BROOKINGS

BRAND GUIDELINES

VERSION 3.0, REVISED DECEMBER 2020

BETA VERSION | NOT FOR DISTRIBUTION

Content

Colors | Brand Palette

Color is at the core of Brookings brand identity. Using a consistent color palette through out Brookings collateral ensures a cohesive brand look and feel and will strengthen brand recognition.

SECONDARY & ACCENT COLORS

Main secondary color (Orange 40 / PMS 1375 C) should be given priority over accent colors. These colors are chosen to provide a vibrant and bold color palette to contrast the dark and serious tone of Brookings Blue.

GRAYS

The neutral gray family has 12 grades, ranging from 00 (white), to grade 100 (black). The gray family can be used in reading text, and as background colors to organize content into different zones. For web interfaces, when using a white background, it's best to use Gray 80 for body text as pure black against pure white backgrounds can be harsh on the eyes.

Note: For Primary & Secondary colors with a Pantone color, the CMYK, HEX & RGB values are obtained from the Pantone website. For all others Hex values are converted to RGB and CMYK values using the w3schools color converter.

PRIMARY

BROOKINGS BLUE / PMS 654 C
HEX #003A70
RGB 0, 58, 112
CMYK 100, 73, 0, 33

PRIMARY SHADES

PMS 653 C
HEX #326295
RGB 50, 98, 149
CMYK 84, 54, 3, 10

PMS 651 C
HEX #A7BCD6
RGB 167, 188, 214
CMYK 33, 15, 0, 0

PMS 656 C
HEX #DDE5ED
RGB 221, 229, 237
CMYK 10, 2, 0, 0

PMS 427 C
HEX #D0D3D4
RGB 208, 211, 212
CMYK 14, 8, 4, 0

SECONDARY

ORANGE 40 / PMS 1375 C
HEX #FF9E1B
RGB 255, 158, 27
CMYK 0, 40, 97, 0

ACCENT COLORS

ORANGE 60
HEX #F26D00
RGB 242, 109, 0
CMYK 0, 55, 100, 5

YELLOW 40
HEX #FFDD00
RGB 255, 221, 0
CMYK 0, 13, 100, 0

YELLOW 60
HEX #E0BB00
RGB 224, 187, 0
CMYK 0, 17, 100, 12

VIVID BLUE 20
HEX #8AC6FF
RGB 138, 198, 255
CMYK 40, 12, 0, 0

VIVID BLUE 70
HEX #00649F
RGB 0, 100, 159
CMYK 94, 61, 13, 1

GRAYS

BLACK 100
HEX #000000
RGB 0, 0, 0
CMYK 75, 68, 67, 100

GRAY 90
HEX #191919
RGB 25, 25, 25
CMYK 0, 0, 0, 90

GRAY 80
HEX #333333
RGB 51, 51, 51
CMYK 0, 0, 0, 80

GRAY 70
HEX #4D4D4D
RGB 77, 77, 77
CMYK 0, 0, 0, 70

GRAY 60
HEX #666666
RGB 102, 102, 102
CMYK 0, 0, 0, 60

GRAY 50
HEX #808080
RGB 128, 128, 128
CMYK 0, 0, 0, 50

GRAY 40
HEX #999999
RGB 153, 153, 153
CMYK 0, 0, 0, 40

GRAY 30
HEX #B3B3B3
RGB 179, 179, 179
CMYK 0, 0, 0, 30

GRAY 20
HEX #CCCCCC
RGB 204, 204, 204
CMYK 0, 0, 0, 20

GRAY 10
HEX #E6E6E6
RGB 230, 230, 230
CMYK 0, 0, 0, 10

GRAY 05
HEX #F2F2F2
RGB 242, 242, 242
CMYK 0, 0, 0, 05

00 / WHITE
HEX #FFFFFF
RGB 255, 255, 255
CMYK 0, 0, 0, 0

Colors | Extended Palette

WHY
The extended palette was created to address some of the limitations of the brand palette. Data visualizations often require more than two primary hues for categorical data sets, and multiple shades of the same hue for sequential data sets. Brookings also produce multi-chapter reports that can benefit from color coding. Having a pre-defined set of hues can help Brookings' materials look cohesive and also reduce production time by eliminating color decisions.

WHAT IS IT
The extended palette offers more flexibility, variety and versatility. It includes a wide range of hues as well as a large variation in brightness for each hue. This serves two purposes – one, support more complex data visualizations, and two, support accessibility. The extended palette has 9 color families and each color family has 9 grades, from 10-90. Grade 00 of any color family equals white and grade 100 equals black.

WHEN TO USE IT IMPORTANT
This should not substitute the brand palette and should only be used in data visualizations and to color code different sections of a large document or a web site.

NAMING CONVENTIONS
Colors are named using everyday terms. When building these colors into a design system use the following naming convention:
ColorName_Grade
(e.g., BrandBlue_70, Orange_40).

ACCESSIBILITY
The extended palette is designed with accessibility in mind. Each color is annotated to indicate if black or white text on them meets WCAG AA standard. However, it's important to note some colors that pass WCAG Level AA contrast ratio are not always subjectively more readable (e.g., white text appears more readable against Brand Blue 50 than black text, even though the contrast ratio suggests otherwise). Refer to Color Accessibility section for more details.

BRAND BLUE

AA	AA	AA	AA AA*	AA AA*	AA AA*	AA	AA	AA
90 HEX #022A4E RGB 2, 42, 78 CMYK 97, 46, 0, 69	**80 / PMS 654C / BB** HEX #003A70 RGB 0, 58, 112 CMYK 100, 73, 0, 33	**70** HEX #1A4E80 RGB 26, 78, 128 CMYK 80, 39, 0, 50	**60 / PMS 653 C** HEX #326295 RGB 50, 98, 149 CMYK 84, 54, 3, 10	**50** HEX #517EAD RGB 81, 126, 173 CMYK 53, 27, 0, 32	**40** HEX #7098C3 RGB 112, 152, 195 CMYK 43, 22, 0, 24	**30** HEX #8DADD0 RGB 141, 173, 208 CMYK 32, 17, 0, 18	**20 / PMS 651 C** HEX #A8BDD5 RGB 167, 188, 214 CMYK 33, 15, 0, 0	**10 / PMS 656 C** HEX #DDE5ED RGB 221, 229, 237 CMYK 10, 2, 0, 0

VIVID BLUE

AA	AA	AA AA*	AA AA*	AA AA*	AA AA*	AA	AA	AA
90 HEX #023147 RGB 2, 49, 71 CMYK 97, 31, 0, 72	**80** HEX #004B6E RGB 0, 75, 110 CMYK 100, 32, 0, 57	**70** HEX #00649F RGB 0, 100, 159 CMYK100, 37, 0, 38	**60** HEX #1479BB RGB 20, 121, 187 CMYK 89, 35, 0, 27	**50** HEX #1E8AD6 RGB 30, 138, 214 CMYK 86, 36, 0, 16	**40** HEX #3398EA RGB 51, 152, 234 CMYK 78, 35, 0, 8	**30** HEX #5AADF6 RGB 90, 173, 246 CMYK 63, 30, 0, 4	**20** HEX #8AC6FF RGB 138, 198, 255 CMYK 46, 22, 0, 0	**10** HEX #BFDFFC RGB 191, 223, 252 CMYK 24, 12, 0, 1

AA Passes 4.5:1 contrast ratio against white

AA* Passes 3:1 contrast ratio against white

AA Passes 4.5:1 contrast ratio against black

AA* Passes 3:1 contrast ratio against black

(See Color Accessibility for more details on contrast ratios.)

