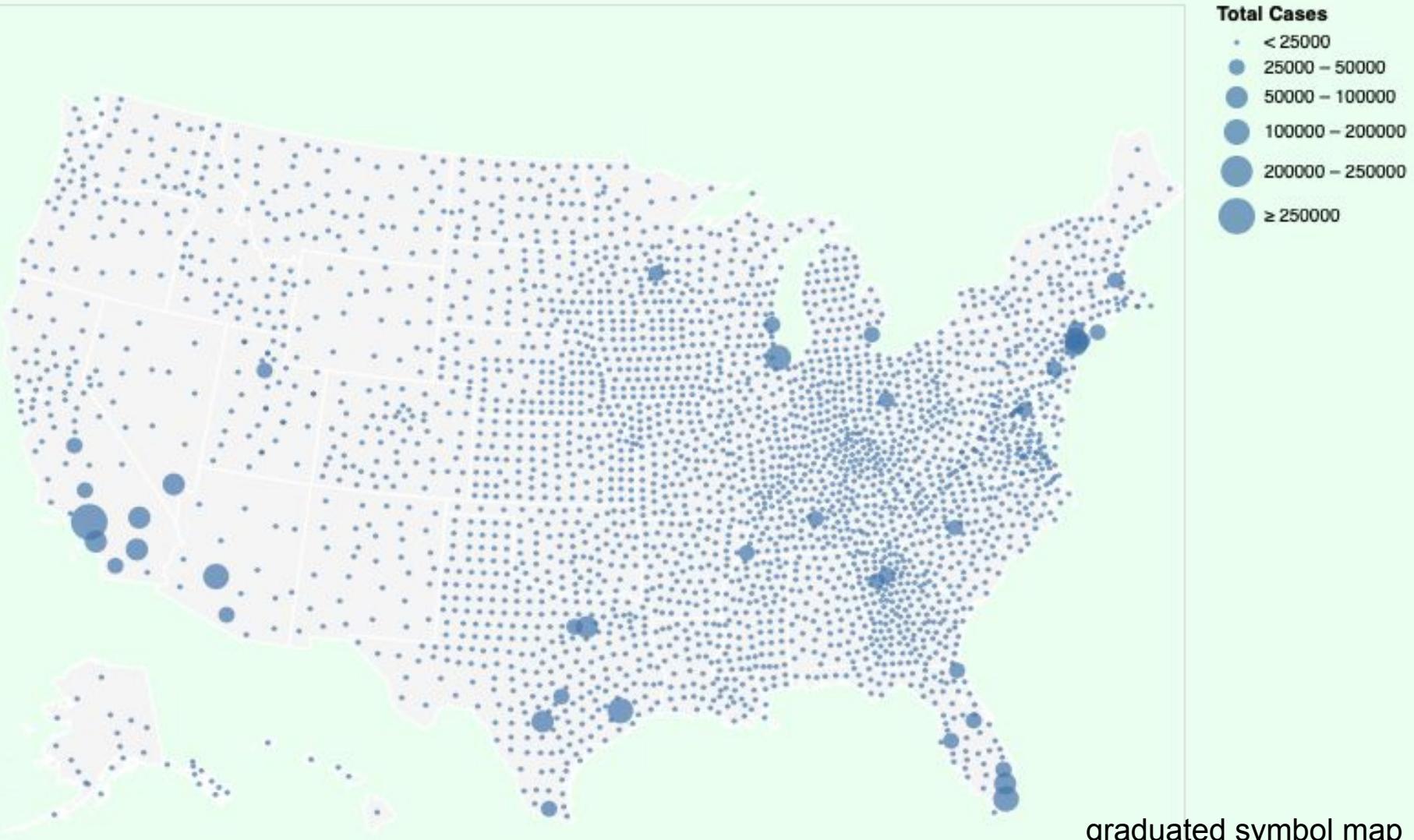




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Examples of Vis 2

COVID-19 Cases in USA

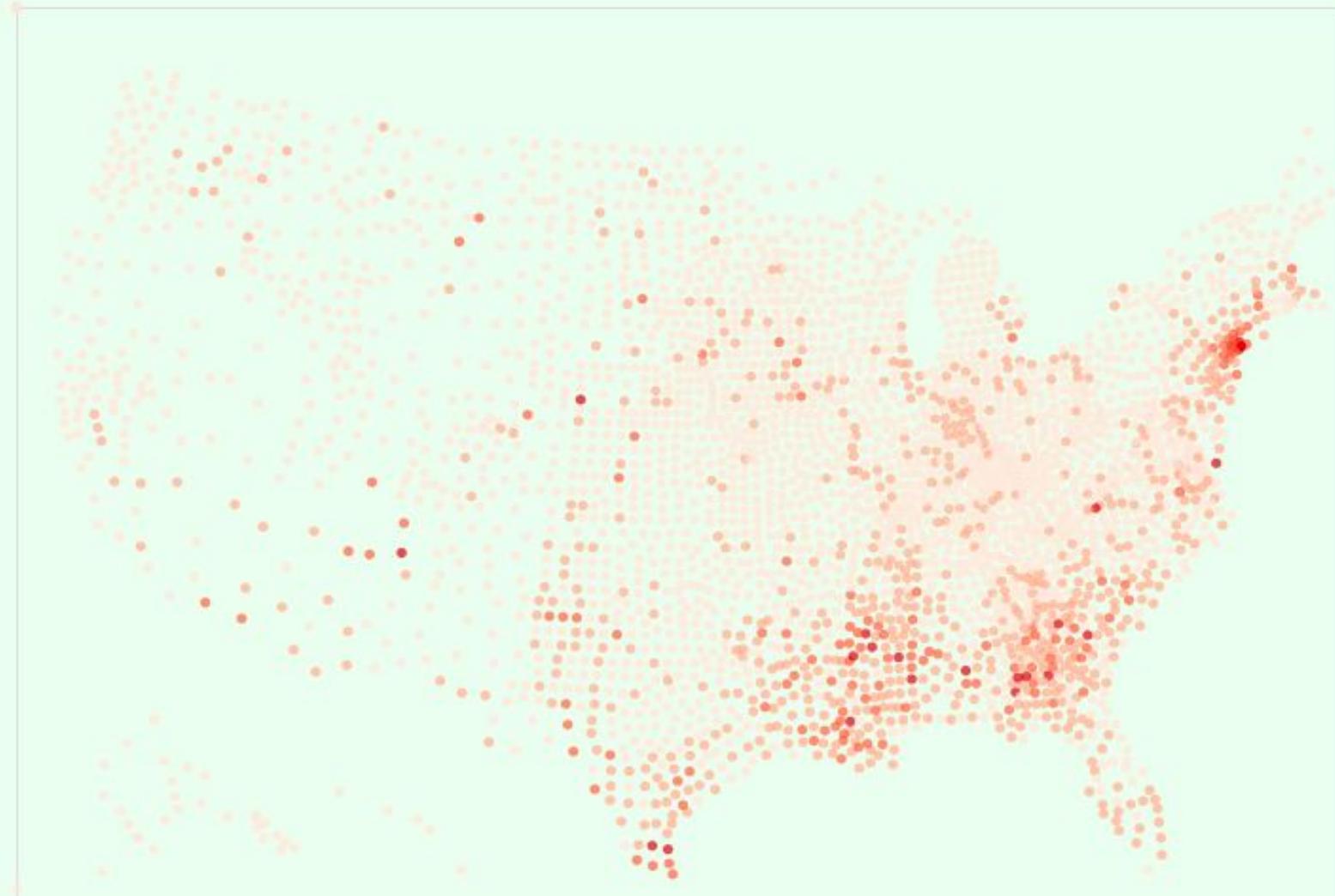


COVID-19 Deaths in USA

graduated symbol colour map

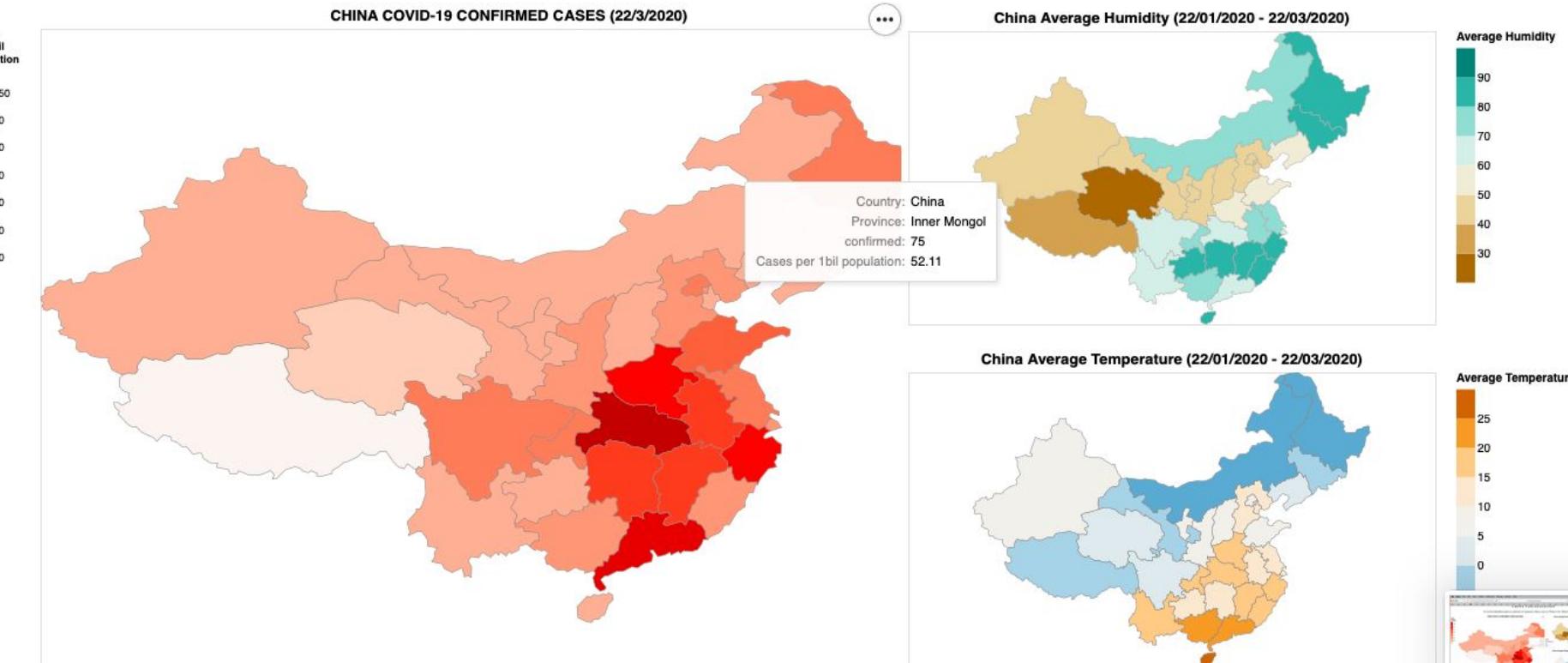
Per 10,000 population

25
15
5



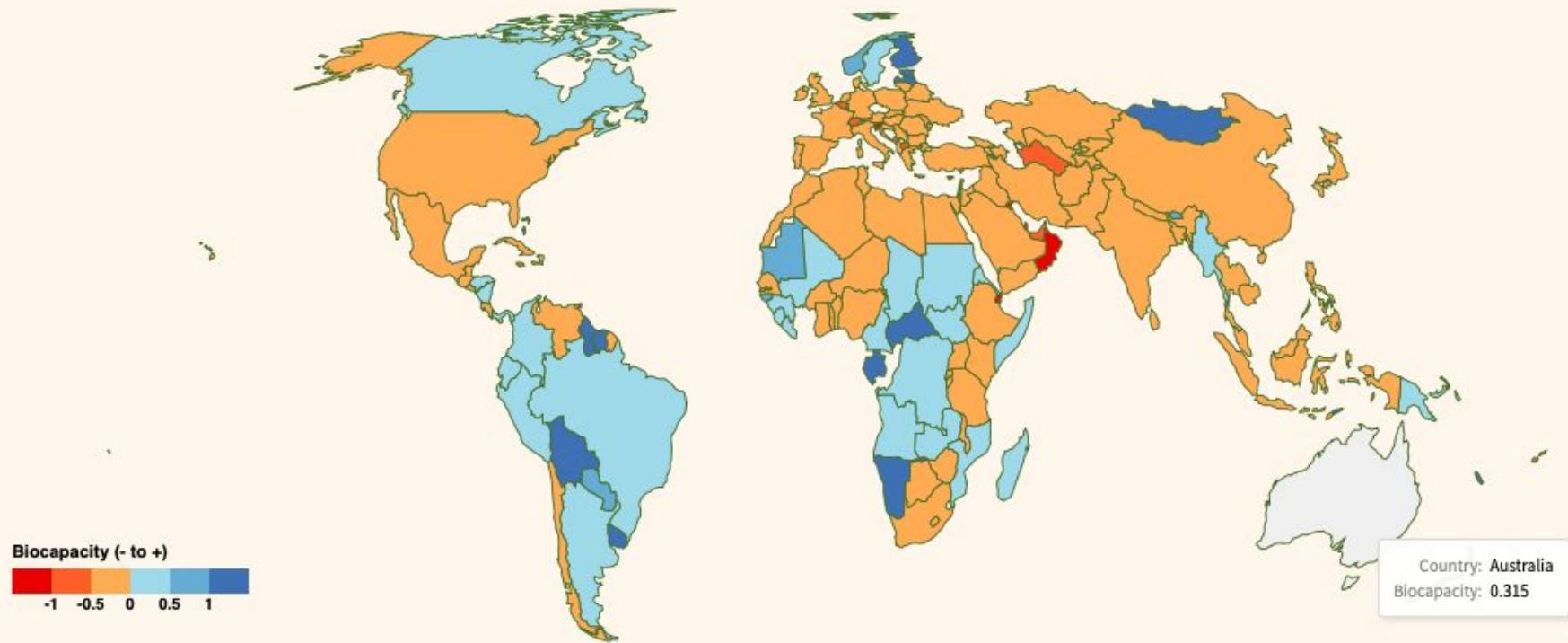
CHINA VISUALIZATION

It was first identified amid an outbreak of respiratory illness cases in Wuhan City, Hubei Province, China.



