

IDEAS

Public BBQ Access Fairness (VIC)



Public BBQ Facilities across Victorian Councils

Data Sources

Data VIC - Public BBQ '23
ABS population by LGA '23

Join on LGA names

Compute BBQ's per
10K residents

CSV example:-

LGA	Popul.	BBQ-count	per 10K

"Simple ratio metric"
→ Fair Comparison

Metrics

BBQ's per 10K
 $= \text{count} \div (\text{pop} / 10K)$

Total BBQ shows scale
effect

State avg → ref line

Metro vs Regional flag

$$\text{Per10K} = \frac{\text{BBQ count}}{\text{Pop/10K}}$$

Visual Directions

Bubble map (Vic outline
+ circles for LGAs)

Ranking bar chart (toggle Total/
per 10K)

Histogram (show distributions)

Boxplot (Metro vs Regional)

KPI tiles (top stats)

Possible choropleth.

Four main idioms
→ balanced story.

Key Questions

Are some Councils
under served for BBQs

Do regional areas have
better per capita access.

Which LGAs are above
or below the avg.

Does population size
affect fairness.

Can this inform
future planning.

FILTER

Filter by metric (Total/per 10K)

Filter by Top-N (Top 5, 10, 20)

Filter by Region (Metro/
Regional)

Filter by LGA Name (search bar)

▼ (metric switch)

🔍 (for Top N)

CATEGORIZE

Group charts by purpose

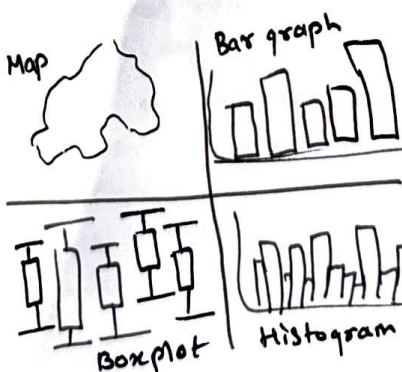
Map → spatial overview

Bars → Ranking Comparison

Histogram → Distribution

Boxplot → Group Comparison

Cards → story context.



COMBINE & REFINE

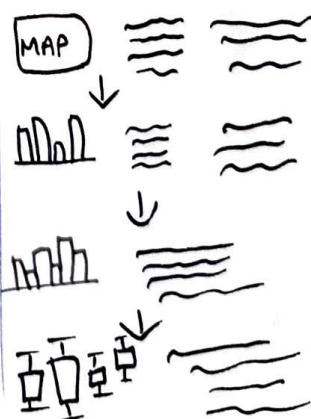
Combine map + ranking for
immediate comparison.

