



# Data Visualization Style Guidelines

## This guide includes:

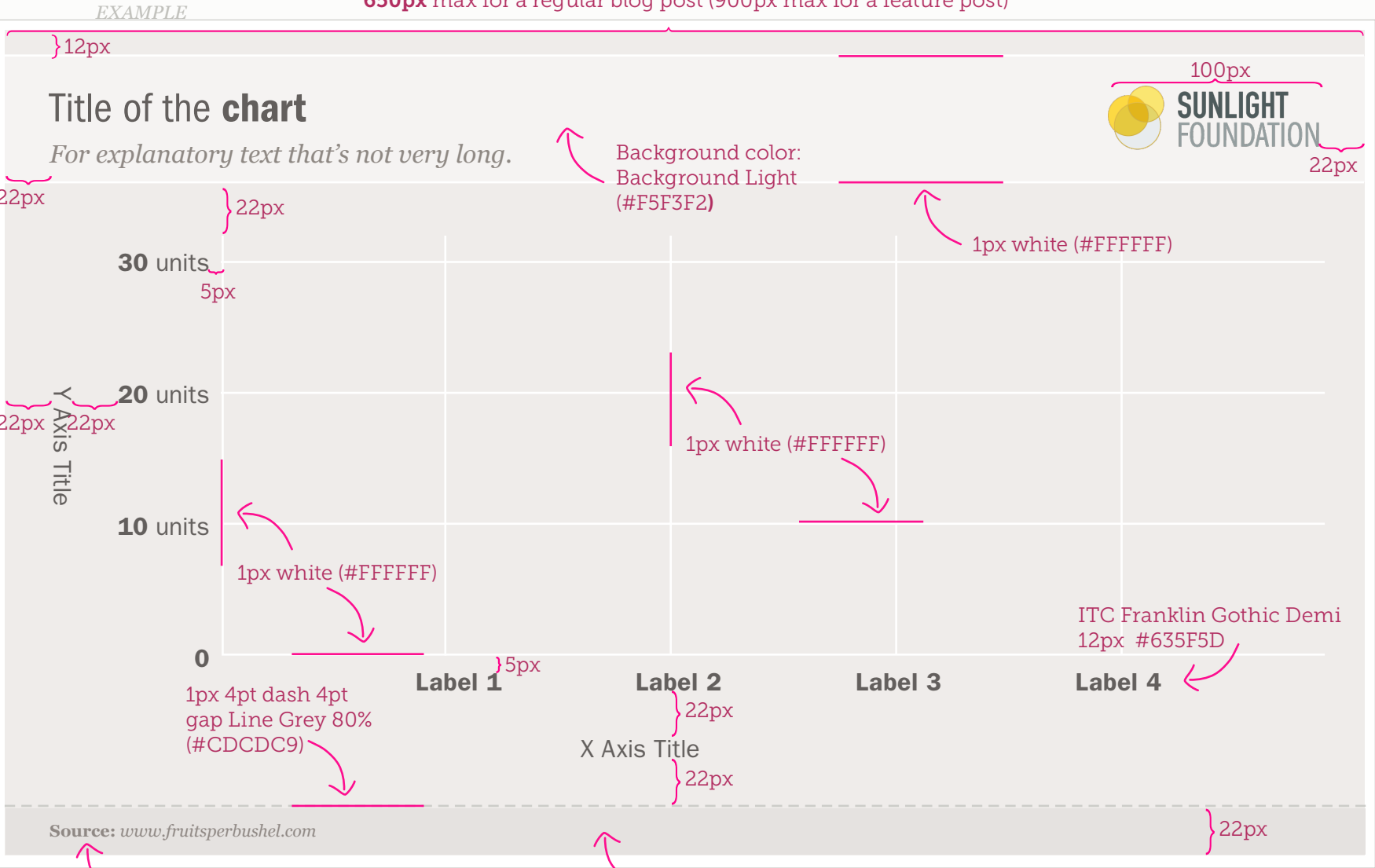
- » basic graph structure
- » bar graphs
- » line graphs
- » pie charts
- » scatter plots
- » maps
- » graph or chart colors
- » choropleth colors for maps
- » network visualization colors

## FORWARD

*This guide is meant to be a starting point for creating data visualizations for this organization. “Data Series” like the 1% of the 1% may have their own twist on these foundations. Visualizations that pertain to a particular project, like the 5 year review of Political Party Time, may also have variations on these standards. Feel free to use these as a starting point, and do what makes sense for your particular data. Please remember to respect the data as you go forth into the wonderful, but often confusing, world of turning numbers into visuals.*

# Basic Structure

650px max for a regular blog post (900px max for a feature post)



Download the sunlight logo @ <http://sunlightfoundation.com/press/logos>

Height is variable. Make them as long as you need them to be since these are mainly web graphics.