- use multiple similar map idioms to contrast related attributes

Map of Global Biocapacity (Deficit or Reserve) per million people

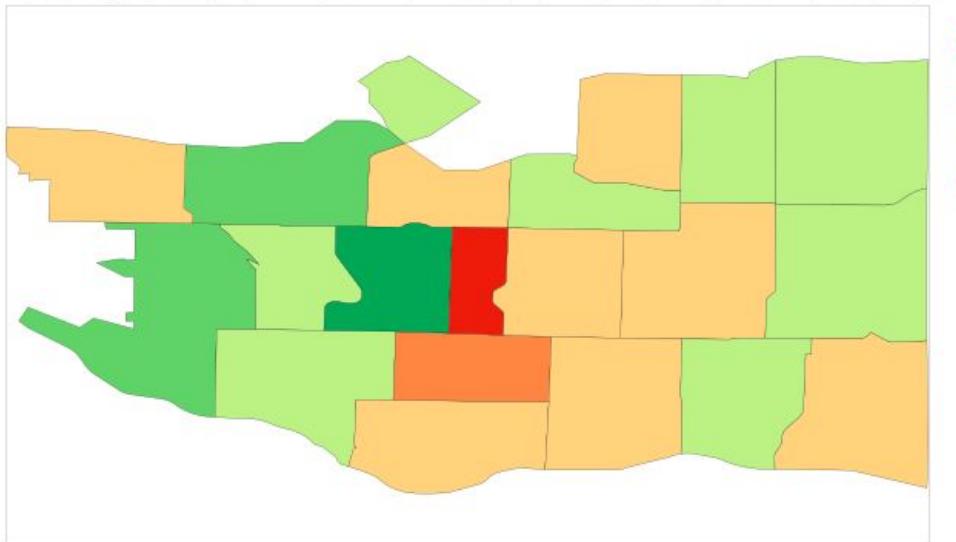


A **biocapacity reserve** (ecological footprint < biocapacity) is key to the **sustainability** of humanity.

- choosing the colour (can be diverging) to emphasize on how better/worse a country is

Map Idioms

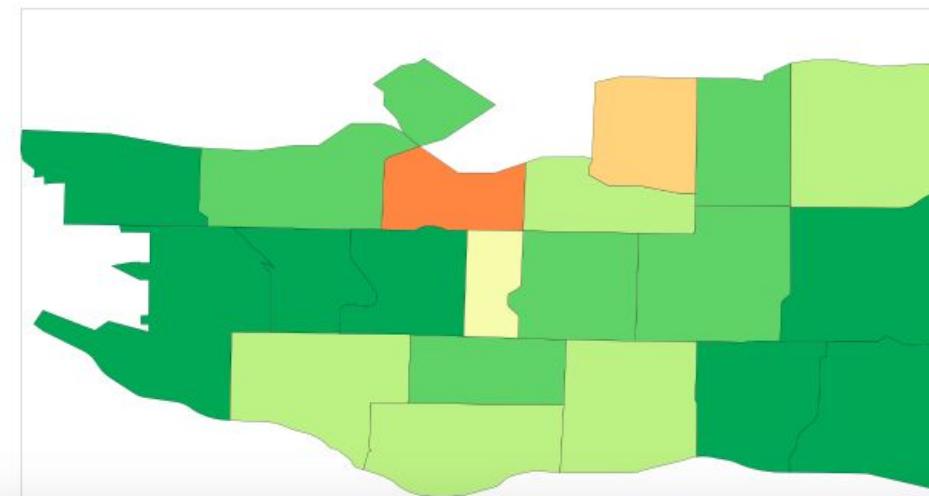
Percentage Change Of "Theft" And "Break and Enter" Crimes From 2018 To 2019



Theft

In terms of the number of crimes, **South Cambie** is the only neighbourhood that has **increased more than 25%**, by contrast, **Shaughnessy** is the only neighbourhood that has **decreased more than 25%**.

Most of the **top-right neighbourhoods** are having **negative** percentage change , while the **middle part** is having **positive** percentage change.



Break and Enter

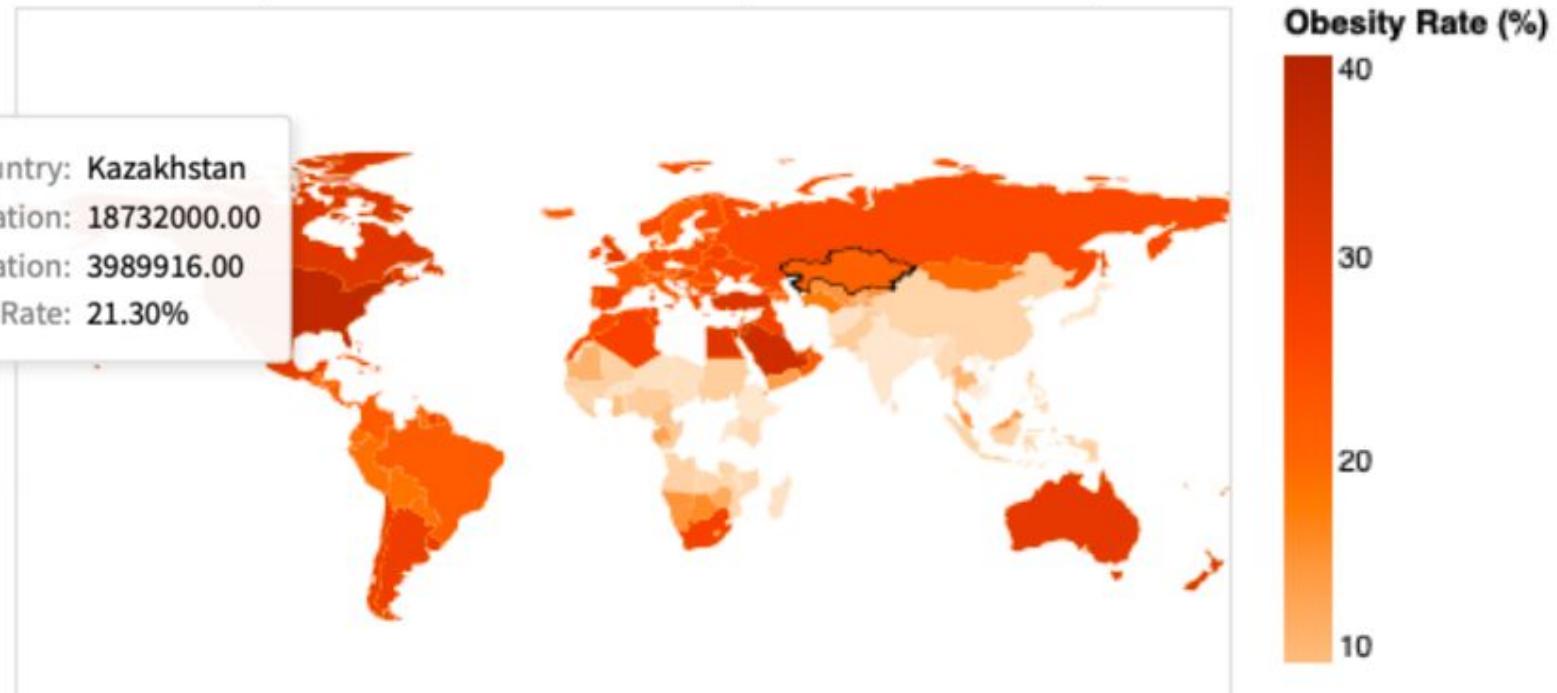
Fairview and **Strathcona** are the only two neighbourhoods having **increase** in percentage change.

Fairview is the only neighbourhood that has more than **20% increase** while **Strathcona** is having around **5% increase**.

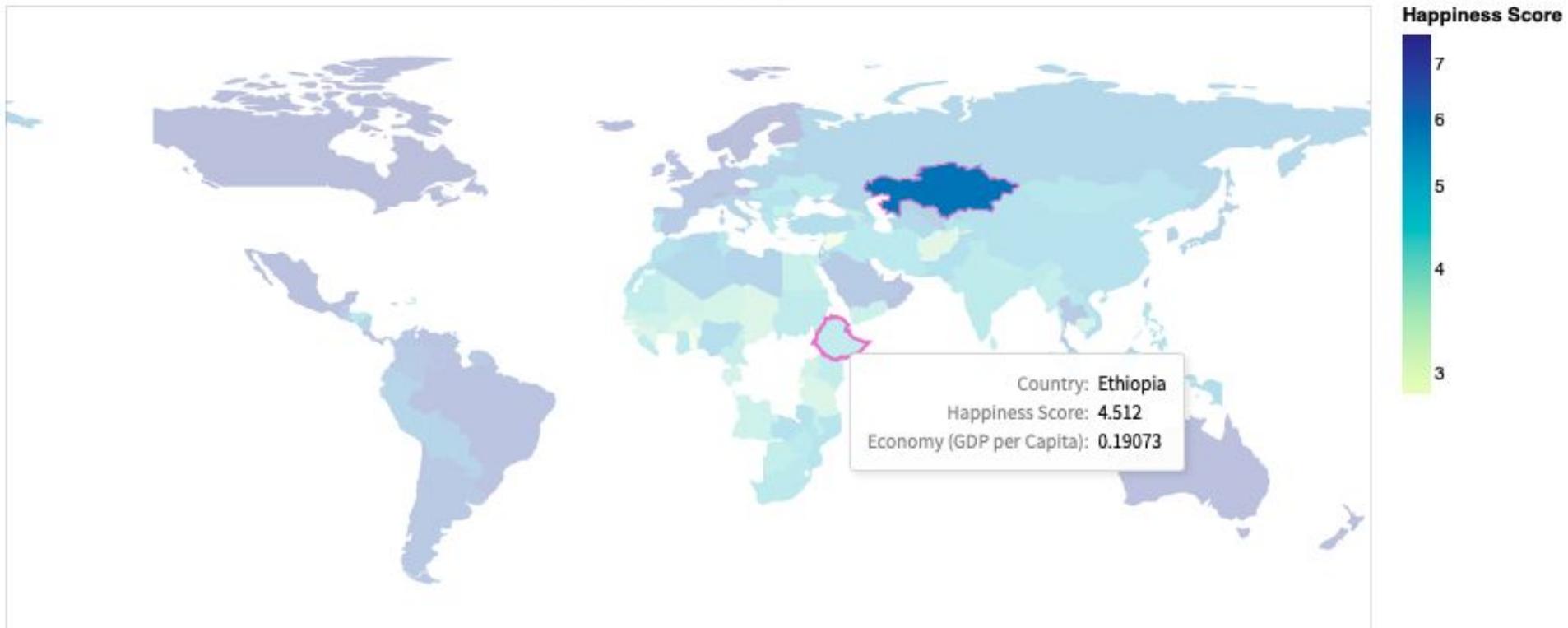
South Cambie has **0%** change in **Break and Enter** crime, yet it has **41.48% increase** in **Theft** which is the **highest increase** among all the neighbourhoods

- rather than focussing on entire world or country, sometimes a particular region (e.g. Vancouver city) may offer a fresh focus

Obesity Rate Around The World (20th October 2020)



- annotation & visual hierarchy within map idiom: mouseover shows country border



- visual annotation within map idiom:
 - **selected** country highlighted in **dark shade**, the **rest** becomes **faded** (less opaque, more transparent)
 - **mouseover** on country will have **outline** shown

Map Idioms

WORLD MAP

GDP per capita is a metric used in determining a country's economic output per person. Click on different countries in the map below to view its GDP and life satisfaction over time.