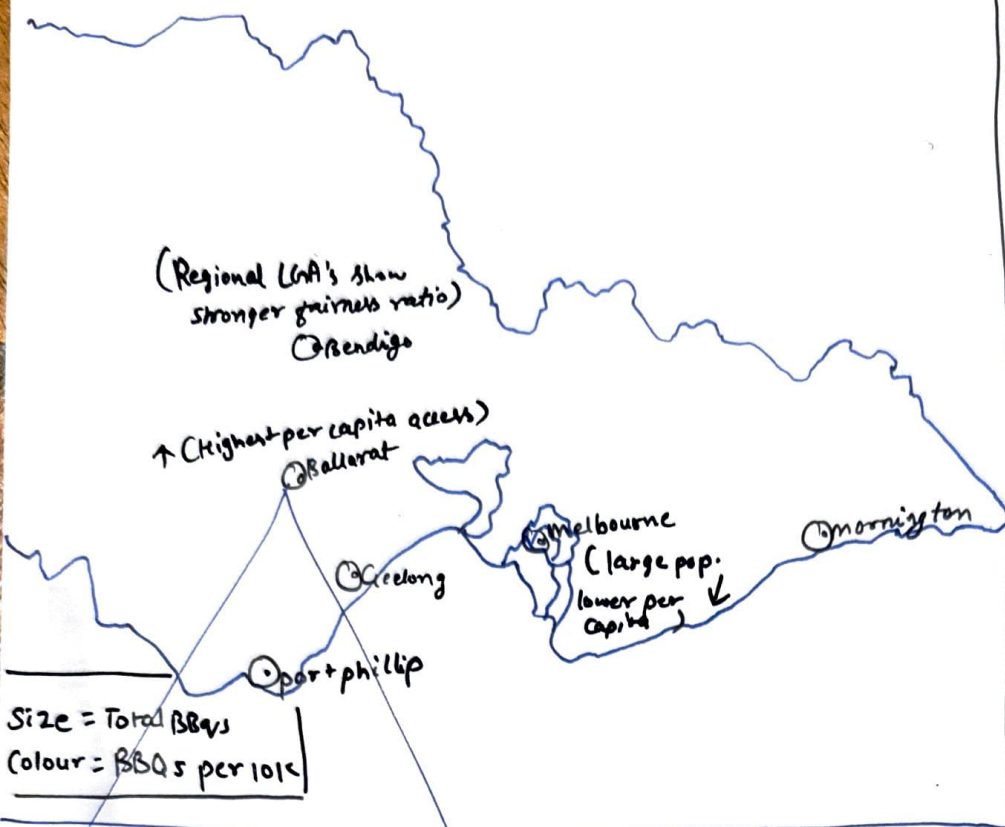
Add histogram and boxplot
below for depth.

Include average line +
inline annotations.

Sidecards explain each
other.

Dark theme for readability
and contrast.






BBQs = 16

Population 116,000

Per 10K: 1.38

Metric 
BBQs per 10K

Search Council

OPERATIONS

- Users can switch metric (Total/per 10K).
- Top-N and search filters adjust and what appears on the map
- Hover = tooltip with LGA name, total, per 10K and population.
- Reset button clears filters to show all.
- Legend updates dynamically with metric type.

DISCUSSIONS

- Is the map intuitive enough on it's own.
- Would adding outlines of Australia/Victoria improve context.
- Does color scheme (teal/blues) read clearly in dark mode.
- Need to ensure bubbles don't overlap for smaller LGAs
- Possible extension: click to zoom into selected regions.
- Add simple annotations to highlight highest & lowest access areas.

Title:- fairness in public BBQ Access Across Victorian Councils.

Author- Ansh Rathore

Date - 26/10/25

Sheet - 2 - FDS2

Task - Bubble Map showing BBQ accessibility (Total + Per Capita).

LAYOUT

- Two column design: large map (left) + short explanatory text (right)
- Bubble overlay represents councils with available data.
- KPIs (Total BBQ, Avg. 10K LGAs) shown above as quick stats.
- Footer will contain sources & notes.

FOCUS

- Map emphasises spatial fairness - which regions have more bbqs relative to population.
- Bubble size shows absolute numbers, color gradient reveals normalized access.
- Encourages users to spot imbalances visually. (e.g. metro vs rural)
- Supports the narrative regional "regional areas often outperform urban ones."

