

# CHART CHOOSEER

**Find the right chart for the right data**

## SIMPLE TEXT

When you just have **one or two numbers** to share.

Make the **number as prominent as possible** (bold, large font, colour). When appropriate, **add an icon** that represents this number for more effect.

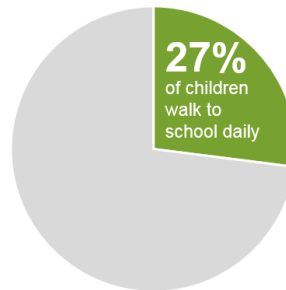
# 27%

of children **walked to school** in 2016

## PIE (DONUT) CHART

When you have **one number** to share.

**Gray out all pie slices** except the one you want your audience to notice. Begin the coloured pie slice at the **12 o'clock position**. If your chart has more than one slice, make sure the values of the slices aren't too similar.



## TABLES

When you need to look up or compare **quantitative data but not show trends**. When you have **multiple units of measure** (e.g., counts, %, rates).

**Gray out or remove borders.** They should only be included if necessary to guide the reader. If appropriate, consider turning your table into a **heat map** to highlight key data values.

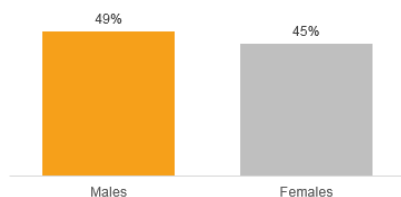
Location	Rate of Infant Mortality (per 10,000)	% Mothers Who Smoked During Pregnancy
Clifford	1.2	5%
Guelph	0.8	24%
Mapleton	0.9	2%
Mount Forest	1.5	0%

## VERTICAL BAR *aka Column Chart*

When you want to show **change over time** or to compare categories.

Best used for **chronological data**. Use this to display **counts or percentages**. Start your **y-axis at 0**, though you may not need this axis if you use data labels.

More **males** report high levels of self-esteem



## HORIZONTAL BAR *aka Bar Chart*

When you want to **compare different categories**, especially with **long names**, and you have **no time intervals**.

Use this to display **counts or percentages**. Start your **x-axis at 0**, though you may not need this axis if you use data labels.

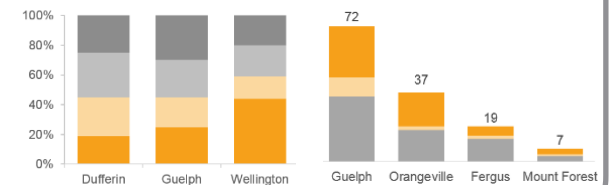
Student in **Erin** are most likely to report **feeling safe at school**



## STACKED BAR

When comparing **part-to-whole relationships** or **totals and subcomponents across categories**.

It's hard to compare subcomponents beyond the bottom series. Make it easier to read by **highlighting the component of interest** and using data labels. Don't display more than four subcomponents.



100% Stacked Bar Chart:  
Values must add to 100%

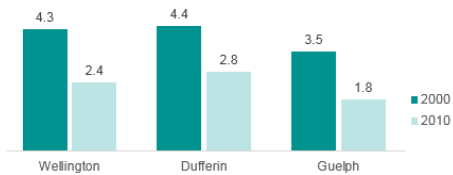
Traditional Stacked Bar:  
Counts or % that don't add to 100%

## CLUSTERED BAR

When you want to compare multiple values across a few categories.

Use this to display counts or percentages. If your data is not chronological, bars should be ordered from largest to smallest or vice versa depending on which category you want to highlight, unless a certain categorical order makes sense.

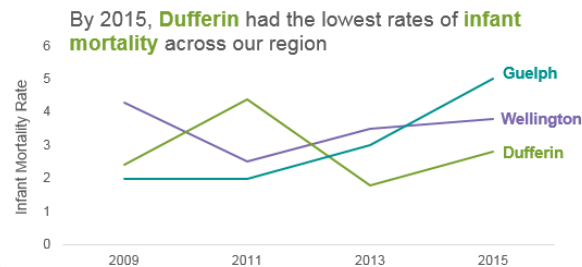
Rates of hospitalization for farm injuries has decreased across WDG



## LINE CHART

When showing trends across time.

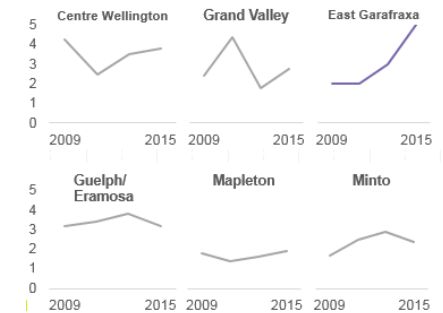
Have no more than four lines on a chart. When the number of lines exceeds four, consider using Small Multiples. Time should read in chronological order along the x-axis.