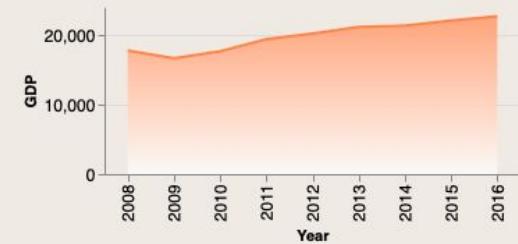
GDP per Capita (2016)

Malaysia

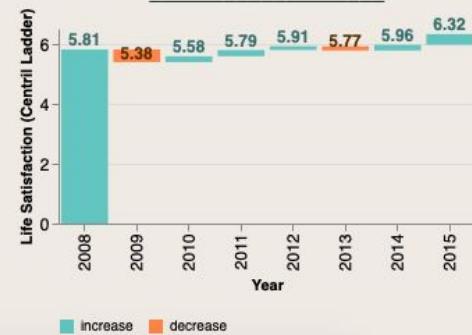
GDP & LIFE SATISFACTION

People in countries with a **higher** GDP report a **higher** level of life satisfaction.

GDP per year



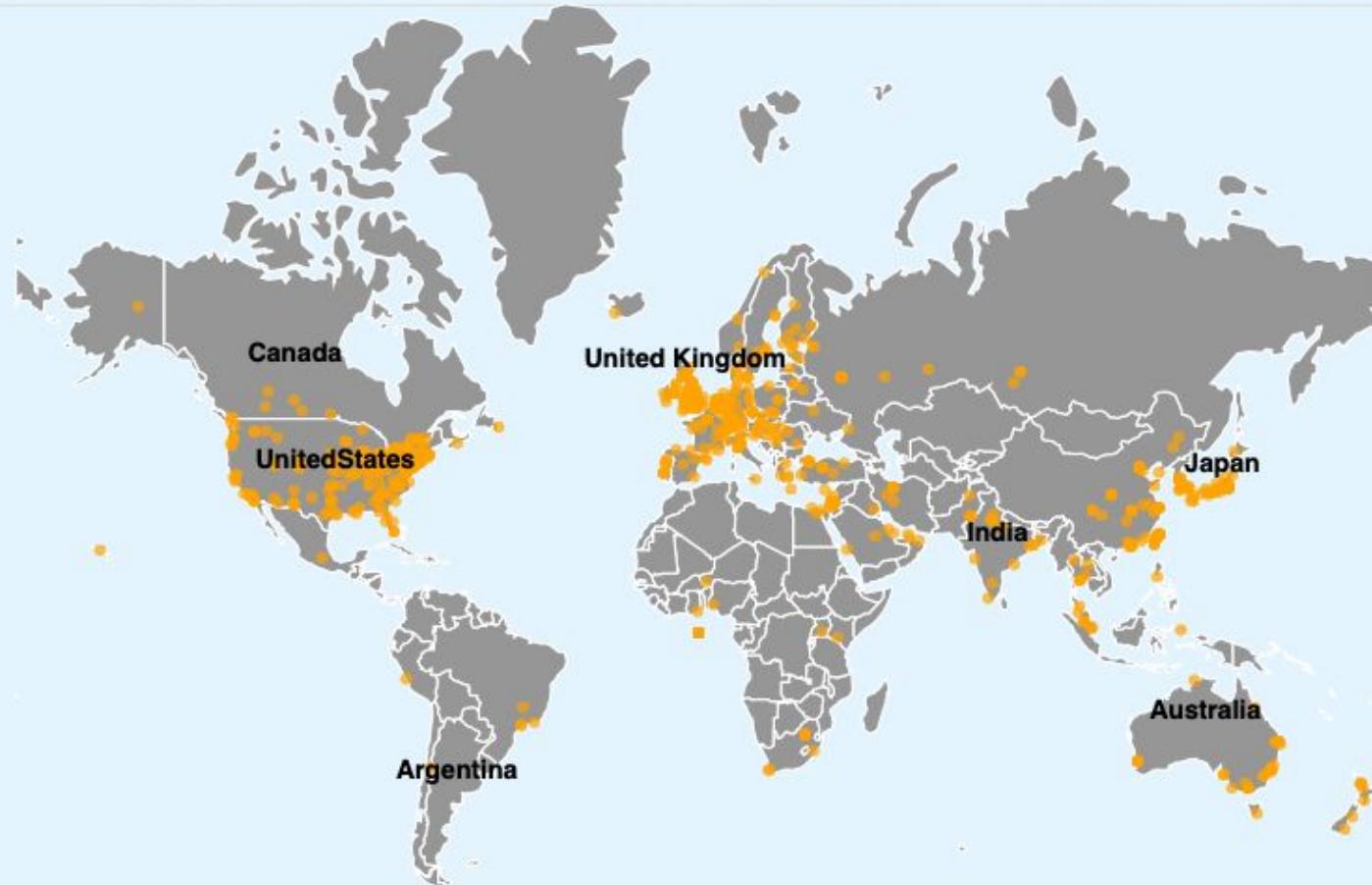
Life Satisfaction per year



- use the map as a filter to vary other idioms
- mouseover region changes colour e.g. white

Top 500 Universities Around the World. Where Are They Now?

This map shows the distribution of the top universities across different countries. It is apparent that most top universities reside in the **U.S.**, **Japan** and **United Kingdom**. Is there an underlying bias in how these rankings are derived? Let's find out.

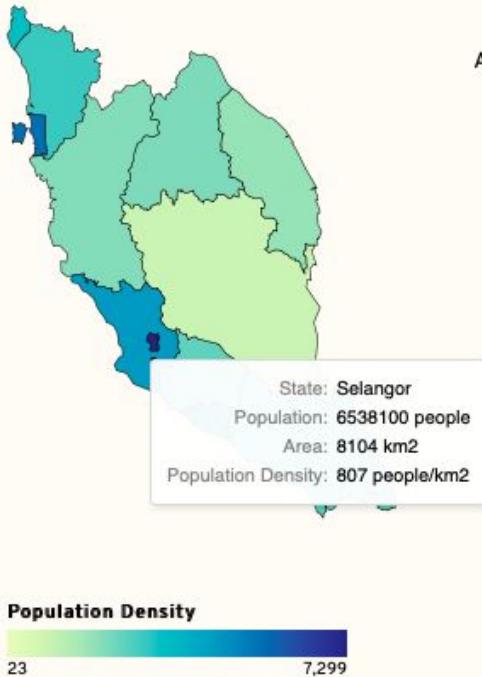


- annotation within map idiom: selected country names

Population Density of States

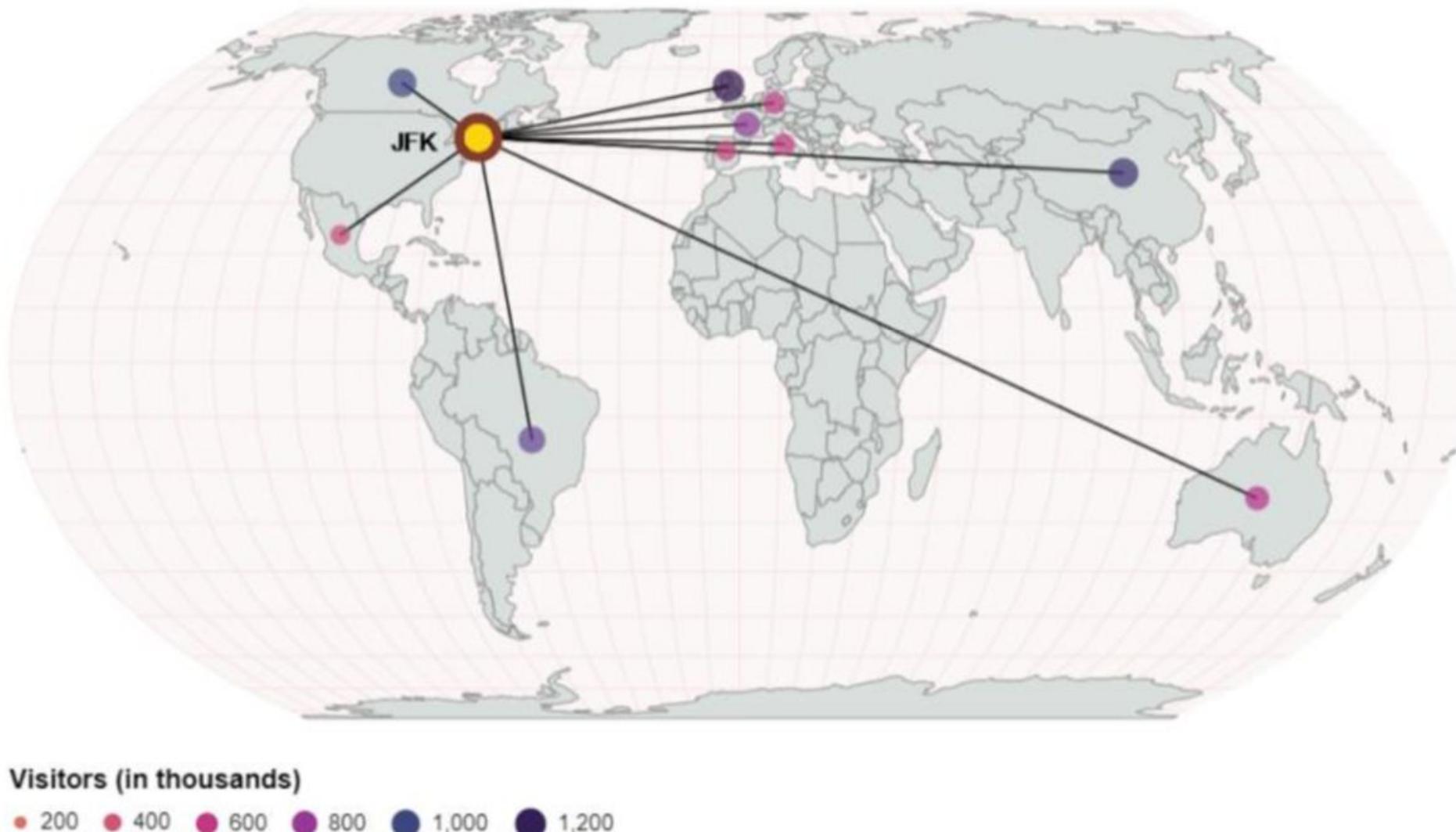
Click on each state to reveal a fun fact!

As the most happening state, Selangor is 'home' to many Malaysians from other states.



