# Grill Map Victoria — Exploring Fairness in Public BBQ Access

#### Domain

This project explores the fairness of public barbecue access across Victorian councils. Public BBQs are an important part of community life in Australia, offering free outdoor cooking spaces that support social connection and public recreation. By comparing the availability of these facilities across different local government areas, the dashboard highlights whether access is shared equally or if some regions are better served than others.

### Who

The visualisation is designed for a broad audience that includes Victorian residents, council officers, and state planners. For residents, it allows them to understand how their local amenities compare to others. For planners and policymakers, it provides a quick, evidence-based view of where new BBQ installations could improve community equity. The dashboard also supports journalists or students studying urban planning or social geography who need a simple way to see spatial differences in access. It aims to be approachable for general audiences while still containing enough detail for professional use.

# Why

The motivation behind this project was to reveal patterns of inequality that are not immediately obvious when looking at total facility counts alone. A council with a large population may appear to have many BBQs, but when adjusted for the number of residents, its per-person access can be much lower than smaller regional councils. This project focuses on fairness — how resources are distributed relative to population size — rather than just total numbers. Understanding these differences can help decision-makers allocate funding more effectively, ensuring that public spaces serve all Victorians, not just those living in high-density or well-resourced areas.

## What (Data)

The data comes from two public sources.

- 1. **Public Barbecues (Data.Vic, 2023)** This dataset provides the geographic locations and counts of council-managed BBQs across Victoria.
- 2. **Population by LGA (Australian Bureau of Statistics, 2023)** This dataset gives the estimated residential population for each council area.

The two datasets were joined using local government area names. From there, a new metric was calculated:

#### BBQs per 10,000 residents = BBQ count $\div$ (population $\div$ 10,000).

This standardisation allows fair comparison between large and small councils. The processed CSV was then visualised through Vega-Lite to create a reproducible and interactive view.

## **How (Visual Design)**

The dashboard uses four coordinated visualisations: a map, ranking bar chart, histogram, and boxplot.

- The map uses bubble size and colour to show where access is highest or lowest geographically, making regional clusters easy to identify.
- The ranking bar chart orders councils by either total BBQs or per-capita access, helping users focus on leaders or those below the average.
- The histogram summarises the overall distribution, revealing that most councils cluster around a moderate access level with a few outliers on either side.
- The boxplot compares metro and regional areas, showing that regional councils generally perform better once population is considered.

Interactive filters (Metric, Top-N, Search, and Reset) allow users to explore the data dynamically without feeling overwhelmed. A card-based layout presents charts beside short explanatory notes to maintain narrative flow. The design uses the *Inter* typeface, a minimal dark-light theme, and accessible colour contrasts for clarity on both desktop and mobile screens.

Overall, this project translates raw public data into a clear visual story about equity in community infrastructure. It encourages users to reflect on how something as ordinary as a public BBQ can reveal broader issues of access, population distribution, and fair urban planning across Victoria.