Data Vic

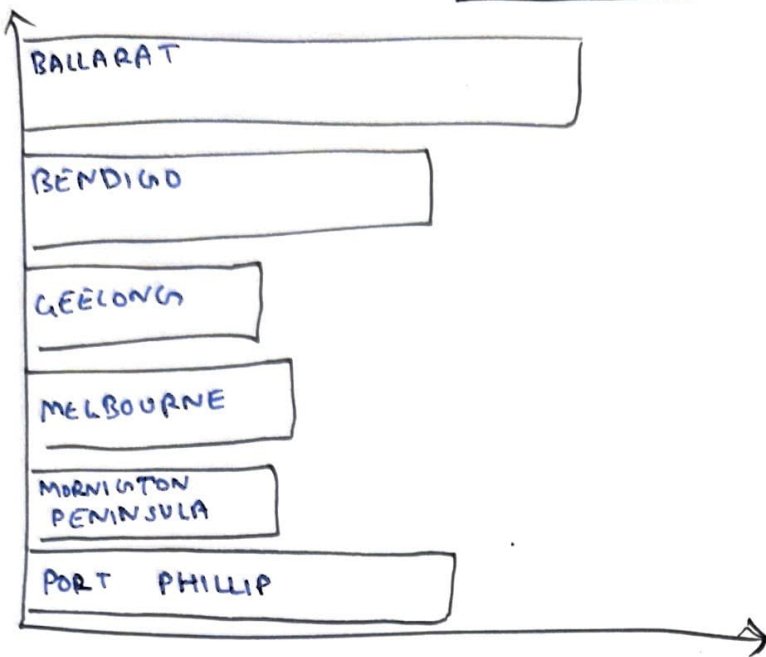
↓
Join with ABS

↓
Compute per 10K

↓
Display on map

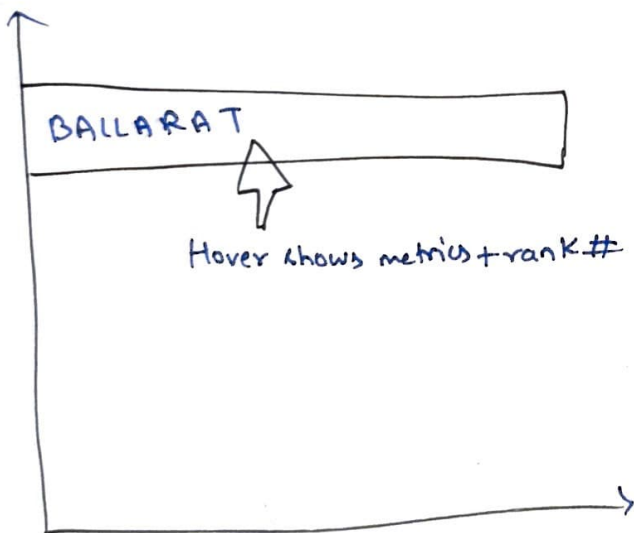
Top N Filter & Search Council

Search



↑ Ballarat above average
↓ Melbourne below average

Hover = tooltip (BBQs, pop, per 10K).



Council - Ballarat
Total BBQs - 16
Per 10K - 1.38
Population - 116000

Title - Ranking of Councils by
bbq accessibility

Author - Ansh Rathore

Date - 26/10/25

Sheet : 3 - FDS3

Task - Bar chart View showing
total vs per capita BBQs.