- use the map as a filter to show extra info

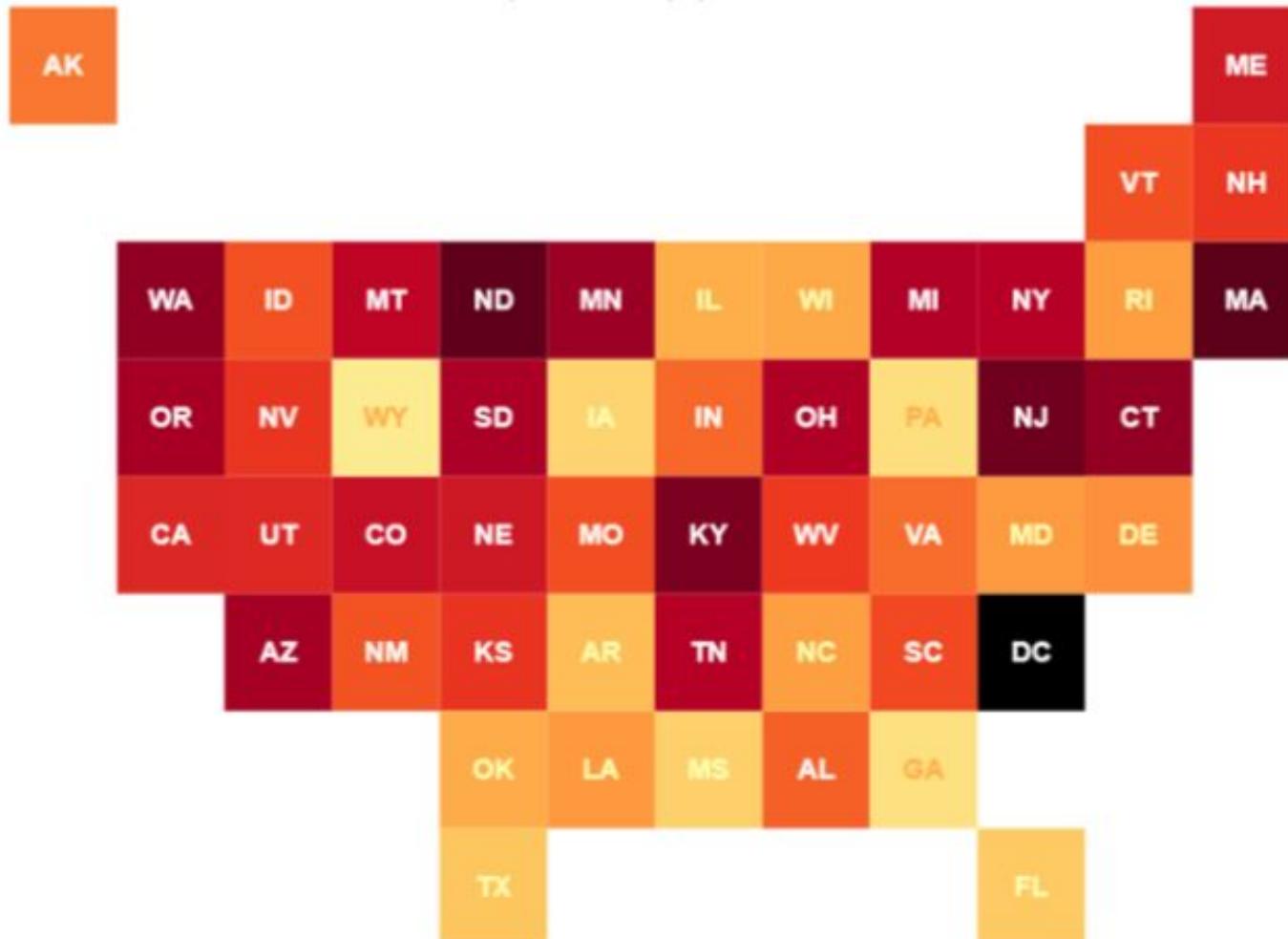
Map Idioms



Map Idioms



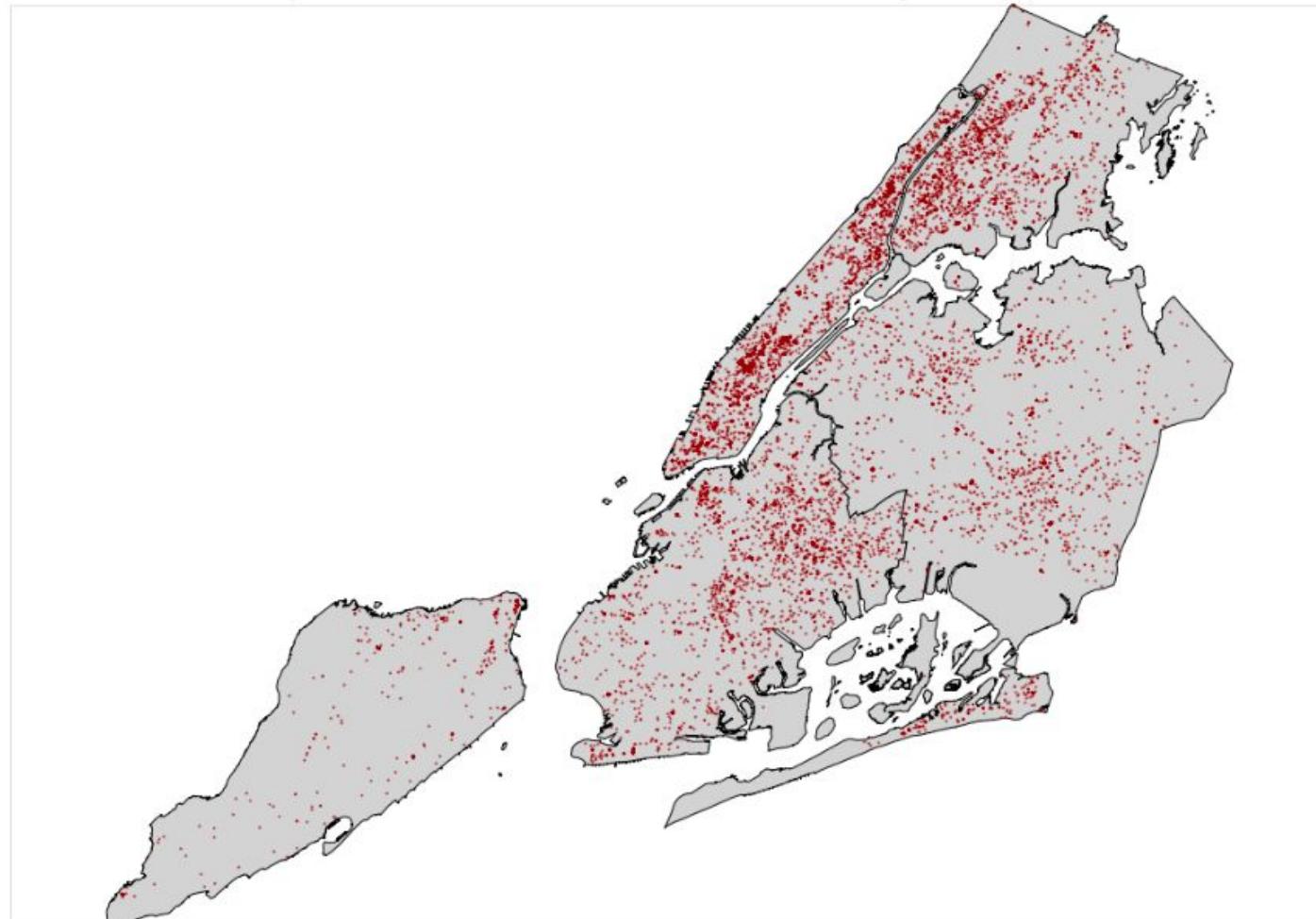
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Average Hatecrimes

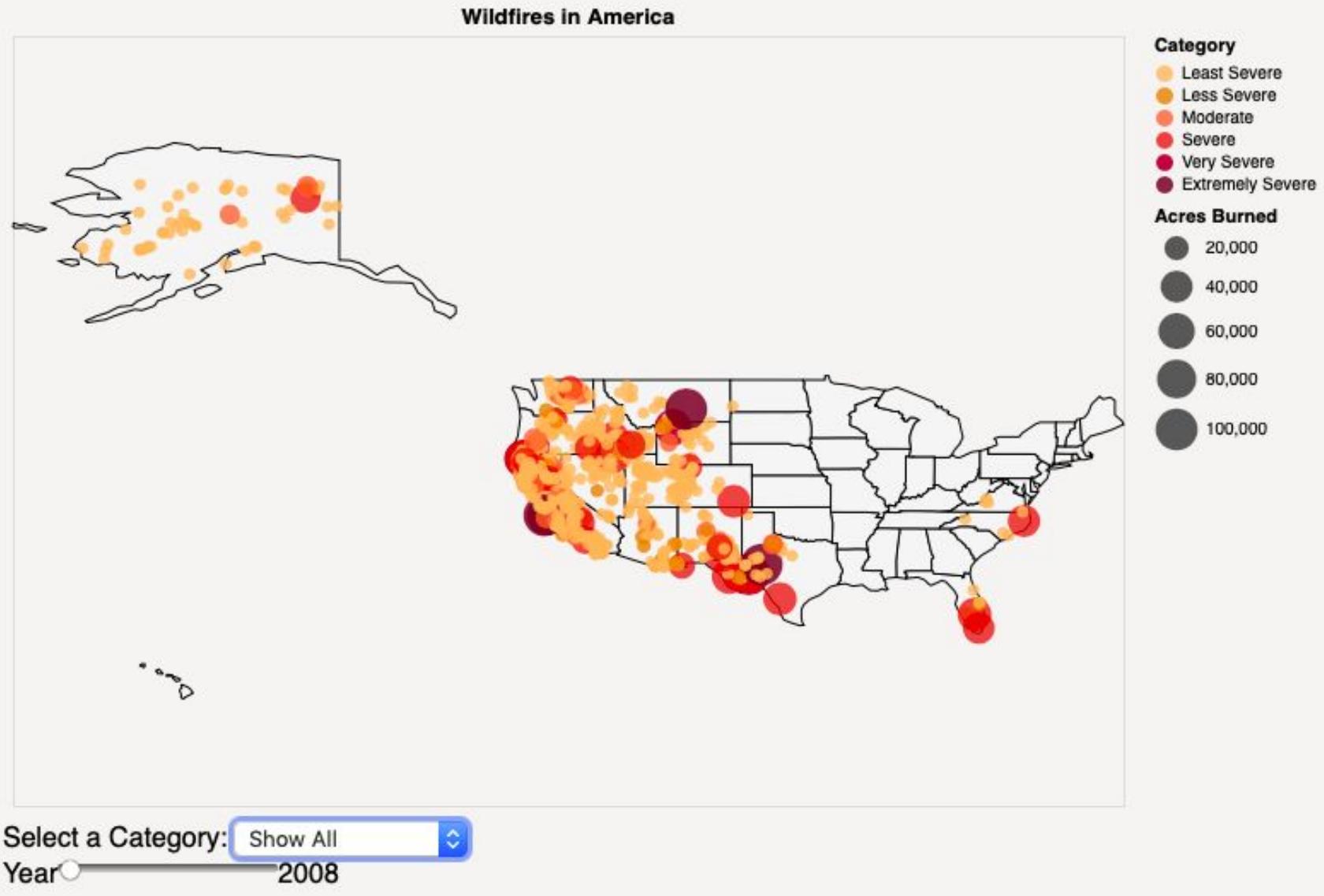


Arrest Spots of Serious Crimes In New York City (1 dot = 1 crime)



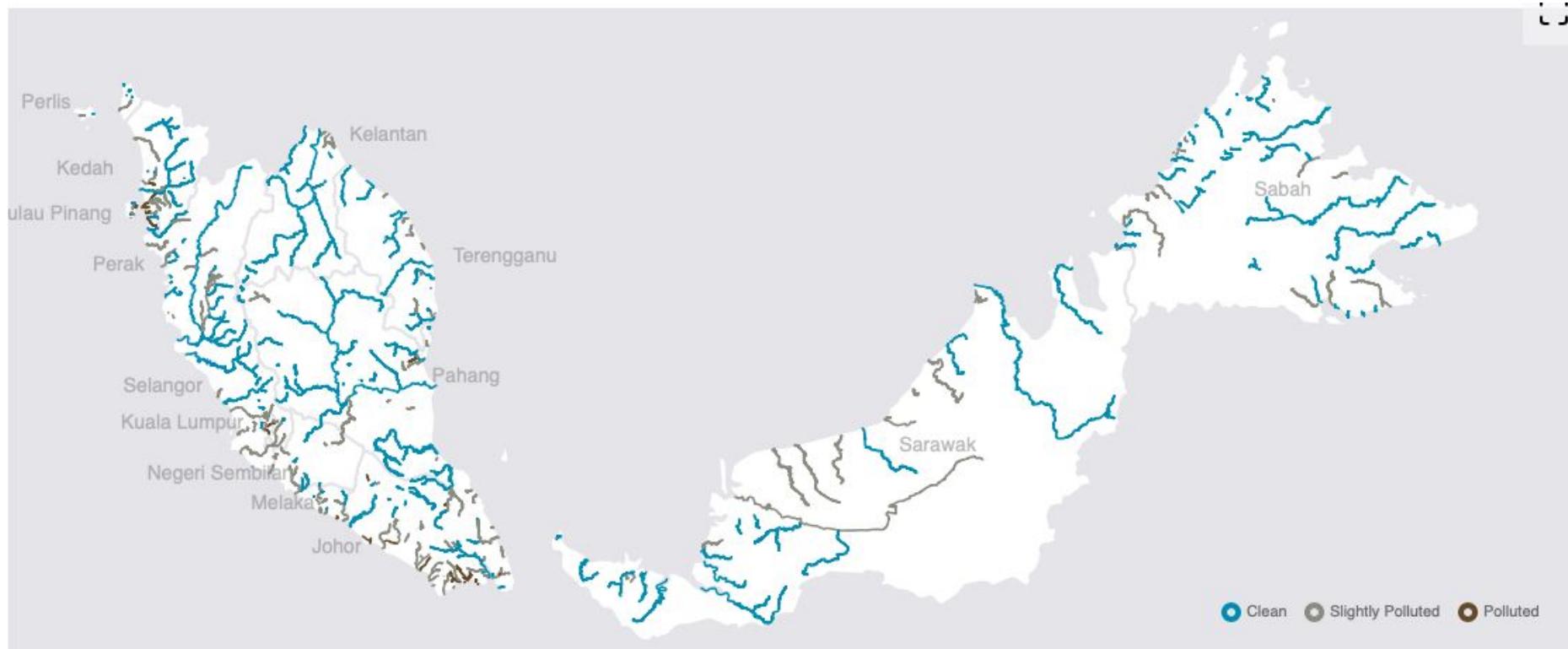
Crime Selection: Show All
Year Onwards: 2006