Colors | Extended Palette

TEAL

AA	AA	AA AA*	AA AA	AA AA*	AA	AA	AA	AA
90 HEX #032B30 RGB 3, 43, 48 CMYK 94, 10, 0, 81	**80** HEX #09484F RGB 9, 72, 79 CMYK 89, 9, 0, 69	**70** HEX #116470 RGB 17, 100, 112 CMYK 85, 11, 0, 56	**60** HEX #1C8090 RGB 28, 128, 144 CMYK 81, 11, 0, 44	**50** HEX #2A9AAD RGB 42, 154, 173 CMYK 76, 11, 0, 32	**40** HEX #3EB2C6 RGB 62, 178, 198 CMYK 69, 10, 0, 22	**30** HEX #59C6DA RGB 89, 198, 218 CMYK 59, 9, 0, 15	**20** HEX #7CD9EA RGB 124, 217, 234 CMYK 47, 7, 0, 8	**10** HEX #A6E9F5 RGB 166, 233, 245 CMYK 32, 5, 0, 4

GREEN

AA	AA	AA AA*	AA AA*	AA AA*	AA	AA	AA	AA
BR.BLUE 90 HEX #1A3404 RGB 26, 52, 4 CMYK 50, 0, 92, 80	**80** HEX #294D0A RGB 41, 77, 10 CMYK 47, 0, 87, 70	**70** HEX #33660F RGB 51, 102, 15 CMYK 50, 0, 85, 60	**60** HEX #45821B RGB 69, 130, 27 CMYK 47, 0, 79, 49	**50** HEX #5CA632 RGB 92, 166, 50 CMYK 45, 0, 70, 35	**40** HEX #7DBF52 RGB 125, 191, 82 CMYK 35, 0, 57, 25	**30** HEX #9CD674 RGB 156, 214, 116 CMYK 27, 0, 46, 16	**20** HEX #BDED9D RGB 189, 237, 157 CMYK 20, 0, 34, 7	**10** HEX #DEF5CC RGB 222, 245, 204 CMYK 9, 0, 17, 4

YELLOW

AA	AA AA	AA	AA	AA	AA	AA	AA	AA
90 HEX #594C09 RGB 89, 76, 9 CMYK 0, 15, 90, 65	**80** HEX #877414 RGB 135, 116, 20 CMYK 0, 14, 85, 47	**70** HEX #C7A70A RGB 199, 167, 10 CMYK 0, 16, 95, 22	**60** HEX #E0BB00 RGB 224, 187, 0 CMYK 0, 17, 100, 12	**50** HEX #F5CC00 RGB 245, 204, 0 CMYK 0, 17, 100, 4	**40** HEX #FFDD00 RGB 255, 221, 0 CMYK 0, 13, 100, 0	**30** HEX #FFE926 RGB 255, 233, 38 CMYK 0, 9, 85, 0	**20** HEX #FFF170 RGB 255, 241, 112 CMYK 0, 5, 56, 0	**10** HEX #FFF9C2 RGB 255, 249, 194 CMYK 0, 2, 24, 0

ORANGE

AA	AA AA*	AA AA	AA AA*	AA	AA	AA	AA	AA
90 HEX #663205 RGB 102, 50, 5 CMYK 0, 51, 95, 60	**80** HEX #994B08 RGB 153, 75, 8 CMYK 0, 51, 95, 40	**70** HEX #B85B0A RGB 184, 91, 10 CMYK 0, 51, 95, 28	**60** HEX #F26D00 RGB 242, 109, 0 CMYK 0, 55, 100, 5	**50** HEX #FF851A RGB 255, 133, 26 CMYK 0, 48, 90, 0	**40 / PMS 1375 C** HEX #FF9E1B RGB 255, 158, 27 CMYK 0, 38, 89, 0	**30** HEX #FFB24D RGB 255, 178, 77 CMYK 0, 30, 70, 0	**20** HEX #FEC87F RGB 254, 200, 127 CMYK 0, 21, 50, 0	**10** HEX #FBD9A5 RGB 251, 217, 165 CMYK 0, 14, 34, 2

Colors | Extended Palette

RED

AA	AA	AA AA*	AA AA	AA AA*	AA AA*	AA	AA	AA
BR.BLUE 90 HEX #660507 RGB 102, 5, 7 CMYK 0, 95, 93, 60	**80** HEX #A00D11 RGB 160, 13, 17 CMYK 0, 92, 89, 37	**70** HEX #CD1A1C RGB 205, 26, 28 CMYK 0, 87, 86, 20	**60** HEX #E22827 RGB 226, 40, 39 CMYK 0, 82, 83, 11	**50** HEX #ED3A35 RGB 237, 58, 53 CMYK 0, 76, 78, 7	**40** HEX #F75C57 RGB 247, 92, 87 CMYK 0, 63, 65, 3	**30** HEX #F98B83 RGB 249, 139, 131 CMYK 0, 44, 47, 2	**20** HEX #FCB0AA RGB 252, 176, 170 CMYK 0, 30, 33, 1	**10** HEX #FDD7D4 RGB 253, 215, 212 CMYK 0, 15, 16, 1

MAGENTA

AA	AA	AA AA*	AA AA*	AA AA*	AA AA*	AA	AA	AA
90 HEX #510831 RGB 81, 8, 49 CMYK 0, 90, 40, 68	**80** HEX #8D1655 RGB 141, 22, 85 CMYK 0, 84, 40, 45	**70** HEX #A82168 RGB 168, 33, 104 CMYK 0, 80, 38, 34	**60** HEX #BF317B RGB 191, 49, 123 CMYK 0, 74, 36, 25	**50** HEX #D2468E RGB 210, 70, 142 CMYK 0, 67, 32, 18	**40** HEX #E160A2 RGB 225, 96, 162 CMYK 0, 57, 28, 12	**30** HEX #EC81B7 RGB 236, 129, 183 CMYK 0, 45, 22, 7	**20** HEX #F5A8CF RGB 245, 168, 207 CMYK 0, 31, 16, 4	**10** HEX #FAD4E7 RGB 250, 212, 231 CMYK 0, 15, 8, 2

PURPLE

AA	AA	AA AA*	AA AA*	AA AA*	AA AA*	AA	AA	AA
90 HEX #3E2C72 RGB 62, 44, 114 CMYK 46, 61, 0, 55	**80** HEX #533C91 RGB 83, 60, 145 CMYK 43, 59, 0, 43	**70** HEX #6A50AD RGB 106, 80, 173 CMYK 39, 54, 0, 32	**60** HEX #7C60BF RGB 124, 96, 191 CMYK 35, 50, 0, 25	**50** HEX #8E72D0 RGB 142, 114, 208 CMYK 32, 45, 0, 18	**40** HEX #9C82D9 RGB 156, 130, 217 CMYK 28, 40, 0, 15	**30** HEX #B59DEA RGB 181, 157, 234 CMYK 23, 33, 0, 8	**20** HEX #D0BEF5 RGB 208, 190, 245 CMYK 15, 22, 0, 4	**10** HEX #E9E0FC RGB 233, 224, 252 CMYK 8, 11, 0, 1

Color Accessibility | Background

ACCESSIBILITY:

Section 508 requires that Federal agencies make their information and communication technologies accessible to people with disabilities. The Web Content Accessibility Guidelines (WCAG) 2.1, which is published by the World Wide Web Consortium's (W3C) Web Accessibility Initiative (WAI), provide recommendations for making web content more accessible to a wider range of people with a variety of disabilities.