Georgia bold and italic 8px  
Left aligned text, vertically centered  
Text light (#8E8883)

Background color: Background Dark (#EFECEA)

# Text Styles

Header Title with **emphasis**

ITC Franklin Gothic Std | Book Condensed with Demi Condensed emphasis | 20px | Left Aligned | #635F5D (Text Main)

*Header title explanatory text*

Georgia | italic | 12px | left aligned | #8E8883 (Text Light)

**X axis & Y axis labels**

ITC Franklin Gothic Std | Demi | 12px | centered on line | #635F5D (Text Main)

X Axis & Y Axis Title

ITC Franklin Gothic Std | Book | 12px | centered | #635F5D (Text Main)

Key labels

ITC Franklin Gothic Std | Book | 10px | left aligned | #635F5D (Text Main)

*Callout text*

Georgia | italic| 10px | left aligned | #635F5D (Text Main)

Point Label

ITC Franklin Gothic Std | Book | 10px | right aligned to point | #635F5D (Text Main)

**Source:** *www.fruitsperbushel.com*

Georgia | bold title with italic text | 8px | left aligned | #8E8883 (Text Light)

# Background Colors

## Base Colors

### Background



CMYK: 5, 5, 5, 0  
RGB: 239, 236, 234  
Hex: #EFECEA

### Background Light Accent



CMYK: 2, 2, 2, 0  
RGB: 245, 243, 242  
Hex: #F5F3F2

### Background Dark Accent



CMYK: 9, 8, 8, 0  
RGB: 229, 226, 224  
Hex: #E5E2E0

### Text Main



CMYK: 59, 54, 54, 25  
RGB: 99, 95, 93  
Hex: #635F5D

### Text Light



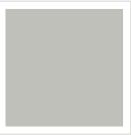
CMYK: 46, 41, 44, 5  
RGB: 142, 136, 131  
Hex: #8E8883

### Line White



CMYK: 0, 0, 0, 0  
RGB: 255, 255, 255  
Hex: #FFFFFF

### Line Grey Accent




CMYK: 25, 19, 23, 0  
RGB: 192, 192, 187  
Hex: #C0C0BB

# Data Colors


## Main Colors

a thing




CMYK: 12, 24, 100, 0  
RGB: 227, 186, 34  
Hex: #E3BA22

a different thing




CMYK: 7, 57, 97, 1  
RGB: 230, 132, 42  
Hex: #E6842A

another different thing




CMYK: 86, 35, 46, 10  
RGB: 19, 123, 128  
Hex: #137B80

another different thing




CMYK: 48, 61, 28, 4  
RGB: 142, 109, 138  
Hex: #8E6C8A

neutral thing




CMYK: 42, 38, 49, 4  
RGB: 151, 143, 128  
Hex: #978F80

No Data




CMYK: 9, 8, 8, 0  
RGB: 229, 226, 224  
Hex: #E5E2E0

a subset of the thing




CMYK: 6, 9, 78, 0  
RGB: 242, 218, 87  
Hex: #F2DA57

a subset of the different thing




CMYK: 2, 31, 76, 0  
RGB: 246, 182, 86  
Hex: #F6B656

a subset of the other different thing




CMYK: 70, 17, 28, 0  
RGB: 66, 165, 179  
Hex: #42A5B3

a subset of the other different thing




CMYK: 31, 42, 18, 0  
RGB: 179, 150, 173  
Hex: #B396AD

a subset of the neutral thing




CMYK: 25, 22, 32, 0  
RGB: 193, 186, 169  
Hex: #C1BAA9

a subset of the thing




RGB: 189, 143, 34  
Hex: #BD8F22

a subset of the different thing




RGB: 186, 95, 6  
Hex: #BA5F06

a subset of the other different thing




RGB: 0, 93, 110  
Hex: #005D6E

a subset of the other different thing



RGB: 104, 70, 100  
Hex: #684664


a subset of the neutral thing



RGB: 124, 113, 94  
Hex: #7C715E

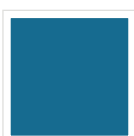
## Specialty Colors

Republican




CMYK: 27, 84, 96, 22  
RGB: 154, 62, 37  
Hex: #9A3E25

Democrat




CMYK: 89, 52, 27, 6  
RGB: 21, 107, 144  
Hex: #E6842A

Independent




CMYK: 58, 34, 73, 13  
RGB: 112, 130, 89  
Hex: #708259

Con




CMYK: 18, 95, 98, 8  
RGB: 189, 45, 40  
Hex: #BD2D28

Pro




CMYK: 84, 24, 60, 5  
RGB: 15, 140, 121  
Hex: #0F8C79

Money




CMYK: 67, 30, 100, 13  
RGB: 92, 129, 0  
Hex: #5C8100

a subset of Republican




CMYK: 25, 60, 69, 8  
RGB: 179, 112, 85  
Hex: #B37055

a subset of Democrat



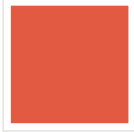
CMYK: 64, 38, 20, 1  
RGB: 104, 139, 171  
Hex: #688BAB