- specific color themes, so map idiom looks different style



- sometimes just outlines without colour may emphasize the map

Map Idioms



- show more details besides just basic map, if relevant

Showing the Trend & Compare



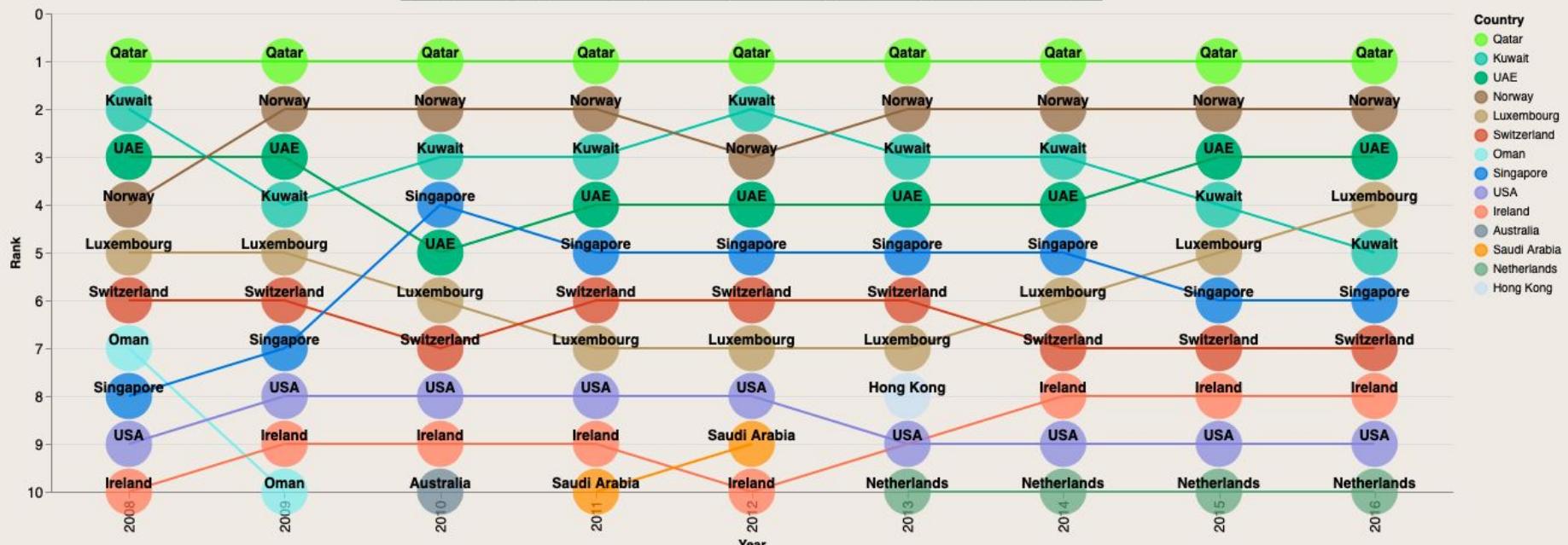
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TOP 10 COUNTRIES (GDP PER CAPITA)

Most top countries in the world by GDP are countries that produce **oil and gas** such as **Qatar, Kuwait and United Arab Emirates (UAE)**.

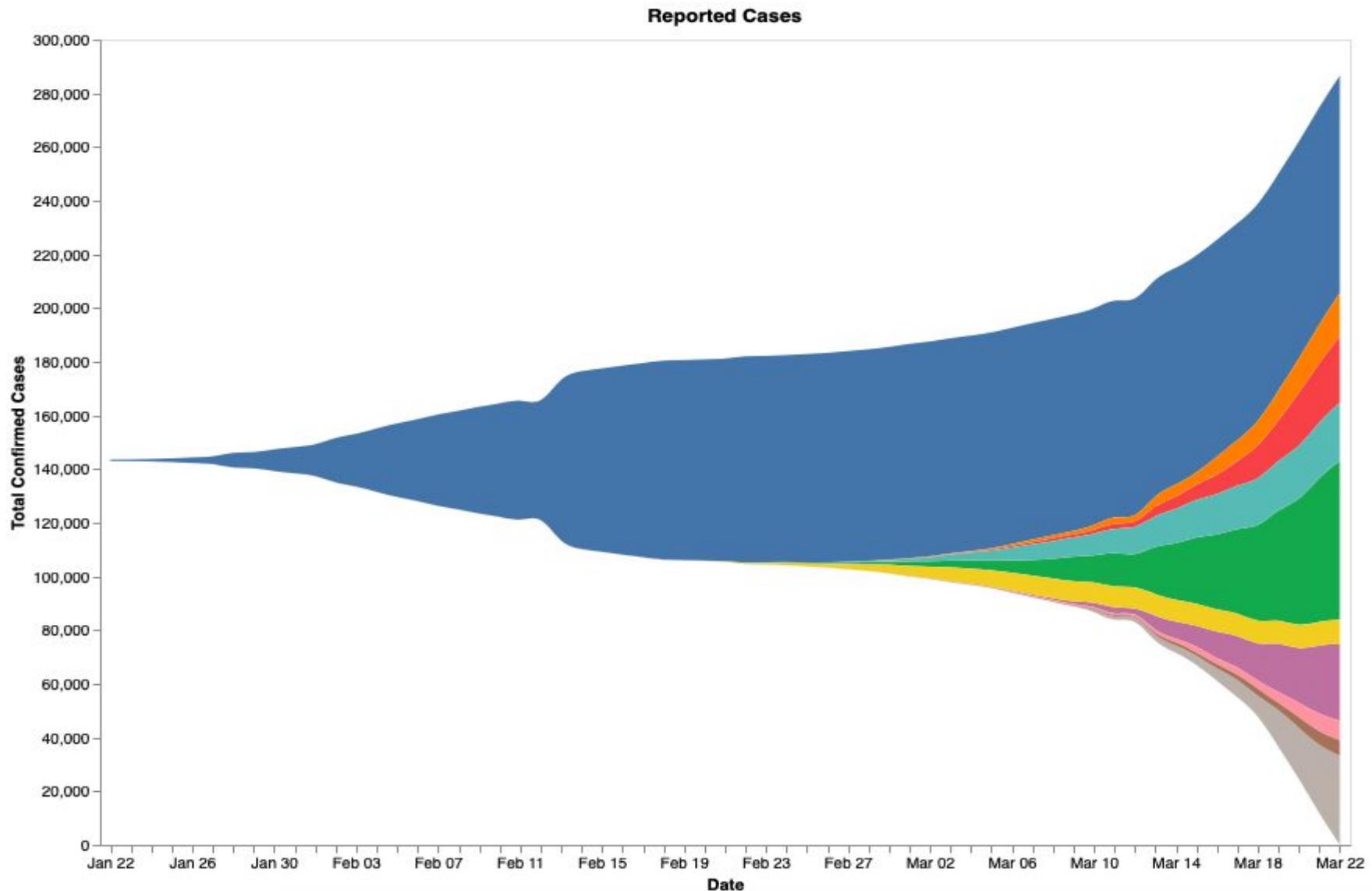
Many leading countries are also **tax havens** such as **Luxembourg, Singapore and Ireland**.

Top 10 Countries for GDP per Capita (2008 – 2016)



- bump chart

Showing the Trend



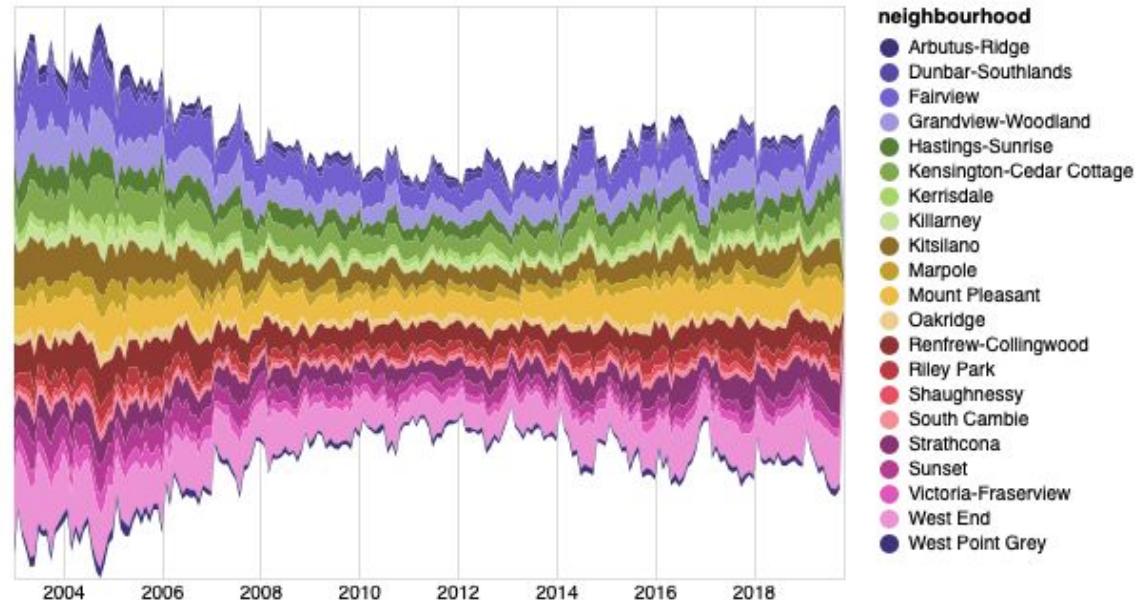
- stream graph

Showing the Trend

Neighbourhood in Vancouver

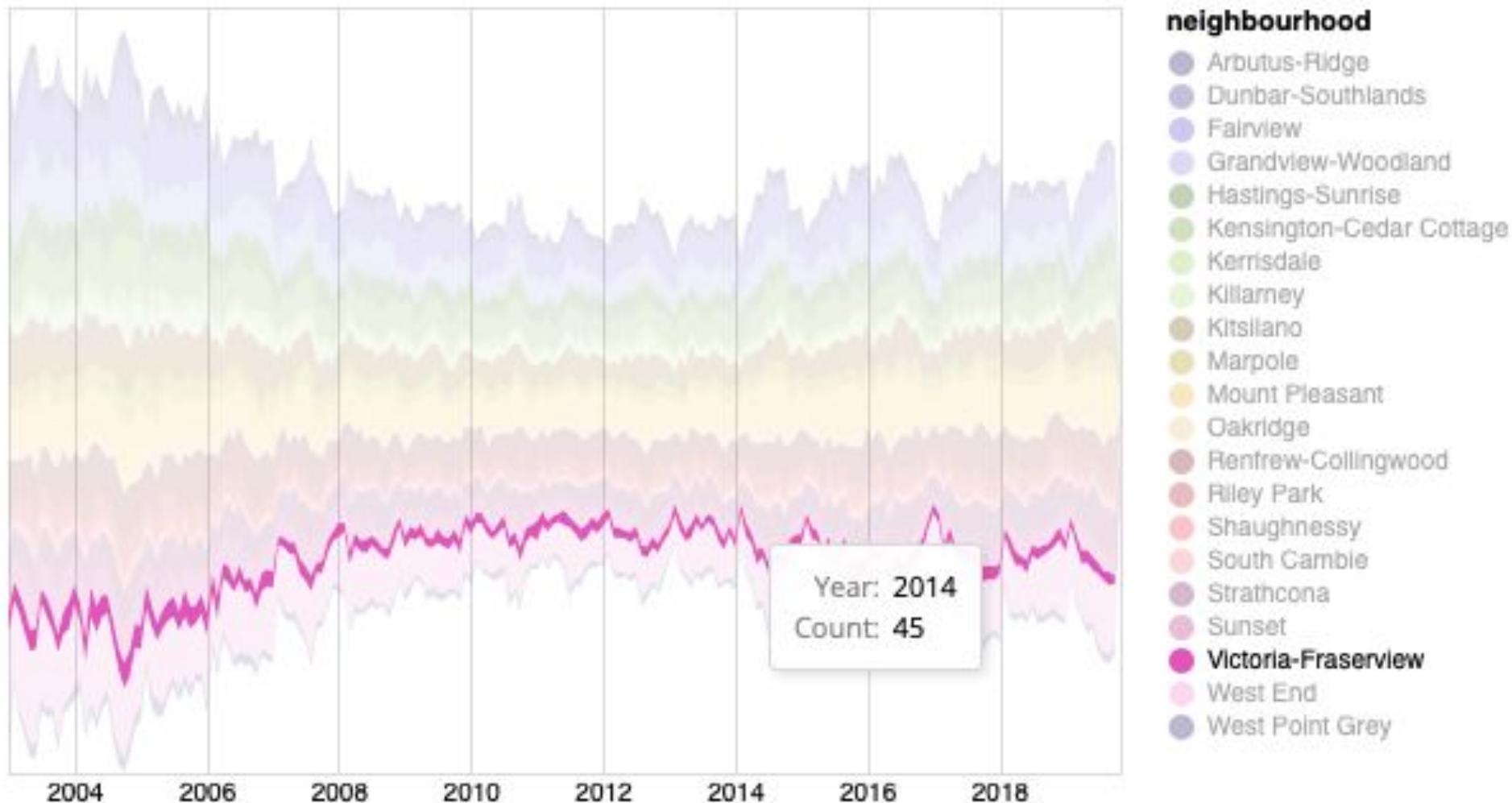
Due to the unique character and ethnic mix of each neighbourhood in Vancouver, it has been called the "city of neighbourhoods". People of English, Scottish, and Irish origins were historically the largest ethnic groups in the city followed by Germans, and elements of British society and culture are still visible in some areas.

We can see a **decrease** in the overall **crime count** from **2004 to 2014** and a **slight increase** from **2014 onwards**.