LAYOUT

- One full width-bar chart
- Sticky legend + dropdowns above
- Dark background

FOCUS

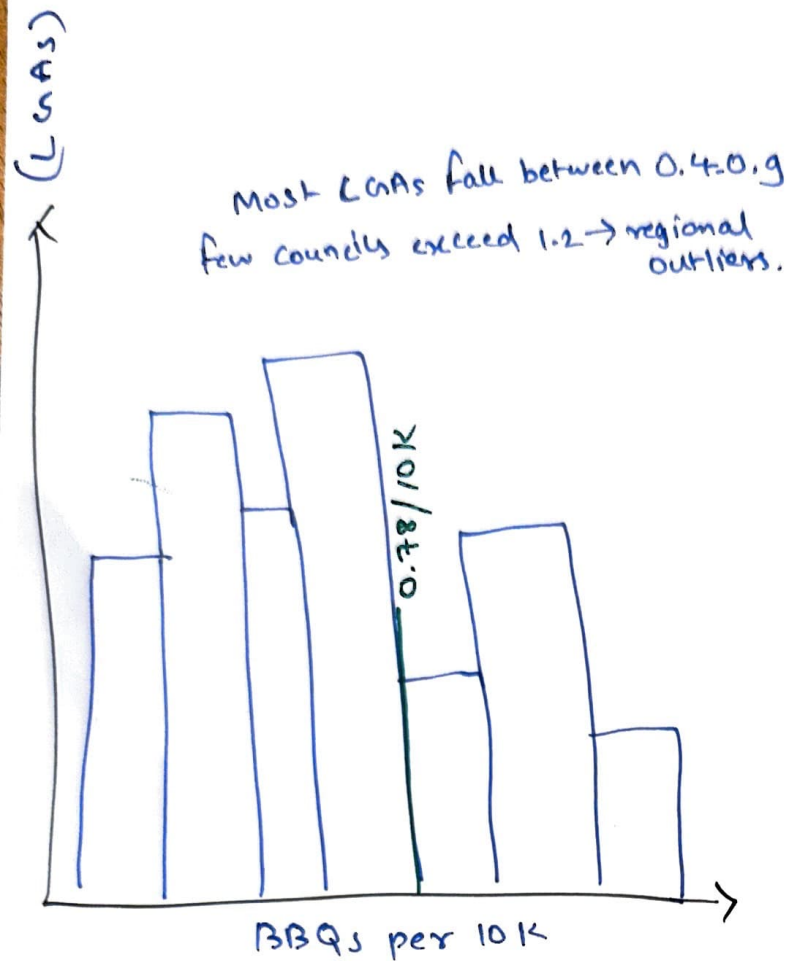
- Show which councils lead or lag behind.
- Highlights fairness differences clearly.

OPERATIONS

- Metric toggle (Total/per 10K)
- Top N Filter
- Hover tooltip.

DISCUSSION

- Quick to compare LGAs
- Could add average line + annotations
- Works well beside map view.



Title:- Distribution of BBQ Access across Victorian councils.

Author: Ansh Rathore

Date: 26/10/25

Sheet: 4F054

Task: Histogram comparing councils by BBQs per 10,000 residents

LAYOUT

- Single histogram centered
- Dark background
- Vertical line = state average

FOCUS

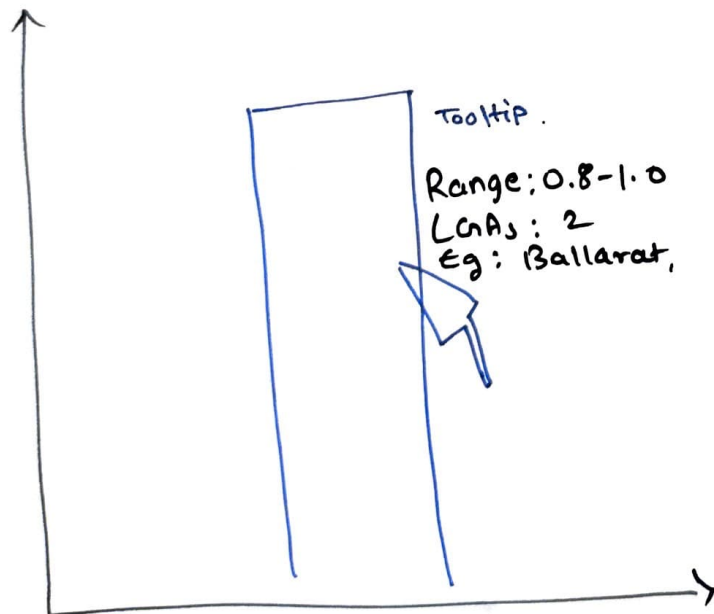
- Reveals how evenly BBQs are distributed,
- shows typical vs outlier councils

OPERATIONS

- Hover → tooltip showing LGA count in each bin
- click bar → highlights those LGAs on the map view.
- Filters link to metric selector.

DISCUSSION

- works well for summarising fairness across all councils.
- Could combine with average annotation for clarity.
- Consider adding density line for smoother look
- keep scale consistent across metrics.

