rate)
- 45-54 years (Normalized Death Rate)
- 55-64 years (Normalized Death Rate)
- 65-74 years (Normalized Death Rate)
- 75-84 years (Normalized Death Rate)
- 85+ years (Normalized Death Rate)