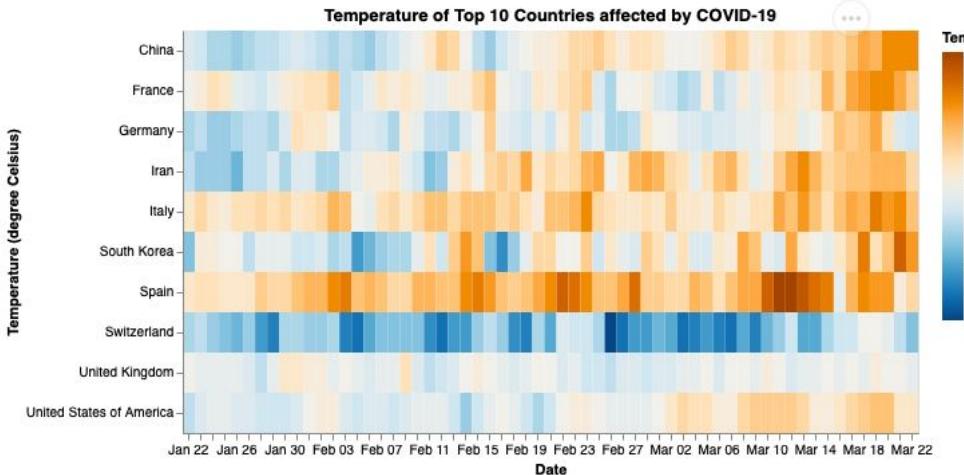
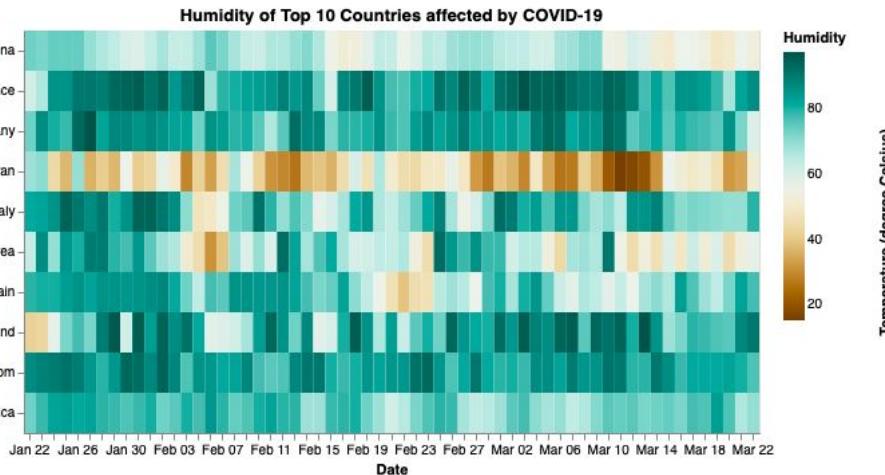
- stream graph
- one level for each category

Showing the Trend & Visual Hierarchy



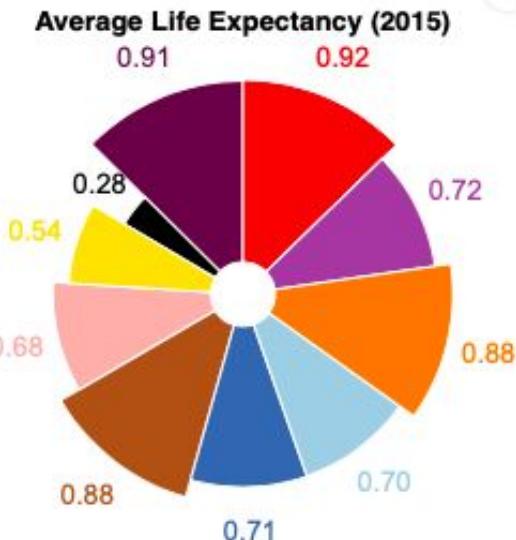
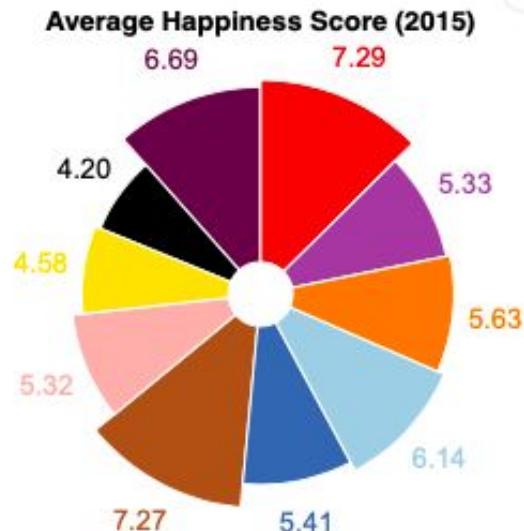
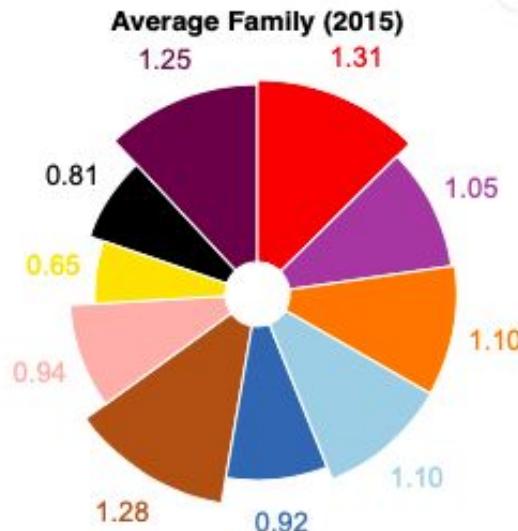
- visual hierarchy: mouseover highlights one category, the rest faded

Side-by-side Comparison of Attributes



- consider different colour combinations
- consider colour themes comprising colours that match the attributes

Side-by-side **Comparison** of Attributes

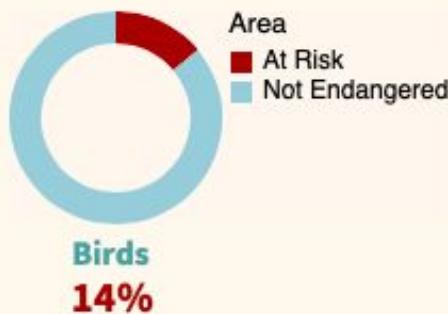
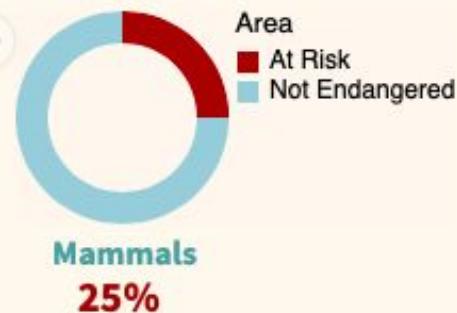
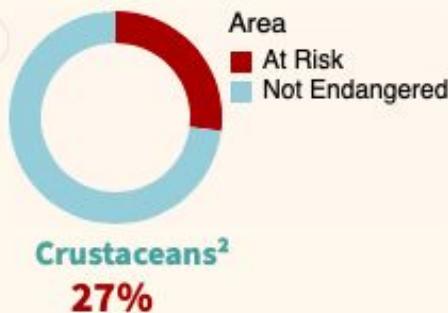
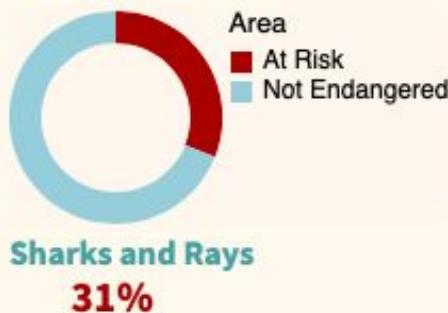
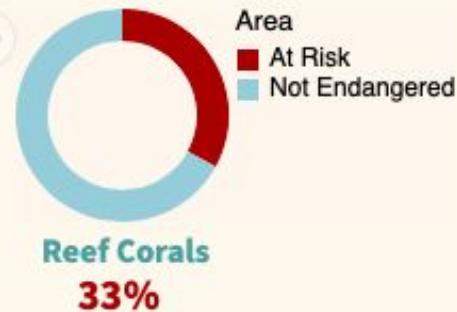
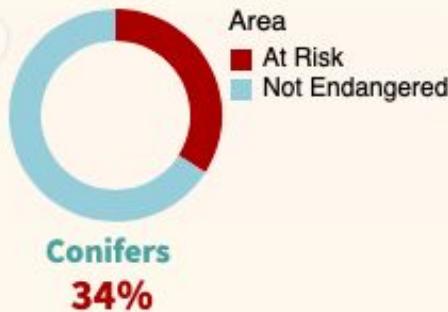
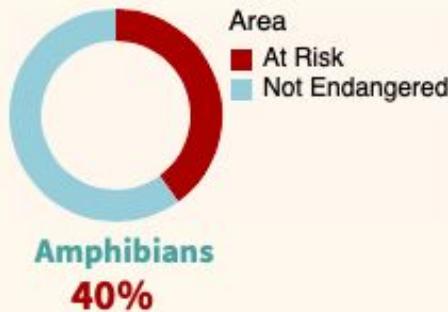


People residing in countries with a **higher happiness score** tend to have **life expectancies that are longer** and **more family**.

- compare similar idioms side by side, for related attributes

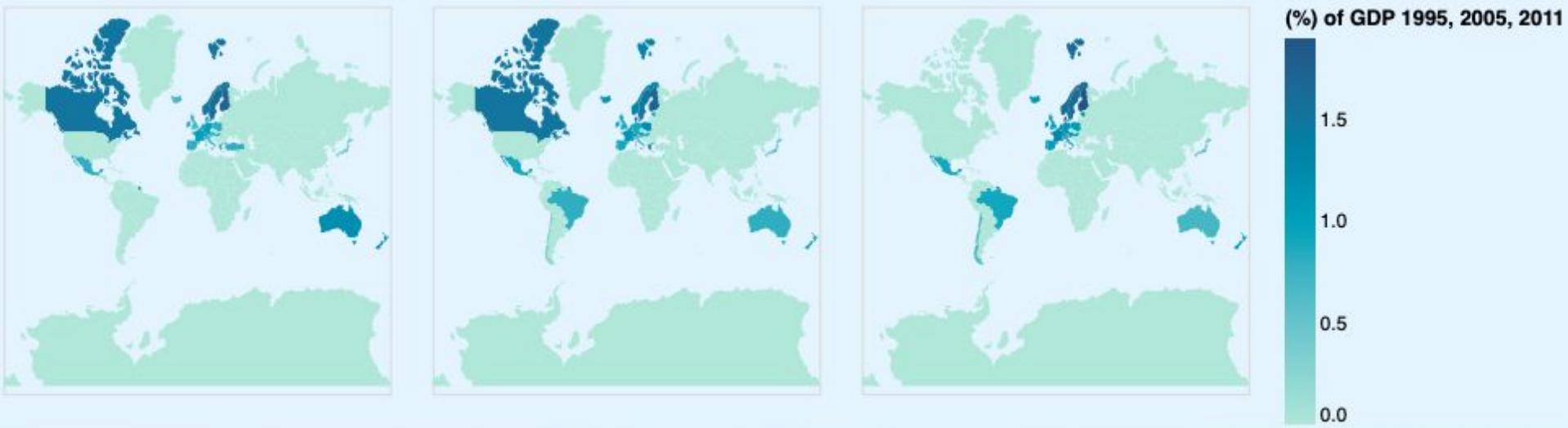
Side-by-side Comparison

One in four species are at risk of extinction, these donut charts show what type of species are at risk