COLOR ACCESSIBILITY

Color accessibility, which is only a sub section of overall accessibility, enables people with visual impairments like low vision and color blindness to access and interact with digital content similar to those without such impairments. Even when a digital experience is not required to meet 508 compliance, it is good practice to consider color accessibility as 4.5% of the total population is estimated to be experiencing some form of visual impairment.

TERMINOLOGY:

Color blindness: It is the decreased ability to distinguish between certain colors. It affects about 8% of men and 0.5 of women in the world. Most common form is the red-green color blindness.

Contrast ratio: Contrast is a measure of the difference in perceived "luminance" or brightness between two colors and is expressed as a ratio ranging from 1:1 (e.g., white text on white background) to 21:1 (black text on white background).

Large text: In WCAG terminology, large text refers to 18pt and larger (in regular weight), or 14pt and larger (if it is bold).

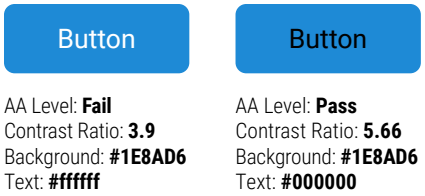
Level AA: It is one of the conformance levels set by WCAG to determine the accessibility of a web/ digital interface. For text, it requires a contrast ratio of at least 4.5:1 for normal text and 3:1 for large text.

User Interface (UI) Components: Elements of a user interface that provides interactivity and distinctive functionality. E.g. social media icon, button, form field.

LIMITATIONS OF STRICT ADHERENCE TO WCAG GUIDELINES:

While we should use WCAG 2.1 color usage guidelines as a starting point to govern our design decisions, we should be mindful of the following limitations:

- For some hues what passes minimum contrast ratio is not always very readable, especially when using white text on hues close to yellow, cyan and magenta, and when using black text on hues close to bright red, blue and green.



- Strict adherence to AA or AAA standards could lead to very dark palettes that are not only unfriendly but are also difficult to distinguish for people with color blindness.
- WCAG 2 does not prohibit any specific color combinations, such as red and green which would not pass a color blindness test.

RESOURCES

- Web Content Accessibility Guidelines (WCAG): Standard for web content accessibility
- Contrast Checker: To check whether foreground / background color combinations pass WCAG contrast ratio guidelines.
- Viz Palette: Check how a color combination might look to those with color perception deficiencies.

Color Accessibility | Brookings Guidelines

When making color choices at Brookings we should aim to achieve Level AA as a starting point, but unless a site is required to pass the WCAG test, it's encouraged to use your best judgment while giving priority to the Brookings Brand palette and consider the above mentioned limitations of WCAG guidelines. In case of a conflict between WCAG guidelines and Brookings guidelines, **unless the site is required to pass WCAG accessibility test, give precedence to Brookings color accessibility guidelines**, which includes best practices to address color blindness and brand compliance.

1. USE OF COLOR:
Color should not be used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element. For example, an error state in a form field should no be marked solely with color red. Instead, it should be accompanied with an icon or supporting text.

2. TEXT CONTRAST:
Visual presentations of text and images of text should aim for a minimum contrast ratio of 4.5:1, **except for the following:**

- Large Text: Large-scale text and images of large-scale text can have a minimum contrast ratio of 3:1;
- Incidental: Text or images of text that are part of an inactive user interface component (e.g, disabled button), that are pure decoration, that are not visible to anyone (e.g., invisible/hidden links), or that are part of a picture that contains significant other visual content (i.e., text that does not contain any important information within an image), have no contrast requirement.
- Logotypes: Text that is part of a logo or brand name has no contrast requirement.
- White text (of regular weight) could be used against grade 40 and above of any color family in the extended palette.
- Black text should not be used against grade 60 and above of any color family in the extended palette.

3. NON-TEXT CONTRAST:
Visual presentation of the following should aim for a minimum contrast ratio of 3:1 against adjacent color(s):

- User Interface Components: Visual information required to identify user interface components and states, except for inactive components or where the appearance of the component is determined by the user agent and not modified by the author;
- Graphical Objects: Parts of graphics required to understand the content, except when a particular presentation of graphics is essential to the information being conveyed.

4. COLOR COMBINATIONS FOR THE COLOR BLIND

- Avoid using red and green of similar luminosity together to convey meaning. (This is the most common type of color blindness.)
- Different types of blue-yellow color blindness, which is less common, makes it hard to differentiate between blue and green, yellow and red, purple and red, and yellow and pink. It also makes colors look less bright.
- Do not choose hues that are too close to one another such as blue and purple, or yellow and orange.
- If afore mentioned color combinations must be used together in a design, ensure that they have distinct differences in brightness and saturation. Individuals with color blindness can differentiate between light and dark colors.
- Do not use red on dark background. Red does not have enough luminosity to provide good contrast.
- Use vivid colors (with higher saturation and/or brightness). Low saturation colors are especially hard to distinguish.

Data Visualization | Basic Structure

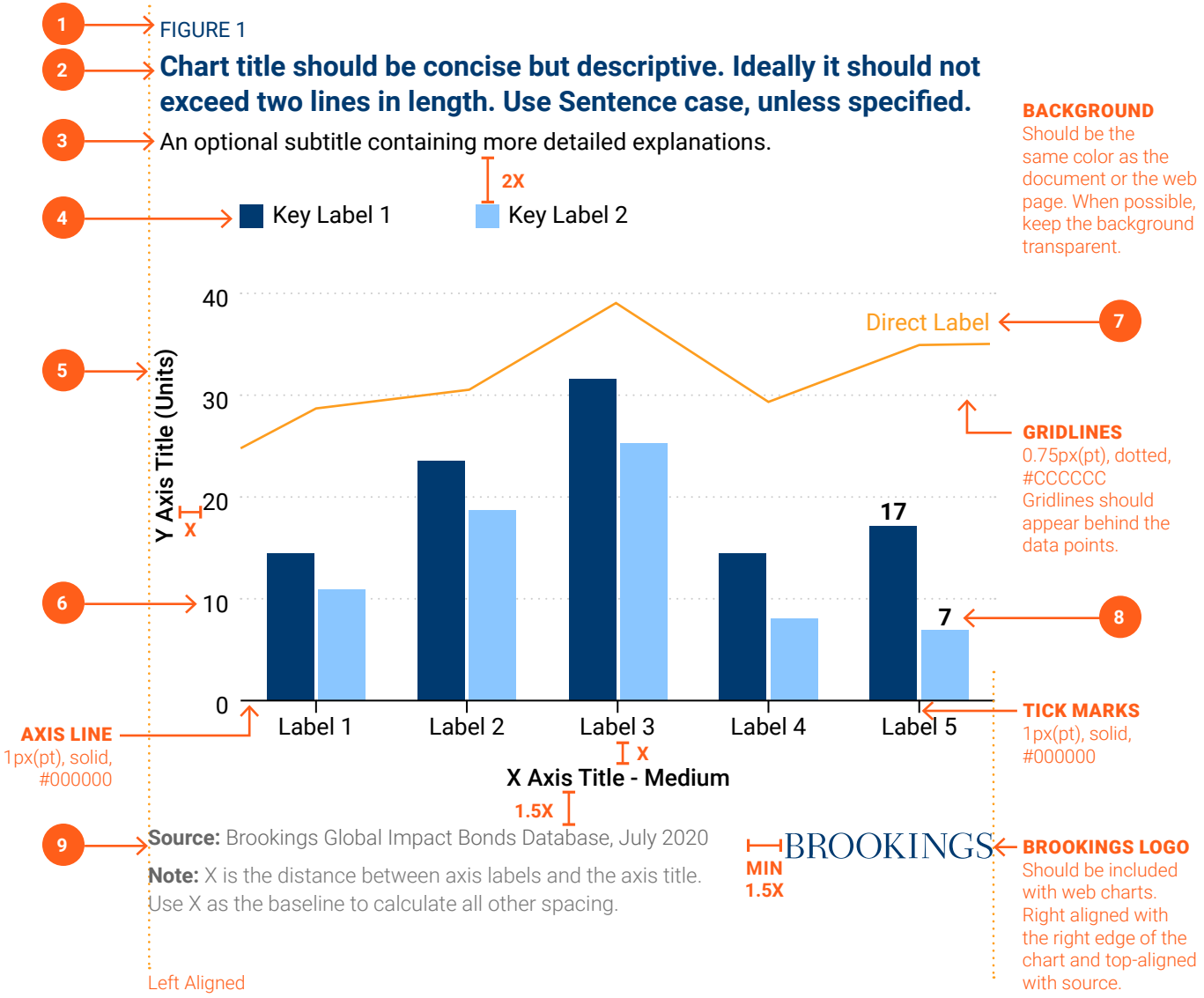
GOALS OF DATA VIZ GUIDELINES:

- Create a uniform look and feel across all Brookings data visualizations.
- Simplify and expedite the production process by eliminating the time spent on design decisions related to typography, color and layout.
- Help construct enriching and easily digestible visualizations that tell stories effectively.
- Improve aesthetics and accessibility.

ANATOMY & TYPOGRAPHY

The illustration on the right identifies common elements used in constructing a chart. See the chart in the following page for typography specifications related to the numbered list below:

1. Figure number
2. Chart title
3. Subtitle
4. Legend / Key labels
5. Axis title
6. Axis labels
7. Direct label
8. Data label
9. Source & Notes



	TYPEFACE (ALTERNATIVE)	WEB * SIZE / LEADING	PRINT ** SIZE / LEADING	COLOR	NOTES
FIGURE NUMBER	Roboto Regular (Helvetica Light)	10pt (All caps)	9pt (All caps)	• Primary color of the document or web page • OR, Black	
Title	Roboto Bold (Helvetica Bold)	16pt / 20pt	12pt / 15pt	• Primary color of the document or web page • OR, Black	Elucidate the main point of the chart. Keep it shorter than two lines. Pay attention to bad breaks/widows. Avoid jargon and provide contextual details. Don't assume the reader will have read the surrounding text.
Subtitle	Roboto Regular (Helvetica Regular)	12pt / 15pt	10pt / 12pt	Black	Optional. Used to qualify or further clarify the title.
X and Y axis titles	Roboto Medium (Helvetica Bold)	10pt	10pt	Black	Include units or multipliers in parenthesis (millions), (%). Avoid meaningless labels and unnecessary descriptors (e.g., "units").
X and Y axis labels	Roboto Regular (Helvetica Regular)	10pt	10pt	Black	Use short labels and remove repetitive units and multipliers. Should be horizontal.
Key labels	Roboto Regular (Helvetica Regular)	10pt	10pt	Black	Avoid redundant key labels if possible. Use when direct labels are not possible.
Direct labels	Roboto Regular (Helvetica Regular)	10pt	10pt	• Match the corresponding data color, or • Black	Use direct labels on line or column charts with three or fewer series instead of key.
Data labels	Roboto Bold	10pt	10pt		No units or multipliers.
Source and Notes	Roboto light	9pt / 12pt	9pt / 12pt	Gray 60	Bold '**Source:**' and '**Notes:**'

* Web typography chart is based on a body font size of 16pt. ** Print typography chart assumes a body font size of 12pt. If the body font size changes, this chart should be adjusted accordingly by first setting the font size of the chart title to the same size as the body font size and then adjusting the rest of the elements proportionately.

Data Visualization | Colors

Color plays an important role in data visualizations. Proper use of color can help tell an effective story, highlight key elements of information and capture attention, stimulate emotions and engage the audience, and improve aesthetics. Inversely, ineffective use of color can distract from what is being communicated. When choosing a color palette consider the type of data that is presented. There are 3 types of color palettes:

1. CATEGORICAL

Use categorical palettes to distinguish discrete categories of data that do not have an inherent ordering. Use distinct hues of visually similar brightness and saturation to avoid creating a sense of order or priority. Try to use a maximum of 6 categorical colors as it becomes difficult for people to distinguish between hues after 5-8 colors. If more than 6 colors are needed, consider alternative solutions such as grouping some categories or using alternative visual cues. **Keep it simple.** Do not use a categorical palette if the story can be told with a single color.

CATEGORICAL 6-COLOR

2. SEQUENTIAL

Sequential palettes can be used to show an inherent order or variations in numeric values. These are usually monochromatic gradients of color from light to dark, typically using light colors to indicate low (or less interesting) values and darker and brighter colors to indicate high (or more interesting) values. In addition to variations in lightness, we can also use two distinct hues to give more contrast. If using two hues for the gradient, ensure that the hue used to represent low values has a lower relative luminance than the hues used to indicate higher values. E.g., yellow (for lower values) and Brookings Blue (for higher values). Instead of using a continuous gradient, consider an equivalent distant gradation of colors to provide more clarity.

SEQUENTIAL (SINGLE HUE)

SEQUENTIAL (TWO HUES)

3. DIVERGING

Diverging palettes are useful when dealing with negative and positive values or a range of values that have two extremes with a baseline central value, like zero. Diverging palettes should use two distinct hues of similar brightness and saturation on either end with a neutral color in the middle. For improved clarity of values, use a discrete set of colors with an evenly distributed gradation, instead of a continuous palette.

DIVERGING

Resources: Data Color Picker can be a useful tool for creating sequential (2 hues) and diverging color palettes. Try to use colors in the extended palette when possible.

Data Visualization | Colors - Categorical Combinations

- Use Brookings Blue as the base color when possible.
- Do not use color that might show priority (like bright red or magenta) unless the intention is to highlight one category.
- Use colors of similar intensity to show similar importance. However, ensure that the color blocks have some separation between them.
- When using similar hues, vary the intensity for aesthetics and accessibility.
- Do not use monochromatic or analogous colors for categorical data carrying more than 2 color groups as that can give a sequential appearance to the data.
- For 3 or more categorical variable, avoid a rainbow palette with bold hues. Opt for more muted colors.

2 COLORS

ANALOGOUS
Different shades of the same hue, or of similar hues can be used when the associated values are related.

BROOKINGS BLUE
HEX #003A70
RGB 0, 58, 112
CMYK 100, 73, 0, 33

VIVID BLUE 20
HEX #8AC6FF
RGB 138, 198, 255
CMYK 40, 12, 0, 0

BROOKINGS BLUE
HEX #003A70
RGB 0, 58, 112
CMYK 100, 73, 0, 33

TEAL 40
HEX #3EB2C6
RGB 62, 178, 198
CMYK 69, 10, 0, 22

CONTRASTING
Colors on the opposite ends of the spectrum. Use Brookings Blue with Secondary colors.