## SMALL MULTIPLES

When you want to show trends across time. When you have four or more categories.

Ensure each mini chart is scaled the same (x- and y-axis heights and size of chart) to allow for visual comparison. Note: this is not a default chart in Excel. It will require some ninja skills.

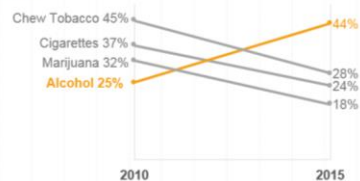


## SLOPEGRAPH

When showing trends across two time points. When one category changed at a rate much faster or in a different direction than the others.

Show no more than four lines – or use colour to accentuate one or two lines of interest. Note: this is not a default chart in Excel. It will require some ninja skills.

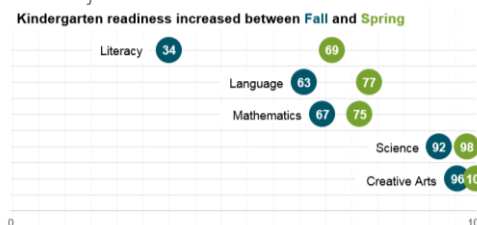
Overall, substance use is declining among youth but rates of alcohol use is increasing



## DOT PLOTS

When you want to show growth, progress, gaps or change over time.

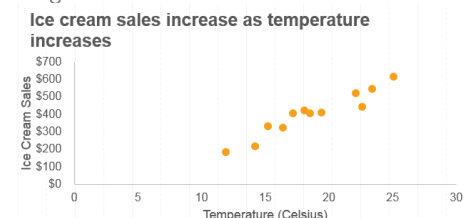
Show progress towards a goal/benchmark by adding in a vertical benchmark line. Keep horizontal gridlines on your chart to help readers understand trends. Remove the y-axis unless necessary. Note: this is not a default chart in Excel. It will require some ninja skills.



## SCATTER PLOTS

When visually exploring the absence or presence of a relationship between the two quantitative measures.

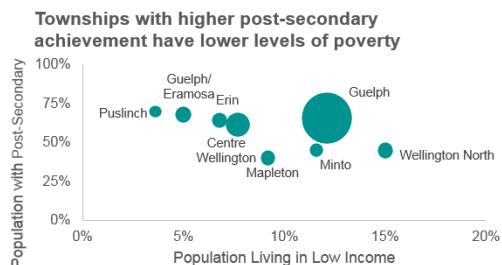
Scatter plots don't work well if the values on the x- or y-axis have limited variation in their values. Gridlines or a trend line can help interpretation. Labeling all values is hard so annotate a few key data points to get your message across.



## BUBBLE PLOT

A scatter plot variation. When you want to change the size of each point (or bubble) depending on a third variable.

Bubble plots don't work well if the values on the x- or y-axes have limited variation in their values. **Annotate a few key data points** to get your message across.



## PICTOGRAM

When you need a fun way to represent a fraction or percentage (e.g., 1/5 or 20%).

A single symbol may represent one or many units (e.g., one symbol could represent one person or 100 people). You can display a number with decimals (e.g. 5.5 out of 6 can be displayed by colouring 5 and half people then graying out the other half of the 6th person). **Symbols should be intuitively recognizable.** Note: pictograms are best made in Piktochart.



## WORD CLOUD

When you have qualitative data and **when individual words have meaning.**

Use **wordle.net** to create word clouds. You can select your font, colour scheme and shape of word cloud. You're also able to right click on words in the cloud to remove them.



## QUOTATIONS

When you have qualitative data and **when comments from a survey or interview have meaning.**

Use **colour** to pull out one or two key words. When you have consent, **add a photo** to humanize the words. When a photo of the speaker isn't an option, add an icon or photo that represents a key point from their quote.



**“To invent, you need a good imagination and a pile of junk.”**  
—Thomas A. Edison

## PICTURES

When you want to supplement other data or **show the impact of a project** (e.g., community garden or bike lanes).

Use **high resolution** photos otherwise your images may appear blurry in PowerPoint or Word. **Ensure you have consent** to use the photo if there are people in it or if it is not yours.

Before



After



## INFOGRAPHICS

When you want to **combine multiple visualizations** into a poster or online visual.

**Infographics take time;** give yourself time to review and revisit your infographic. Follow standard guidelines for any visual (see checklist). **Arrange your infographic around a central image or arrange in rows with two, three or four columns. Try out an agency template!**