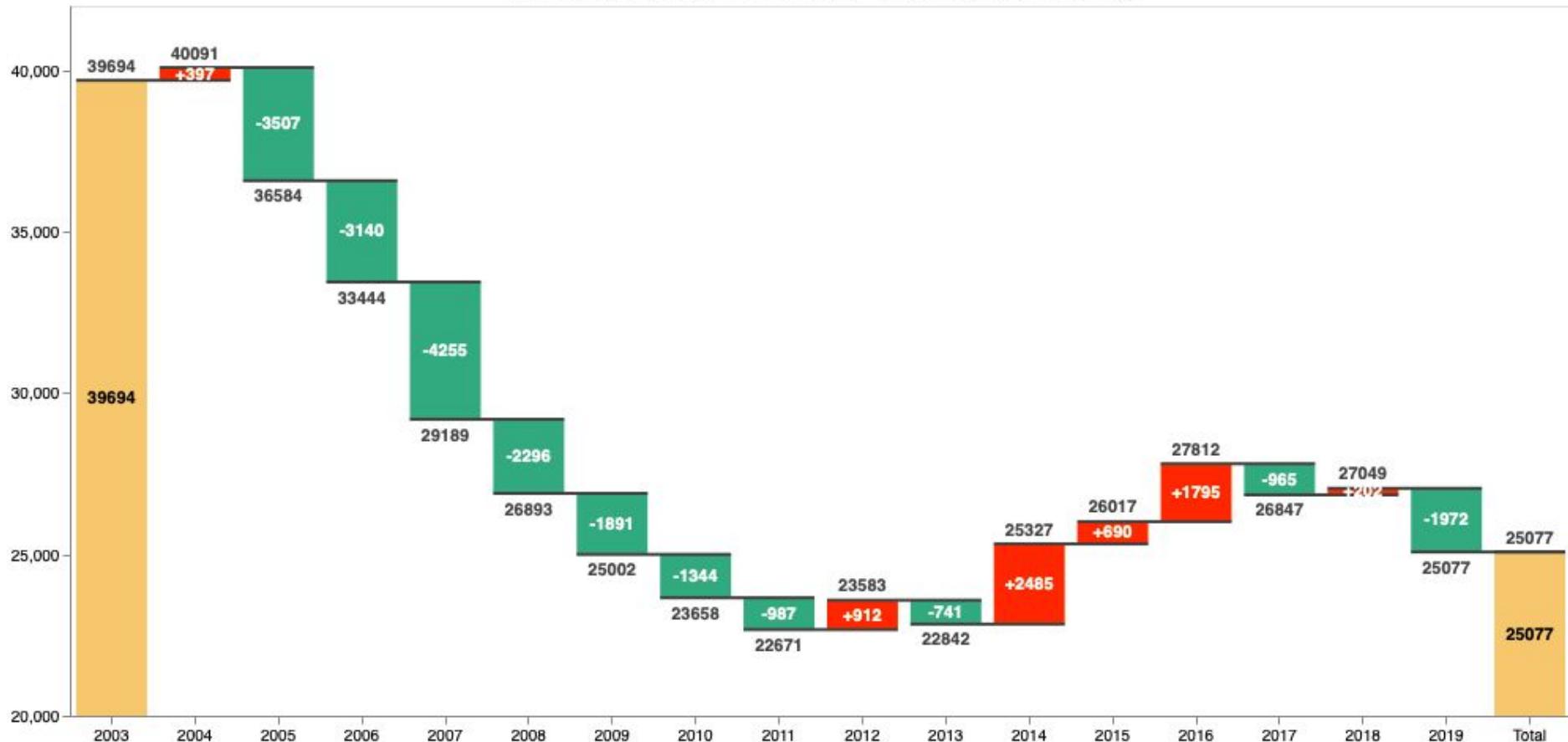
- compare similar idioms side by side, for related items

Side-by-side **Comparison** for Trend



- compare similar idioms side by side, for same attributes, over time

Number Of Crimes Over Years (2003-2019)

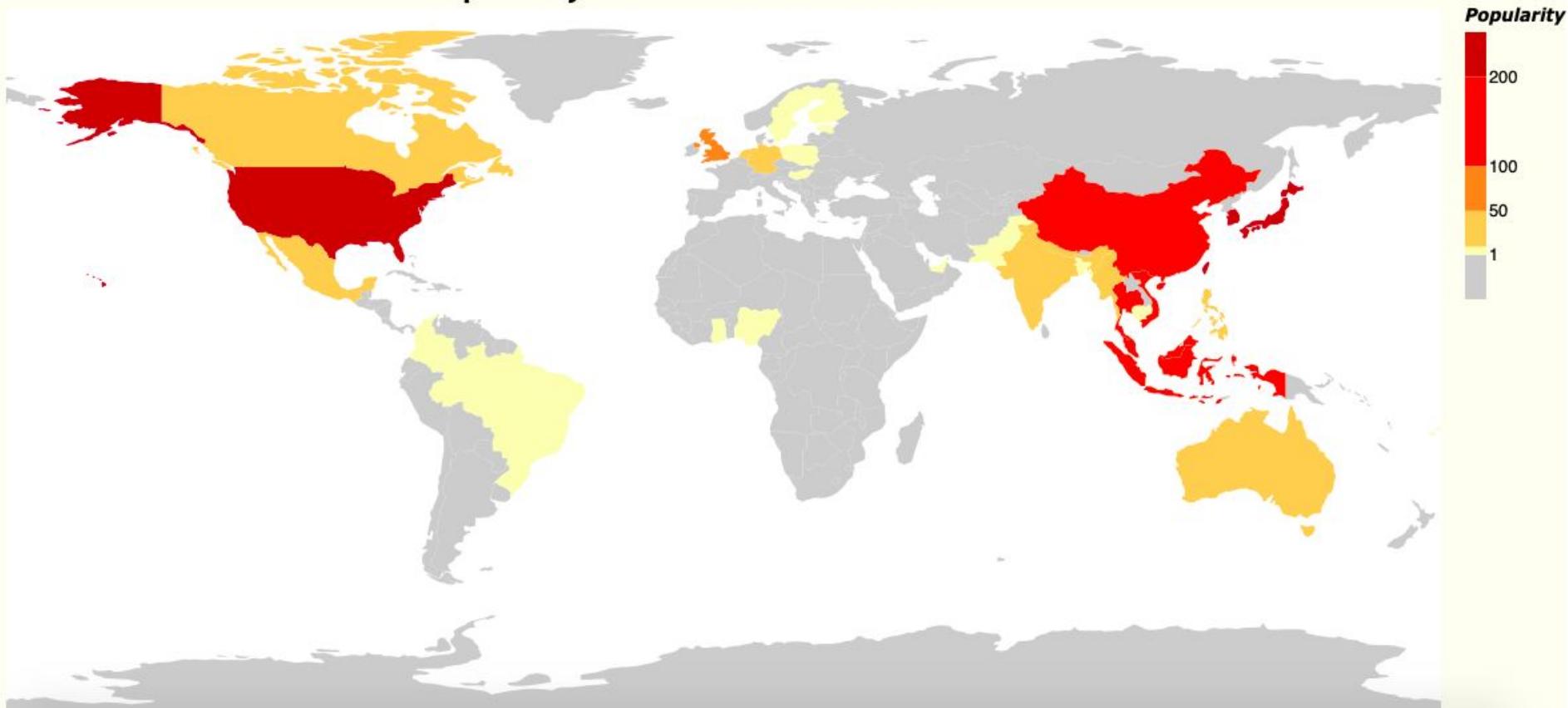


In 2005, a new transit police force, the Greater Vancouver Transportation Authority Police Service (now South Coast British Columbia Transportation Authority Police Service), was established with full police powers. In 2006, a new Counter Terrorism Unit was formed to have the ability to fight back terrorist activities. In 2011, a riot took place following the 2011 Stanley Cup Finals. Vancouver operates

- same colour for within idiom & relevant text

Visual Hierarchy & Color Theme

Popularity of Ramen Across The Globe



- visual hierarchy & cohesive colour theme (like fastfood)

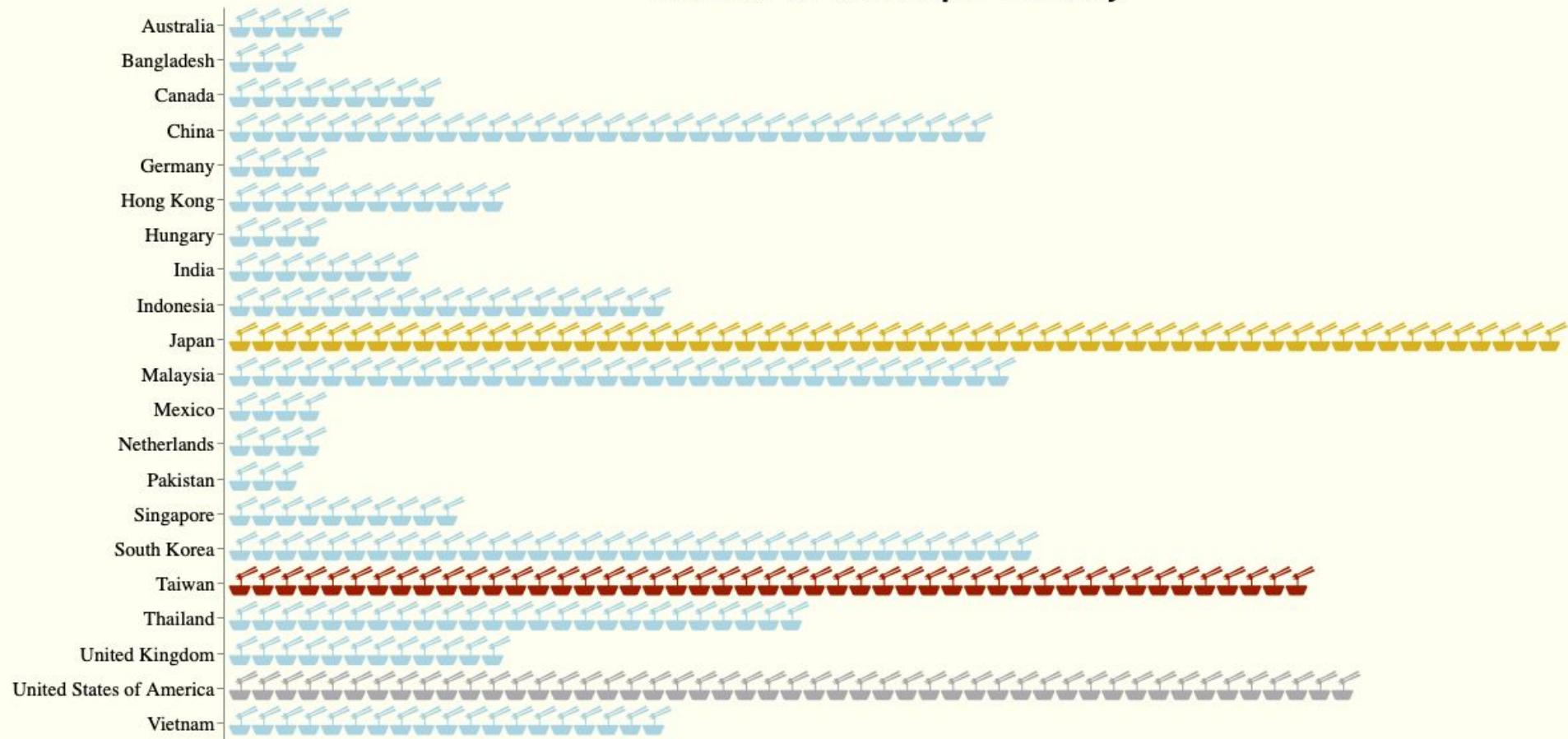
Top 10 Ramen Ingredients/Flavours



- visual hierarchy & cohesive colour theme (like fast food packaging)

Visual Hierarchy & Color Theme

Number of brands per country



- visual hierarchy & cohesive colour theme

Food Security in Asia

CHINA AUSTRALIA INDIA JAPAN

Description

In the age of coronavirus , logistics between countries have been interrupted and food security became the primary focus of most asian countries. This is a big concern in Asia because of the magnitude of the population. **64 %** of starving children in the whole world lives in Asia. The main staple food in Asia is rice. Up to **3.5 billion** people in the world depends on rice and it has become the main concern of most asian country when it comes to food security. This issue is especially crucial in **Malaysia** because malaysian imported most of our food from surrounding countries.

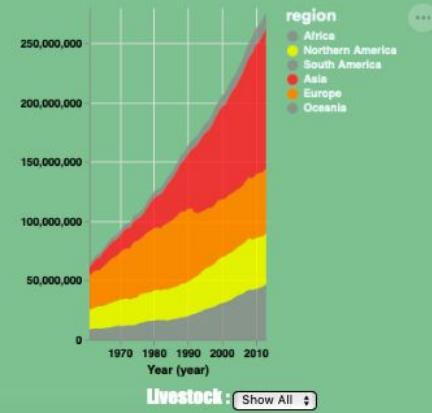
Meat per Capita



Livestocks



Meat in Each Region



- food styled isotype
- chicken themed colour scheme

Isotype variations



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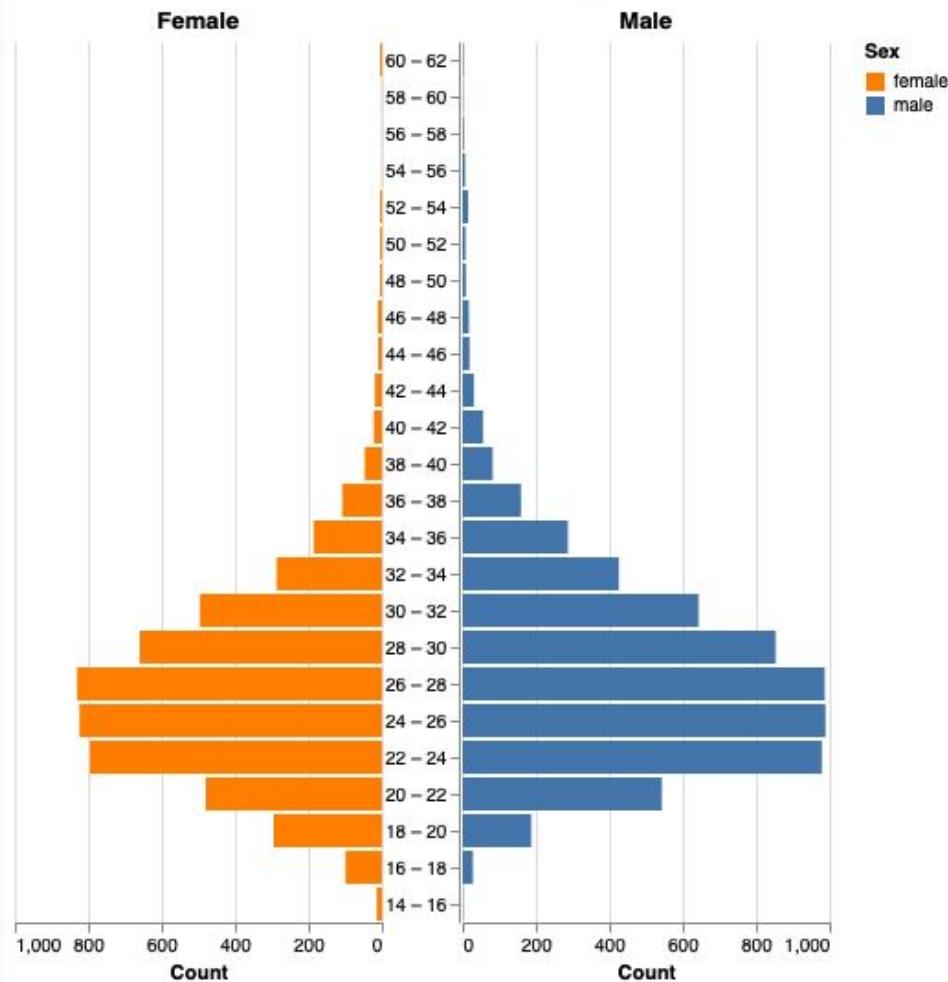
Michael Phelps is hailed as the greatest Olympian of all time with **28 total medal** which comprise of **23 gold, 3 silver and 2 bronze**.