BROOKINGS BLUE
HEX #003A70
RGB 0, 58, 112
CMYK 100, 73, 0, 33

ORANGE 40
HEX #FF9E1B
RGB 255, 158, 27
CMYK 0, 40, 97, 0

BROOKINGS BLUE
HEX #003A70
RGB 0, 58, 112
CMYK 100, 73, 0, 33

YELLOW 50
HEX #F5CC00
RGB 245, 204, 0
CMYK 0, 17, 100, 4

SEMANTIC
Where applicable, use colors that are associated with certain concepts. For e.g., option 1 shows male and female data, and option 2 show pros and cons or positive and negative data. **(This red-green color combination passes color blind test through variations in intensity.)**

TEAL 30
HEX #59C6DA
RGB 89, 198, 218
CMYK 59, 9, 0, 15

RED 40
HEX #F75C57
RGB 247, 92, 87
CMYK 0, 63, 65, 3

GREEN 50
HEX #5CA632
RGB 92, 166, 50
CMYK 45, 0, 70, 35

RED 70
HEX #CD1A1C
RGB 205, 26, 28
CMYK 0, 87, 86, 20

POLITICAL
Use red and blue of similar intensity to represent data related to political parties in the US. Do not use the Brand Blue color family to represent a political party.

VIVID BLUE 60
HEX #1479BB
RGB 20, 121, 187
CMYK 89, 35, 0, 27

RED 50
HEX #ED3A35
RGB 237, 58, 53
CMYK 0, 76, 78, 7

VIVID BLUE 30
HEX #5AADF6
RGB 90, 173, 246
CMYK 63, 30, 0, 4

RED 30
HEX #F98B83
RGB 249, 139, 131
CMYK 0, 44, 47, 2

Data Visualization | Colors - Categorical Combinations

3 COLORS

BRAND COLORS
Use colors from the brand palette whenever possible.

BROOKINGS BLUE
HEX #003A70
RGB 0, 58, 112
CMYK 100, 73, 0, 33

VIVID BLUE 20
HEX #8AC6FF
RGB 138, 198, 255
CMYK 40, 12, 0, 0

ORANGE 40
HEX #FF9E1B
RGB 255, 158, 27
CMYK 0, 40, 97, 0

BROOKINGS BLUE
HEX #003A70
RGB 0, 58, 112
CMYK 100, 73, 0, 33

ORANGE 40
HEX #FF9E1B
RGB 255, 158, 27
CMYK 0, 40, 97, 0

PMS 427 C
HEX #D0D3D4
RGB 208, 211, 212
CMYK 14, 8, 4, 0

POLITICAL
Use red and blue of similar intensity to represent data related to political parties in the US. Yellow represents 'Independent' category. Do not use the Brand Blue color family to represent a political party.

VIVID BLUE 60
HEX #1479BB
RGB 20, 121, 187
CMYK 89, 35, 0, 27

RED 50
HEX #ED3A35
RGB 237, 58, 53
CMYK 0, 76, 78, 7

YELLOW 60
HEX #E0BB00
RGB 224, 187, 0
CMYK 0, 17, 100, 12

VIVID BLUE 30
HEX #5AADF6
RGB 90, 173, 246
CMYK 63, 30, 0, 4

RED 30
HEX #F98B83
RGB 249, 139, 131
CMYK 0, 44, 47, 2

YELLOW 30
HEX #FFE926
RGB 255, 233, 38
CMYK 0, 9, 85, 0

SEMANTIC
Where applicable, use colors that are associated with certain concepts.
- **Option 1 & 2** show subsets of gender data (female, male and other).
- **Option 3** shows pros, cons and neutral, or positive, negative and neutral data.

(These color combinations pass color blind test.)

TEAL 60
HEX #1C8090
RGB 28, 128, 144
CMYK 81, 11, 0, 44

RED 80
HEX #A00D11
RGB 160, 13, 17
CMYK 0, 92, 89, 37

YELLOW 60
HEX #E0BB00
RGB 224, 187, 0
CMYK 0, 17, 100, 12

TEAL 30
HEX #59C6DA
RGB 89, 198, 218
CMYK 59, 9, 0, 15

RED 40
HEX #F75C57
RGB 247, 92, 87
CMYK 0, 63, 65, 3

YELLOW 40
HEX #FFDD00
RGB 255, 221, 0
CMYK 0, 13, 100, 0

GREEN 50
HEX #5CA632
RGB 92, 166, 50
CMYK 45, 0, 70, 35

RED 70
HEX #CD1A1C
RGB 205, 26, 28
CMYK 0, 87, 86, 20

YELLOW 50
HEX #F5CC00
RGB 245, 204, 0
CMYK 0, 17, 100, 4

MISCELLANEOUS
A pleasing option using Brookings Blue and accent yellow.

BROOKINGS BLUE
HEX #003A70
RGB 0, 58, 112
CMYK 100, 73, 0, 33

TEAL 40
HEX #3EB2C6
RGB 62, 178, 198
CMYK 69, 10, 0, 22

YELLOW 50
HEX #F5CC00
RGB 245, 204, 0
CMYK 0, 17, 100, 4

Data Visualization | Colors - Sequential Combinations

- Use Brookings Blue and other colors from the brand color as the starting point of building a sequential palette.
- Sequential colors show order and can therefore be used in ordinal and interval scales.
- Do not use sequential colors for categorical data.
- Use dark color for high values and lighter colors for low values and less interesting data.
- Gradation of colors should be even across the palette.
- Using two different hues can offer more contrast. However, ensure that the hue used to represent low values has a lower relative luminance than the hue used to indicate higher values. E.g., yellow (for lower values) and Brookings Blue (for higher values). Data Color Picker can be a useful tool for creating sequential palettes with two hues.

2 COLORS

Start with a color from the Brand palette or grade 50 of a color family as the base color. For the 2nd color chose a grade, that is 20-40 grades lighter or darker.

BROOKINGS BLUE
HEX #003A70
RGB 0, 58, 112
CMYK 100, 73, 0, 33

BRAND BLUE 50
HEX #517EAD
RGB 81, 126, 173
CMYK 53, 27, 0, 32

ORANGE 50
HEX #FF851A
RGB 255, 133, 26
CMYK 0, 48, 90, 0

ORANGE 20
HEX #FEC87F
RGB 254, 200, 127
CMYK 0, 21, 50, 0

VIVID BLUE 70
HEX #00649F
RGB 0, 100, 159
CMYK 94, 61, 13, 1

VIVID BLUE 40
HEX #3398EA
RGB 51, 152, 234
CMYK 78, 35, 0, 8

YELLOW 70
HEX #C7A70A
RGB 199, 167, 10
CMYK 0, 16, 95, 22

YELLOW 50
HEX #F5CC00
RGB 245, 204, 0
CMYK 0, 17, 100, 4

3 COLORS

Start with a color from the Brand palette or grade 50 of a color family as the base color. For the 2nd color chose a grade 30 grades lighter or darker.