a subset of independent




CMYK: 44, 27, 57, 2  
RGB: 149, 161, 126  
Hex: #95A17E

a subset of Con




CMYK: 6, 79, 80, 1  
RGB: 226, 90, 66  
Hex: #E25A42

a subset of Pro



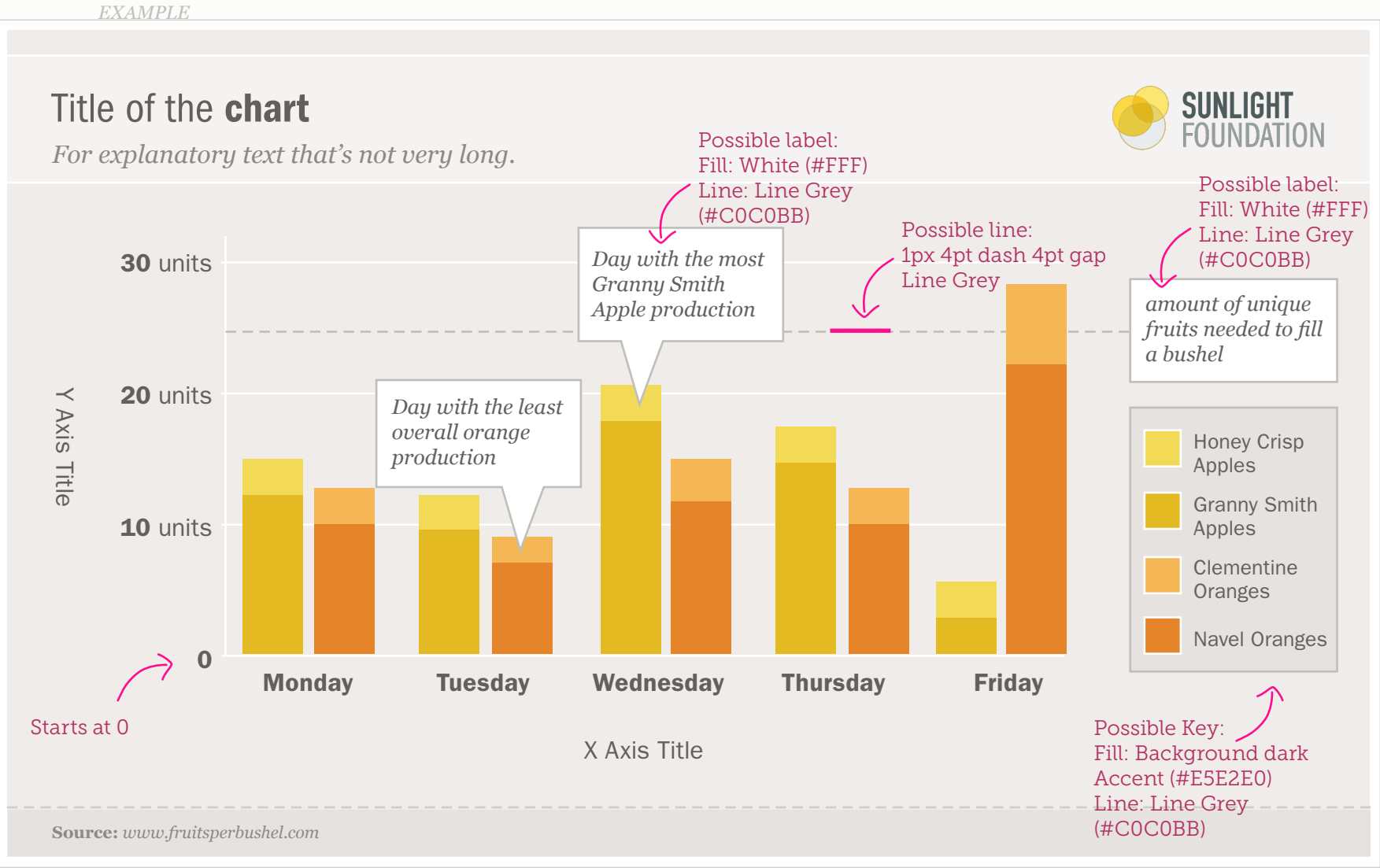
CMYK: 58, 5, 45, 0  
RGB: 107, 187, 161  
Hex: #6BBBA1