10 Most Successful Athletes



Athlete gender total count are **5308 female** and **6500 male** which give gender proportional of **45% female and 55% male**.

Athlete Gender Pyramid

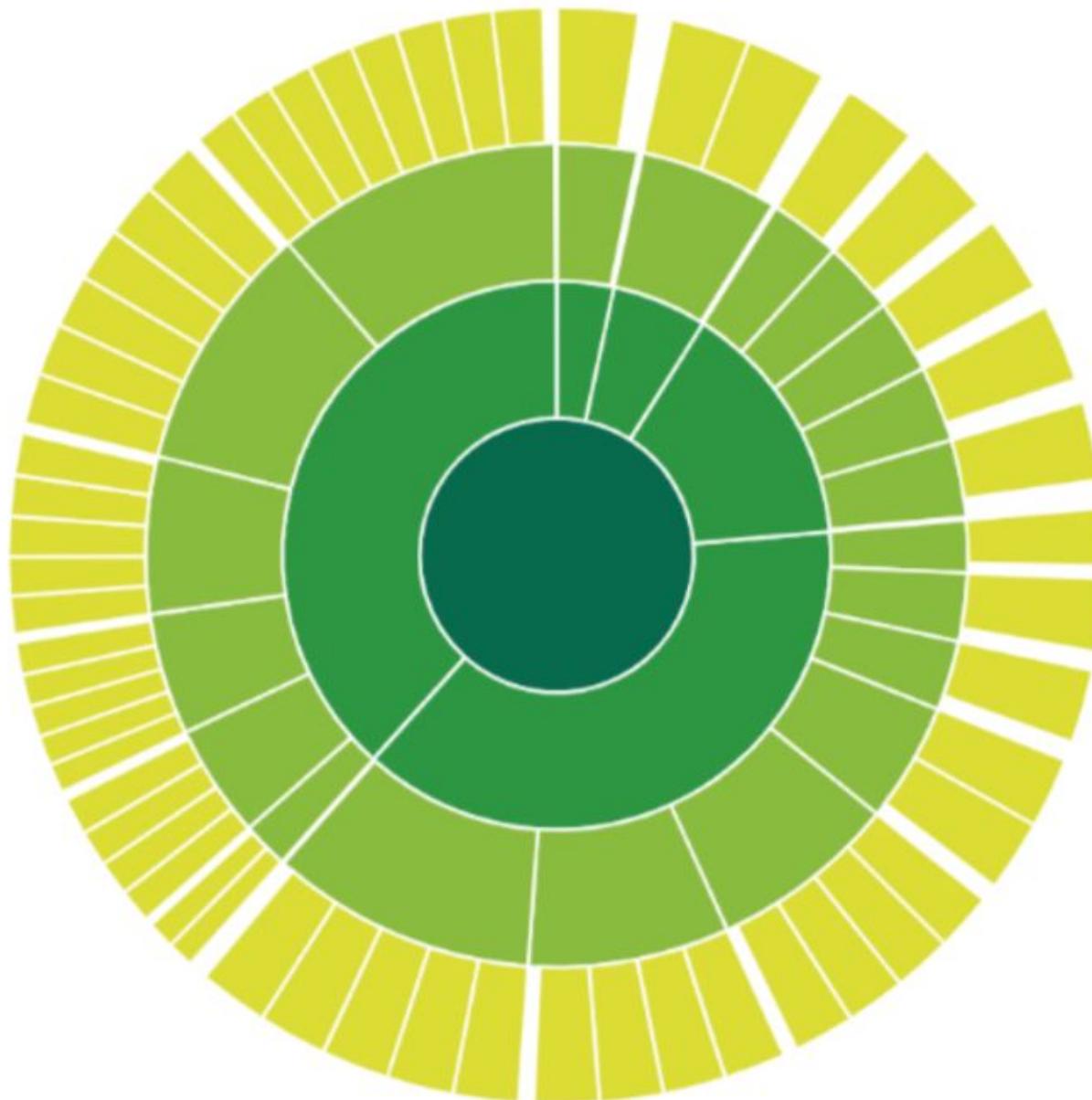


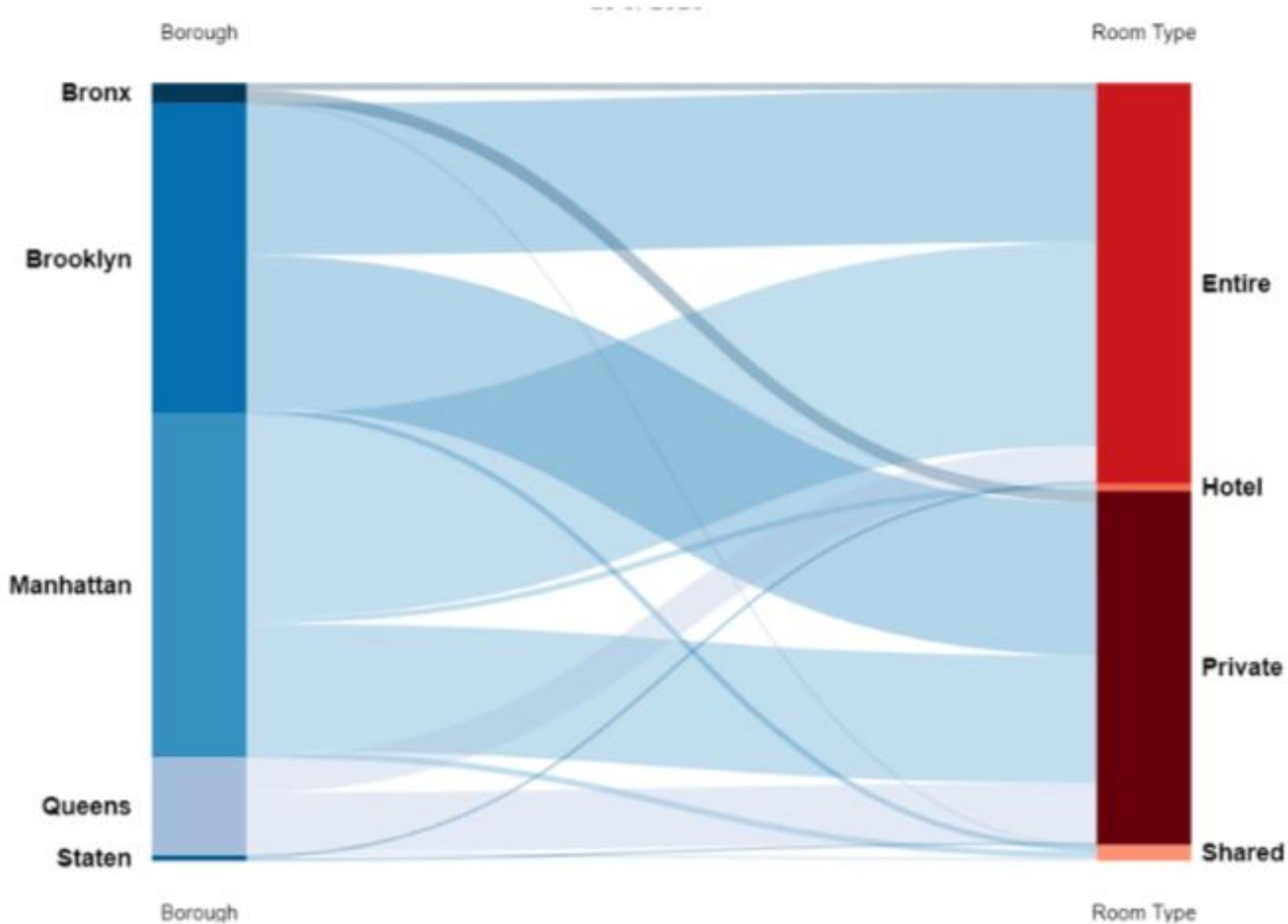
- isotype: using related symbol, & customized arrangement

Sunburst

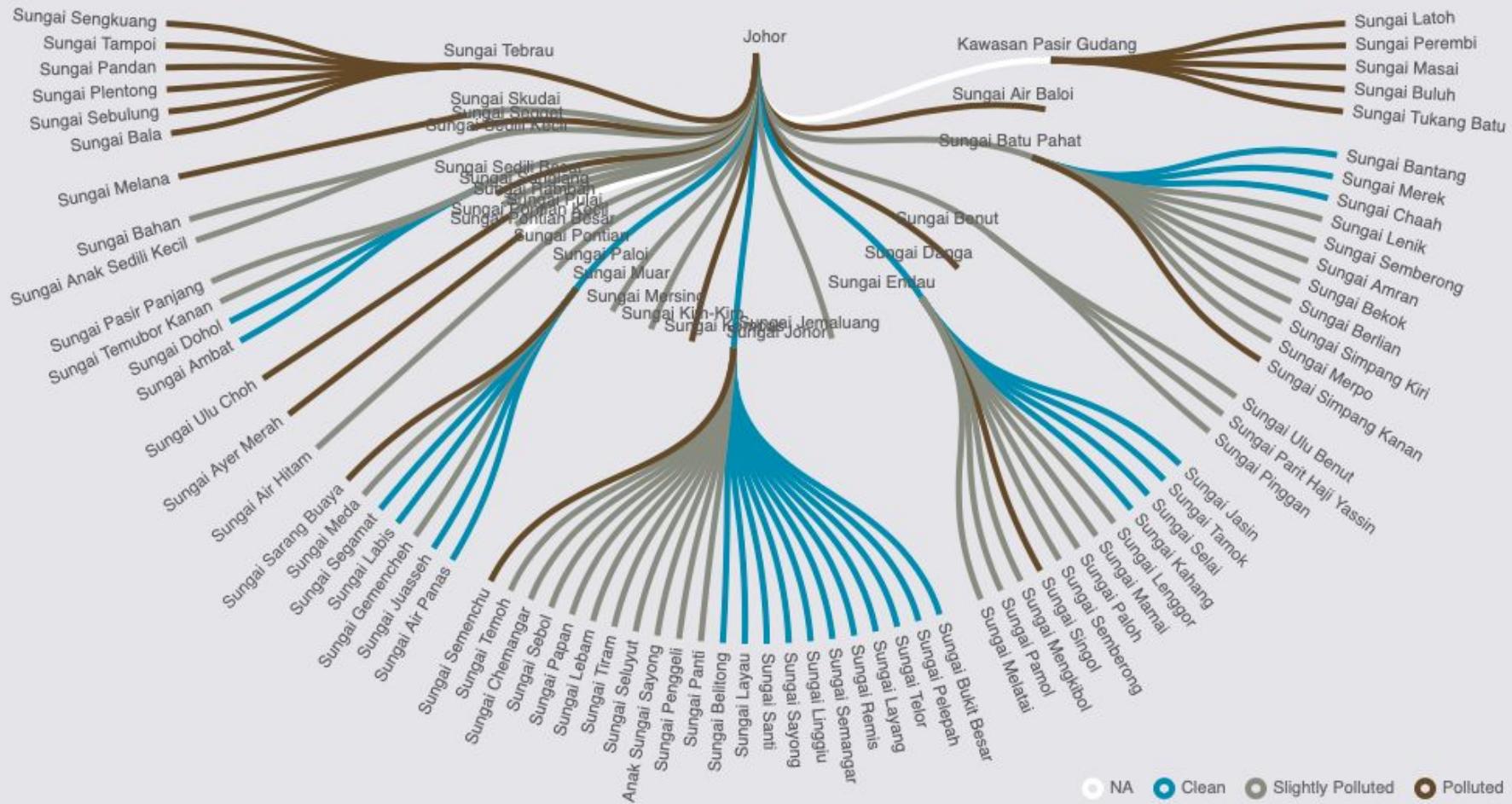


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Exotic Idioms



- explore exotic idioms