BROOKINGS BLUE
HEX #003A70
RGB 0, 58, 112
CMYK 100, 73, 0, 33

BRAND BLUE 50
HEX #517EAD
RGB 81, 126, 173
CMYK 53, 27, 0, 32

BRAND BLUE 20
HEX #A8BDD5
RGB 167, 188, 214
CMYK 33, 15, 0, 0

ORANGE 80
HEX #994B08
RGB 153, 75, 8
CMYK 0, 51, 95, 40

ORANGE 50
HEX #FF851A
RGB 255, 133, 26
CMYK 0, 48, 90, 0

ORANGE 20
HEX #FEC87F
RGB 254, 200, 127
CMYK 0, 21, 50, 0

WHEN TO USE

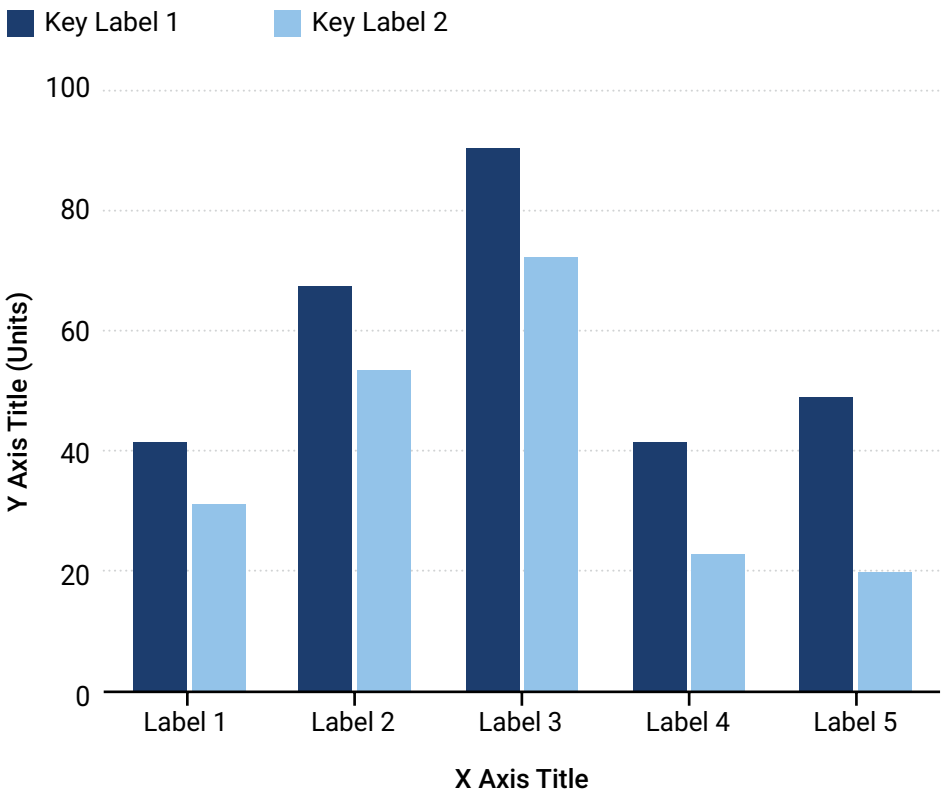
- To show the relationship between a numeric and a categoric variable.
- To compare different items or to compare items over time.
- Use bar charts, instead of column charts, when the data labels are long and to compare more than 10 items.
- Both bar and column charts can be used to show values going in opposite directions from a central line. Column charts are best to indicate negative values from a central horizontal line, implying a downward direction.

TIPS

- Start the y-axis at zero to present an accurate story.
- Use data labels on the bars or at the end of each bar to show exact values and to eliminate gridlines.
- Avoid too many, unnecessary colors. In a simple bar /column chart use a single color for all items and use a secondary color only to highlight a particular bar.
- Avoid 3-D imagery and distracting visuals that make it hard to accurately read the chart.

FIGURE 1

A sample grouped column chart.

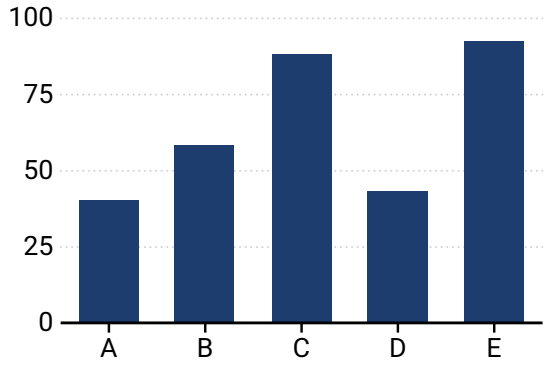


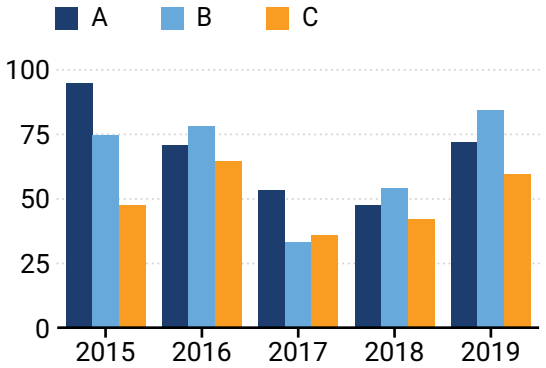
Source: Brookings Brand Guide, 2020

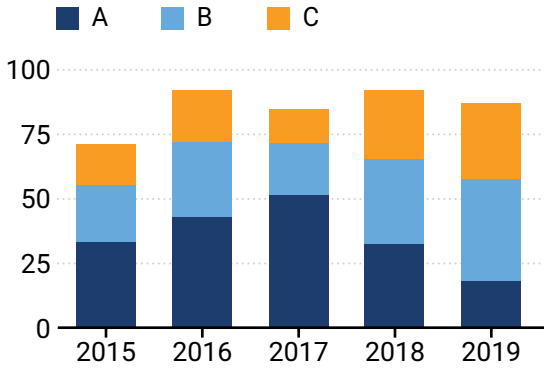
BROOKINGS

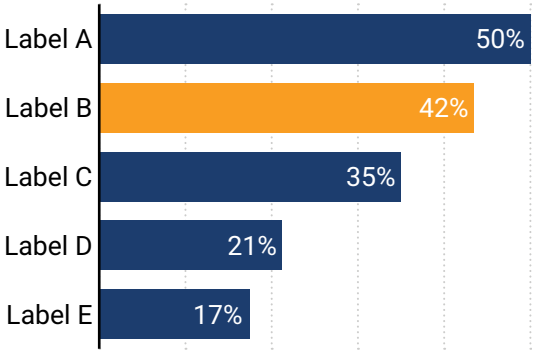
Data Visualization | Chart types – Bar and Column Charts

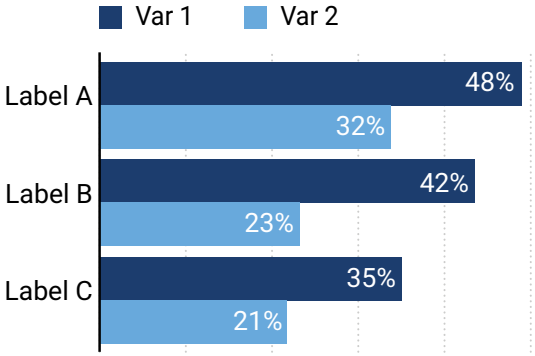
VARIATIONS

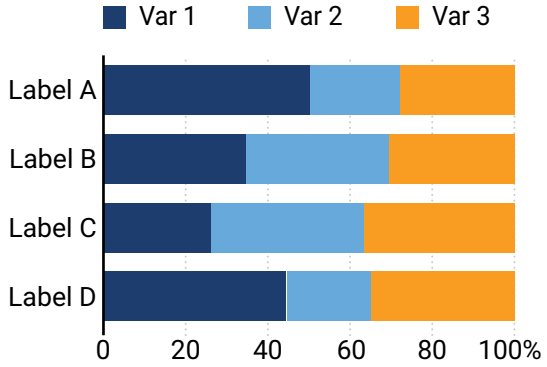












SIMPLE
Use bar charts when the data labels are long and to compare a long list of items. Use a single color in simple bar charts, and only use an accent color to highlight a specific item.

GROUPED.
In a grouped bar chart, multiple sets of data are compared using different colors to denote each series across all sets. Center align the group labels with the bar group.

STACKED
Stacked charts can be used to show the composition of each bar. A stacked chart with variable length bars show numeric values. A 100% stacked chart has a fixed length for all bars and shows percentage values.