a subset of Money



CMYK: 43, 12, 100, 0  
RGB: 160, 183, 0  
Hex: #A0B700

# Bar Graph (categorical)



## When to use a Bar or Column Chart

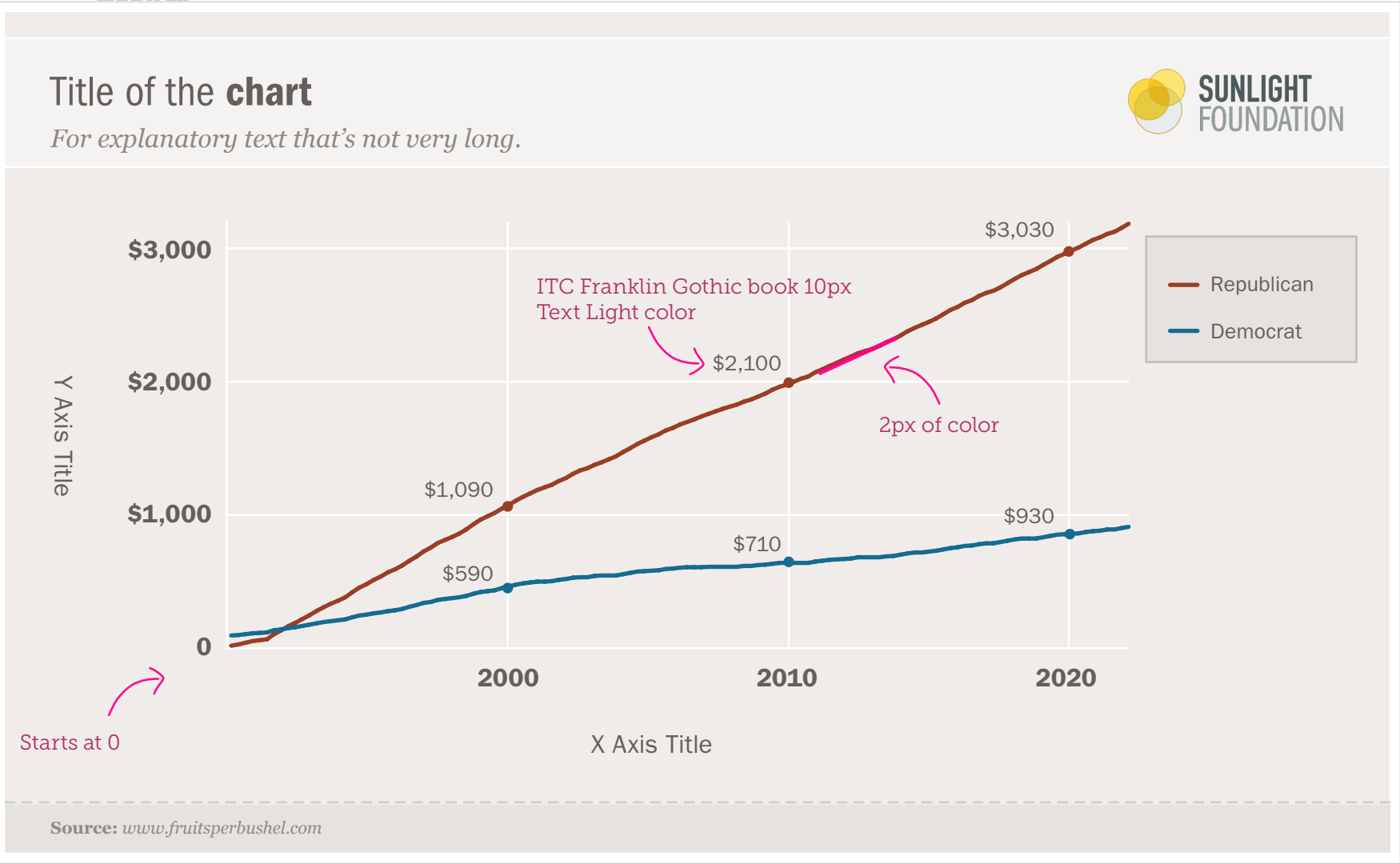
- » Use mostly for one variable.
- » Compares numerical values for different observations. Shows relative amounts.
- » Grouped or stacked bars or columns can break that one numerical variable out into different sub-groups.

Your data should look like:

	Honey Crisp	Granny Smith	Clementine	Navel
Monday	3	12	3	10
Tuesday	3	9	2	7
Wednesday	3	18	4	12
Thursday	3	15	3	10
Friday	3	3	5	22

# Line Graph (political)

EXAMPLE



## When to use a Line Graph

- » Shows the trend in one variable usually over time.
- » Multiple lines can show multiple variables (if they are on the same scale).
- » Multiple lines can also show the same variable for multiple observations.

Your data should look like:

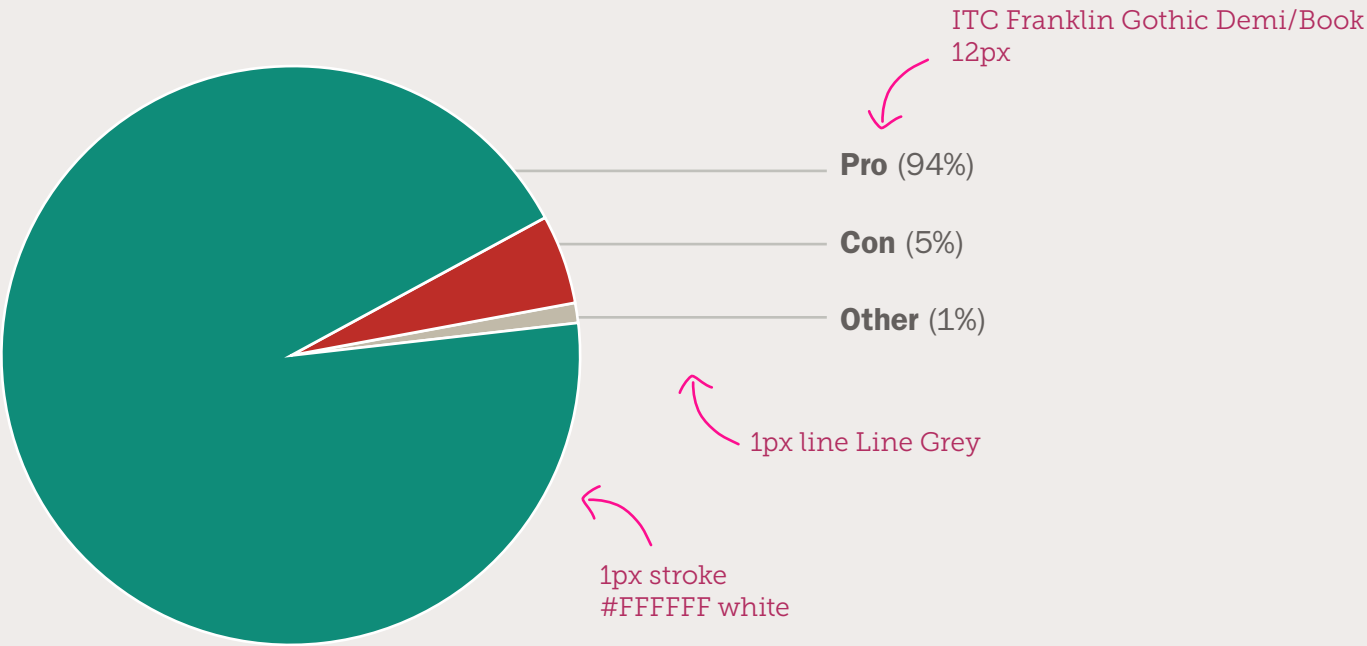
Time	Republican	Democrat
1990	1	2
1991	2	5
1992	4	9
1996	6	13
1994	7	15
1995	8	17