Notes: Bars on a column chart are vertical, while bars on a bar chart are horizontal.

WHEN TO USE

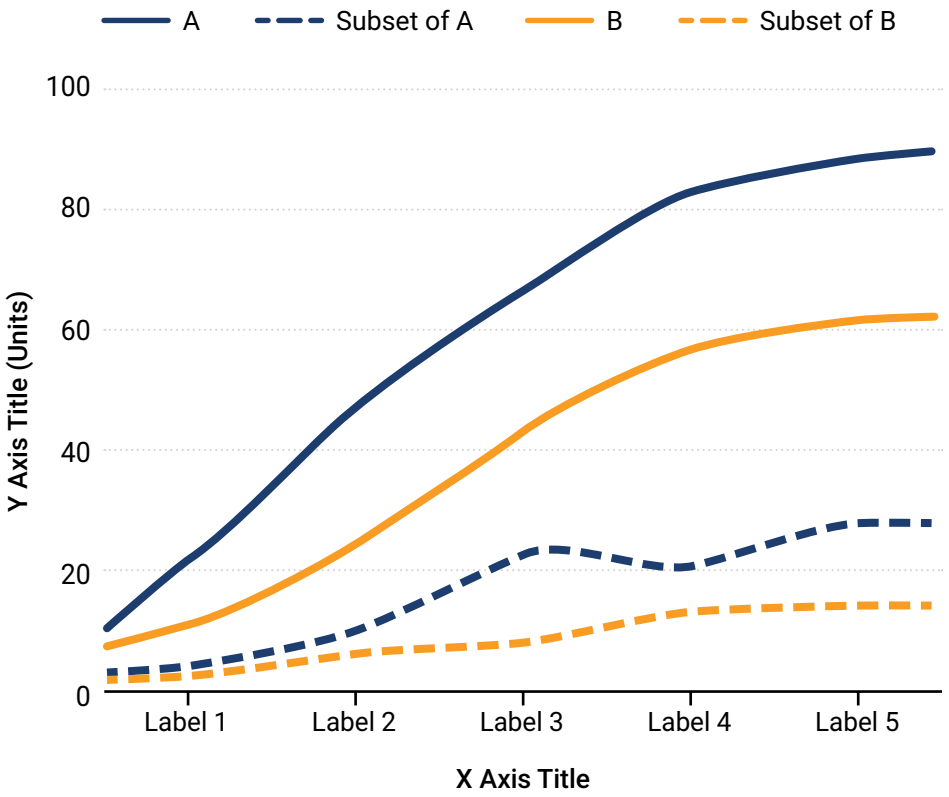
- To show trends in data over time.
- To compare several data sets and show trends in multiple variables using multiple lines (if they are on the same scale).

TIPS

- Start the y-axis at 0 to present an accurate picture.
- Use direct labels when possible. If the lines are too close to one another, use a legend.
- Be mindful of choosing colors that support accessibility.
- Don't compare more than 5-7 lines. Group some categories to reduce clutter and focus on the story you want to tell.
- Don't use too many colors unnecessarily. Use colors to highlight a specific point.

FIGURE 1

A sample line chart containing multiple trend lines.

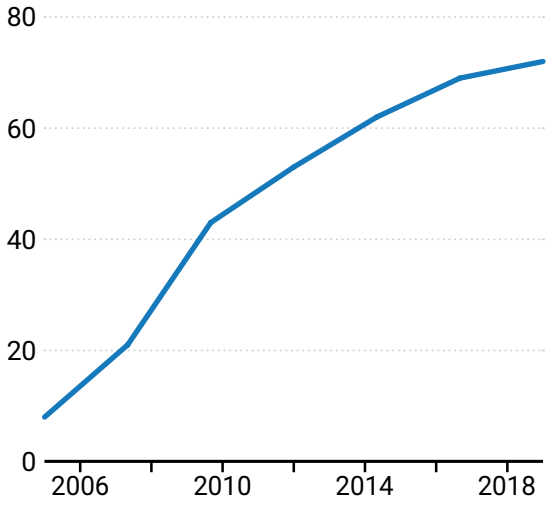


Source: Brookings Brand Guide, 2020

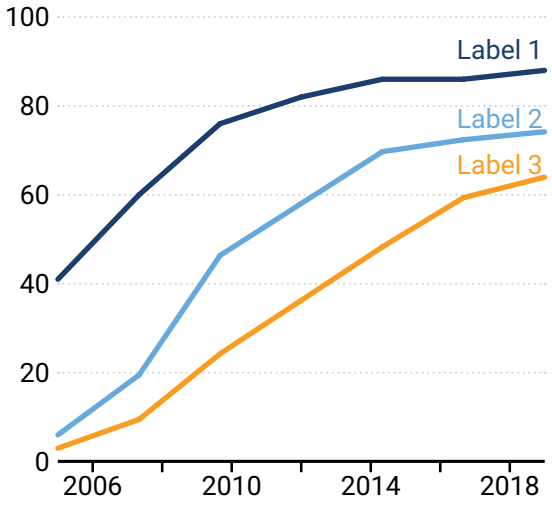
BROOKINGS

Data Visualization | Chart types – Line Chart

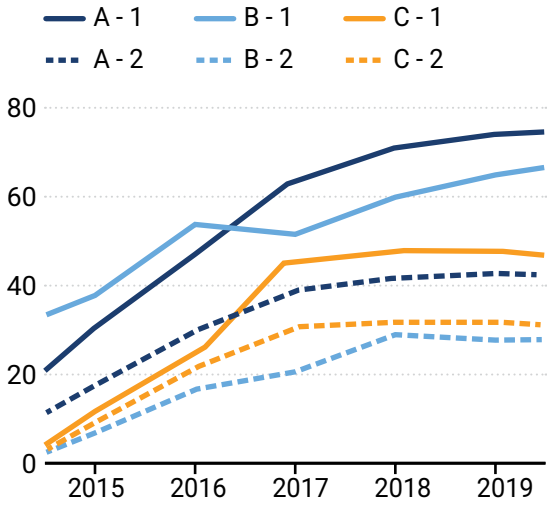
VARIATIONS



SINGLE LINE
To show trend of one variable over time. Use Brookings Blue or Vivid Blue 70 when possible.



2-4 LINES
To compare trends of multiple data sets over time. Use direct data labels if possible.



5 OR MORE LINES
To compare trends of multiple data sets over time. Use direct data labels if possible. If the lines overlap or are too close to one another, use colors and patterns that can help distinguish the lines .

WHEN TO USE

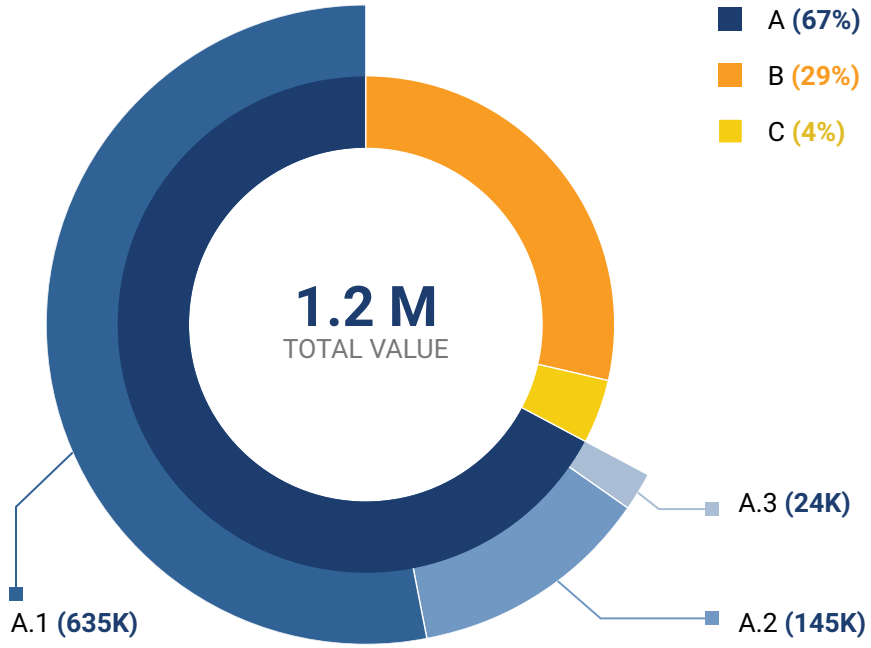
- To show parts of a whole.
- To show proportions or percentages that add up to 100%.

TIPS

- Don't use 3-D images. It makes it harder to read the proportions.
- Make sure the total adds up to 100%.
- Too many segments make it hard to read a pie chart. Keep it clean by comparing only a few categories to tell your story.
- Don't use a pie or donut chart if the proportions are too similar, making it hard to distinguish your data.
- Do not use multiple doughnut or pie charts to compare values, use a stacked bar/column chart instead.
- When possible, use direct labels instead of a side legend.
- Use a doughnut chart to show the total value in the center.

FIGURE 1

A sample doughnut chart showing composition.



Source: Brookings Brand Guide, 2020

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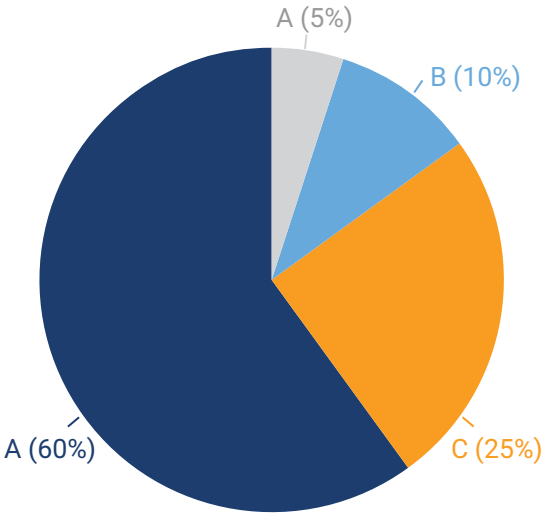
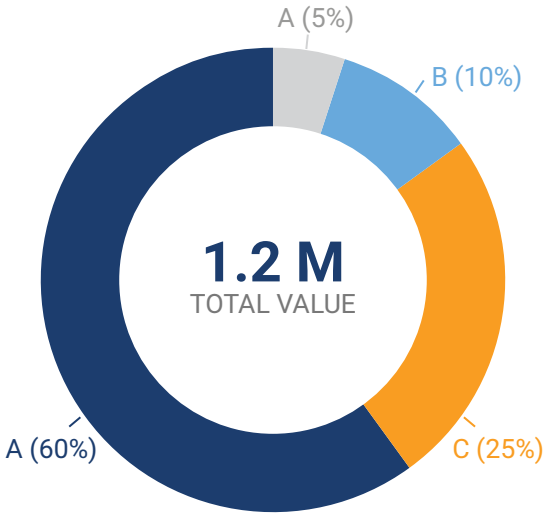
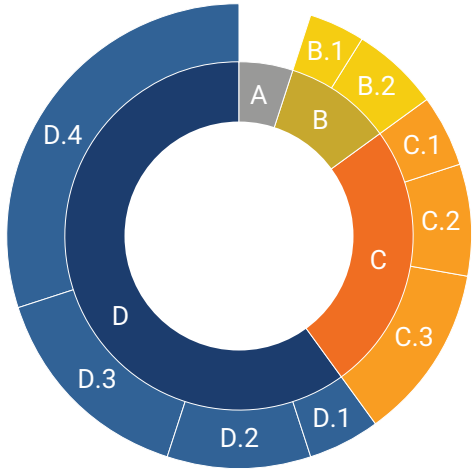
VARIATIONS



PIE CHART
To show parts of a whole or composition, where the area of each slice represents a percentage value. Totals must add up to 100%.



DOUGHNUT CHART
To show parts of a whole, where the length of each slice represents a percentage value. Additional information like total value can be rendered in the center of the doughnut.



SUNBURST
It is a multilevel doughnut chart that can be used to visualize hierarchical datasets from the center outwards, with the innermost ring as the top of hierarchy.

WHEN TO USE

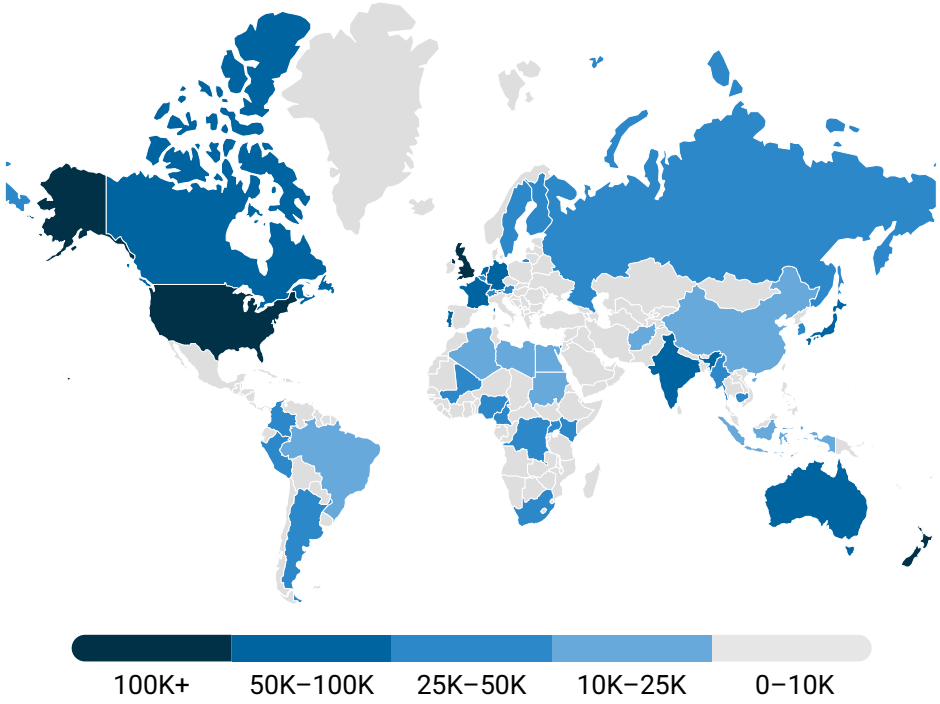
- To show clear geographic trends.
- If the primary component of your data is geographical.
- When it's important to show the absolute location of a place or event.

TIPS

- Craft a clean, simple and organized map, and eliminate unnecessary information and visual clutter.
- Be mindful of the final size of display and how it will be viewed to determine how detailed or general the information should be.
- For digital mediums, consider an interactive map to provide additional information using tooltips and zoom-in features.
- Don't pick colors that are too similar when making comparisons.
- For heat maps, consider an evenly graded discrete color palette instead of a continuous one.
- Consider if another simpler chart type could represent the data more effectively. A ranked list or a bar chart may be better if comparing related values. A pie or a donut chart may be more suitable to depict composition.

FIGURE 1

A sample map with sequential data.



Source: Brookings Brand Guide, 2020

BROOKINGS