# Pie Chart (pro/con)

EXAMPLE

## Title of the pie chart

For explanatory text that's not very long.



Source: [www.fruitsperbushel.com](http://www.fruitsperbushel.com)

### When to use a Pie Chart

- » Use them very sparingly. Often a bar or column chart is better. It is much more difficult to visually judge the size of circles (or circle segments) vs. rectangles.
- » You want to show the relative relationship between 2-3 things.
- » They add up to 100% (which may necessitate the inclusion of a category such as “none”, “other”, etc.)

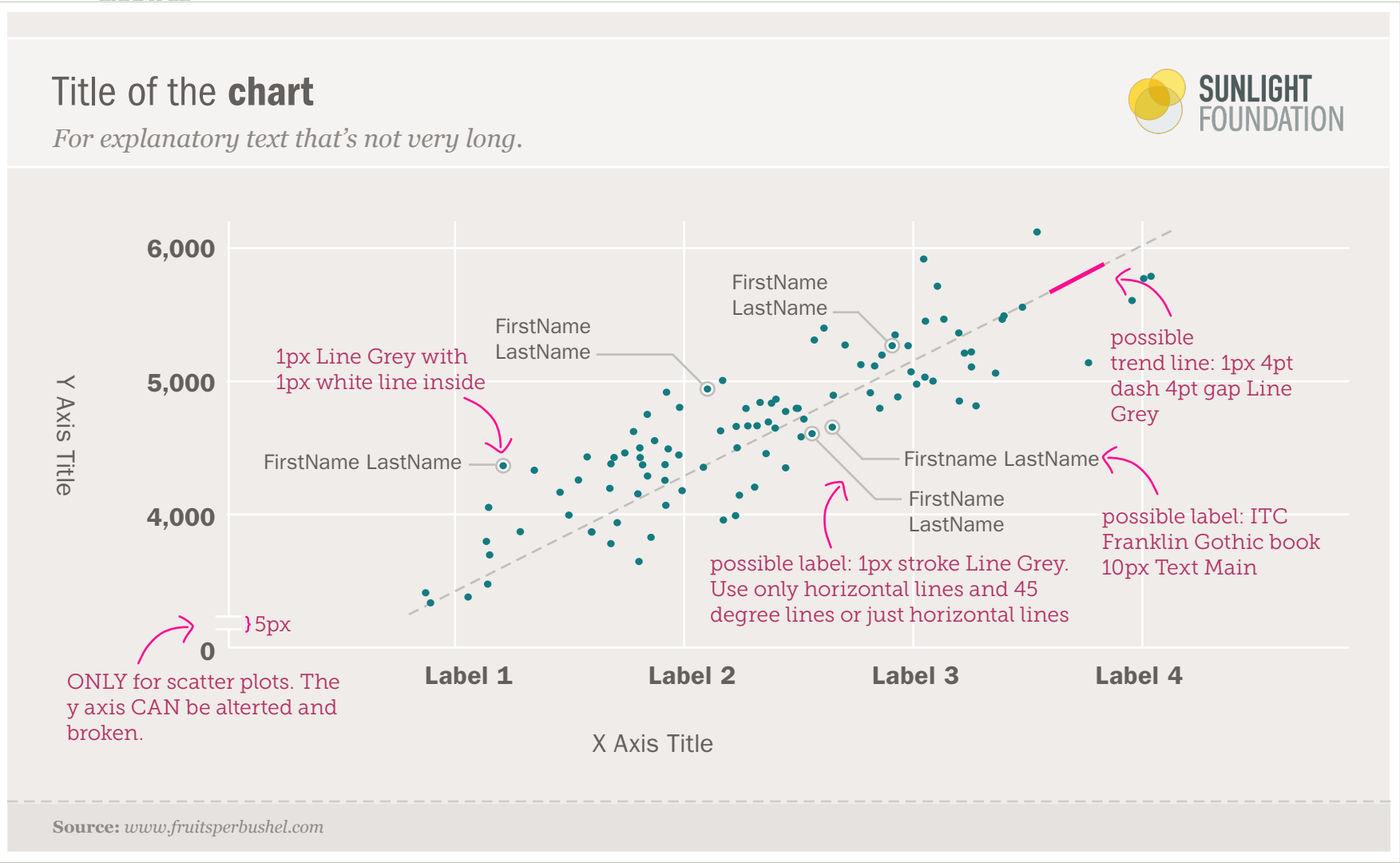
### Your data should look like:

Pro	Con	Other
94	5	1



# Scatter Plot (single variable)

EXAMPLE



## When to use a Scatter Plot

- » Shows the relationship between two continuous variables for your set of observations.
- » Each point in the plot represents an object.
- » You can change color or symbol to show groups.
- » Sometimes it is nice to show a trend line (regression).

## Your data should look like:

variable 1	variable 2
7.560309668	48.87193277
8.569477057	57.70873996
5.178854559	35.50990599
5.044602676	31.94896911
7.629095533	49.76954493
6.631379	46.66529366
7.035723733	45.68632108
8.152163624	57.46279438

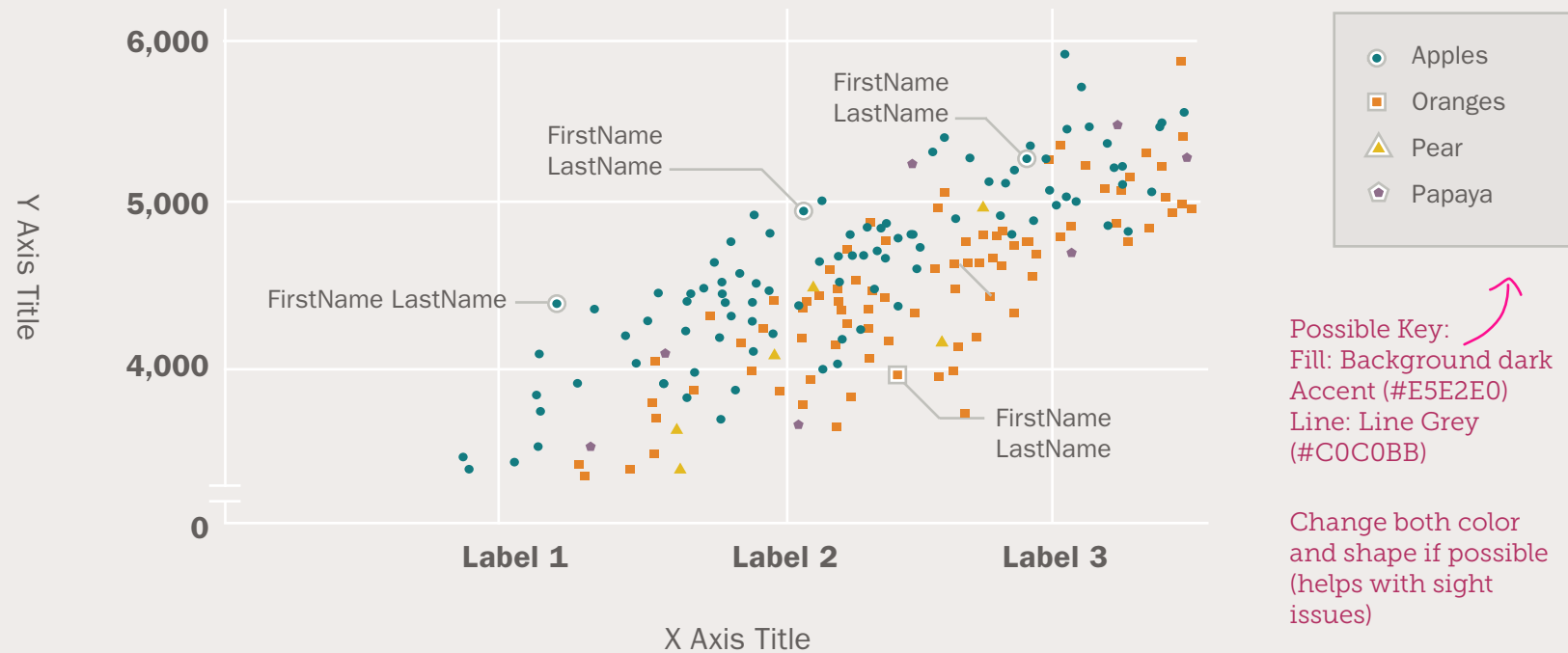
## Scatter Plot (multi variable)

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*EXAMPLE*

## Title of the **chart**

*For explanatory text that's not very long.*



Possible Key:  
Fill: Background dark  
Accent (#E5E2E0)  
Line: Line Grey  
(#C0C0BB)

Change both color and shape if possible (helps with sight issues)

## When to use a Scatter Plot

- » Shows the relationship between two continuous variables for your set of observations
- » Each point in the plot represents an object.
- » You can change color or symbol to show groups.
- » Sometimes it is nice to show a trend line (regression).

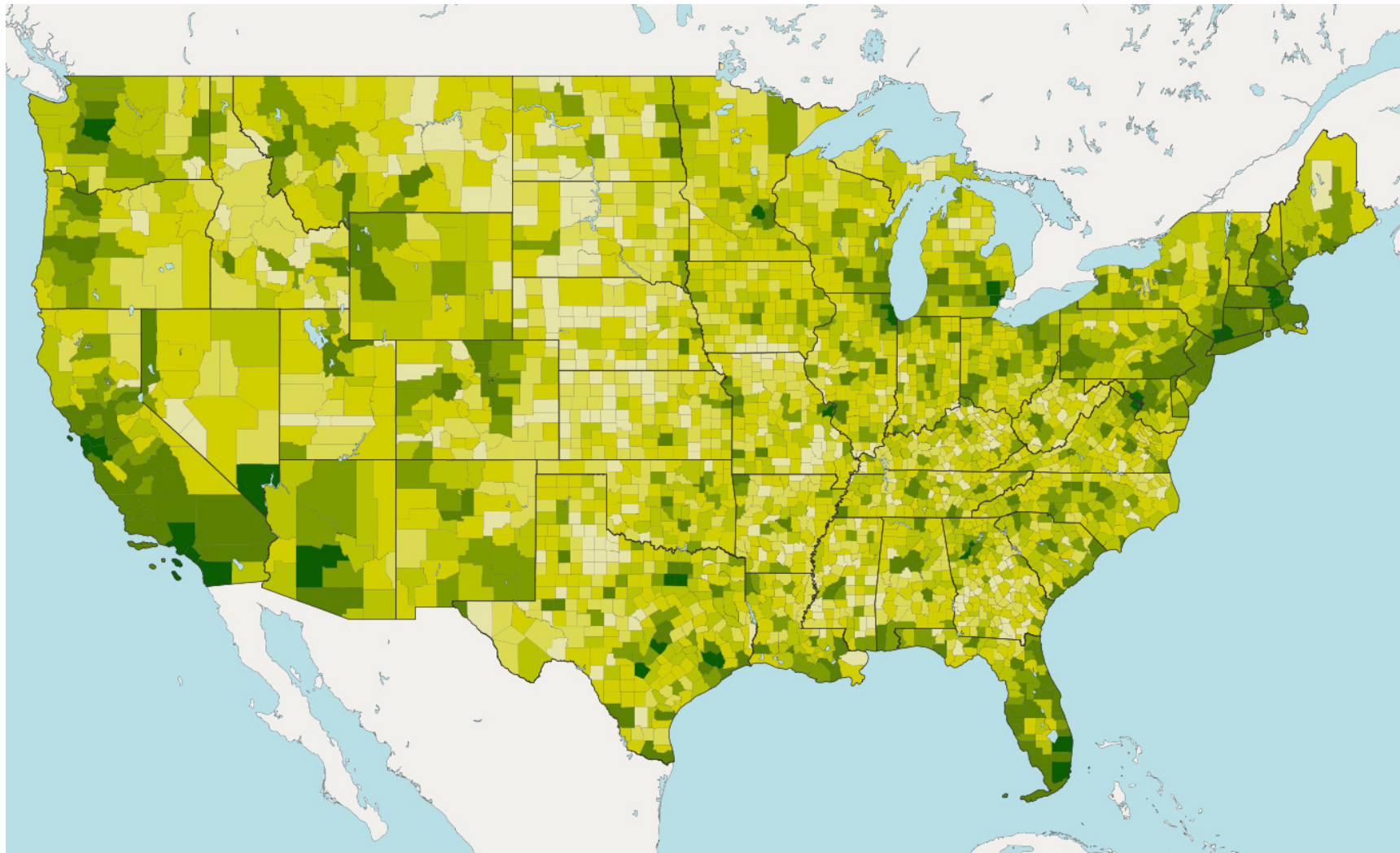
**Your data should look like:**

variable 1	variable 2
7.560309668	48.87193277
8.569477057	57.70873996
5.178854559	35.50990599
5.044602676	31.94896911
7.629095533	49.76954493
6.631379	46.66529366
7.035723733	45.68632108
8.152163624	57.46279438

**Source:** [www.fruitsperbushel.com](http://www.fruitsperbushel.com)

## Map (sequential, single hue, money)

EXAMPLE

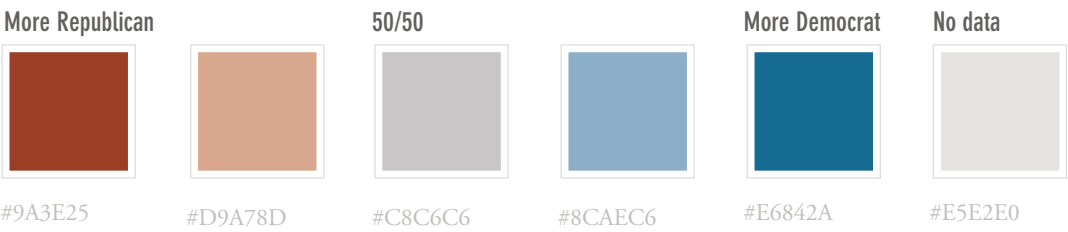
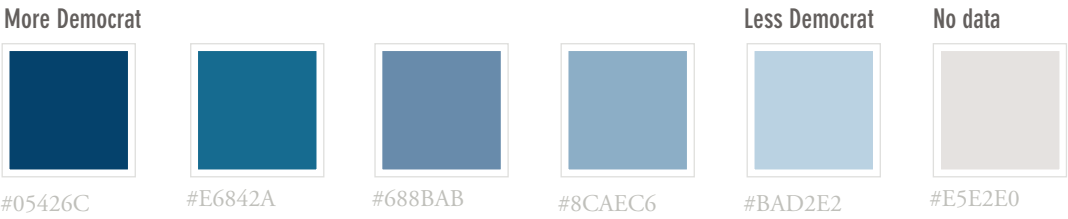
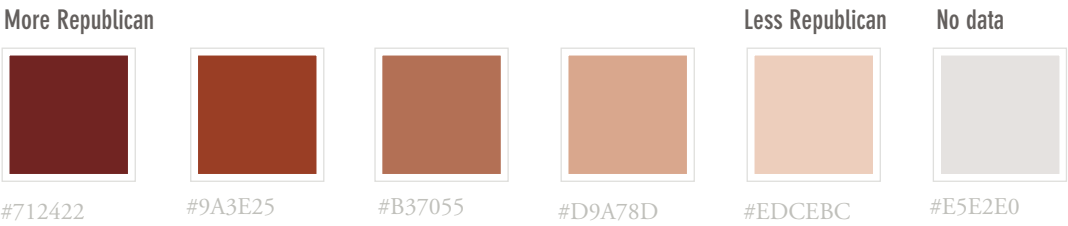


### When to use a Map

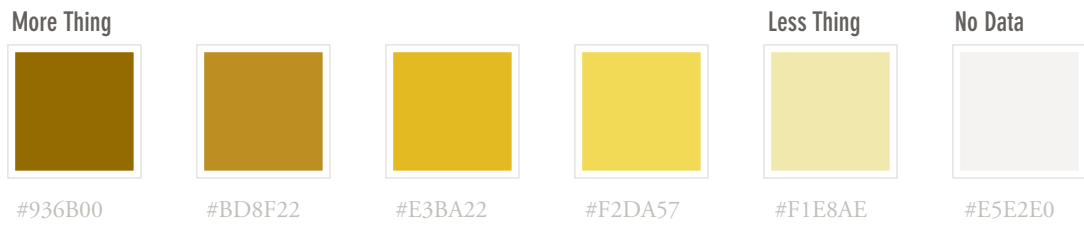
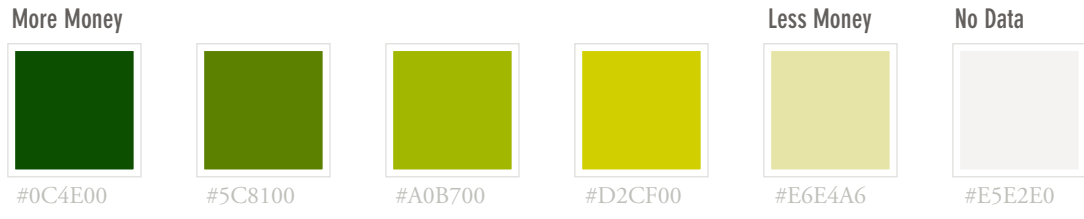
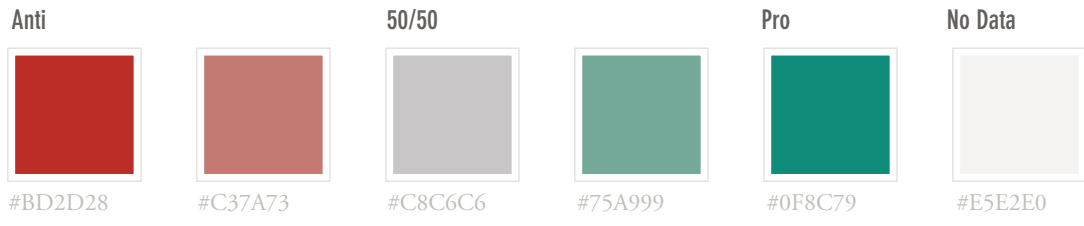
- » Be sure to only use a map if the primary component of your data is geographical. Sometimes a ranked list or bar chart is better if you are just trying to compare a single value for each state.
- » Color scale comparisons are harder for humans than size comparisons. Keep this in mind as you choose between a map or another layout.

# Choropleth Colors (for maps)

○ Political Colors (stick to choropleths of 5 or fewer colors for maximum readability)




○ Non-political Colors (stick to choropleths of 5 or fewer colors for maximum readability)



# Network Graph Colors

30 colors. TRY not to use them all.

										
#F2DA57 242, 218, 87	#F6B656 244, 182, 86	#E25A42 226, 90, 66	#DCBDCF 220, 189, 207	#B396AD 179, 150, 173	#B0CBDB 176, 203, 219	#33B6D0 51, 182, 208	#7ABFCC 122, 191, 204	#C8D7A1 200, 215, 161	#A0B700 160, 183, 0	
										
#E3BA22 227, 186, 34	#E58429 229, 132, 41	#BD2D28 189, 45, 40	#D15A86 209, 90, 134	#8E6C8A 142, 108, 138	#6B99A1 107, 153, 161	#42A5B3 66, 165, 179	#0F8C79 15, 140, 121	#6BBBA1 107, 187, 161	#5C8100 92, 129, 0	
										
#B08B12 176, 139, 18	#BA5F06 186, 95, 6	#8C3B00 140, 59, 0	#6D191B 109, 25, 27	#842854 132, 40, 84	#5F7186 95, 113, 134	#193556 25, 53, 86	#137B80 19, 123, 128	#144847 20, 72, 71	#254E00 37, 78, 0	