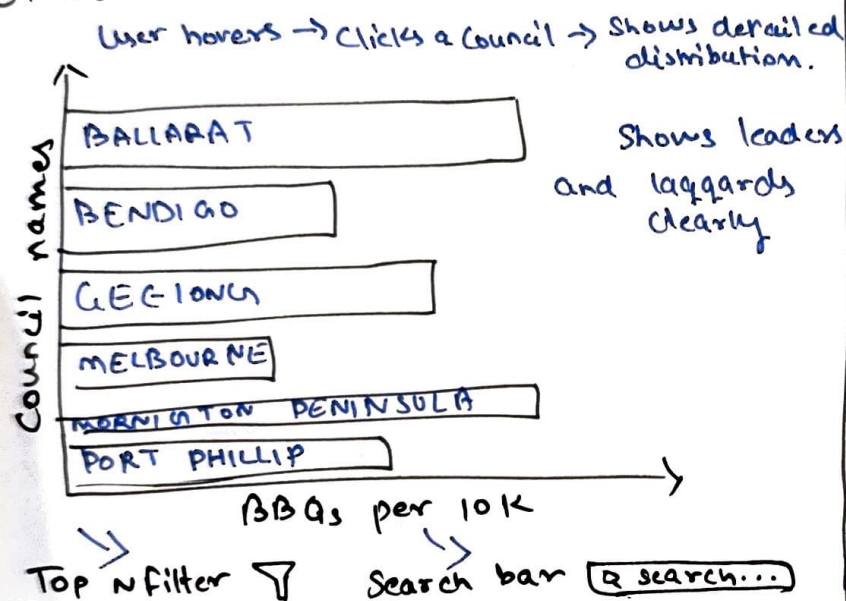


Focus on distribution fairness rather than totals.

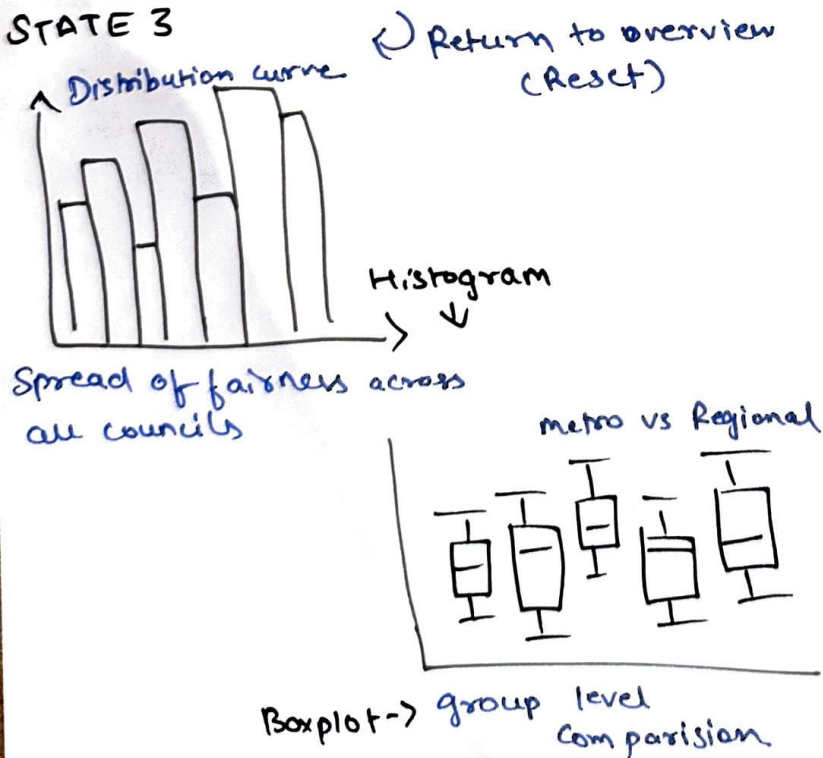
STATE 1



STATE 2



STATE 3



Title - Fairness in Public BBQ access across Victorian Councils

Author - Ansh Rathore

Date - 20/10/23

Sheet: 5 - FDS

Task - Final design concept
Combining map, ranking and distribution views.

Development - Refined from
FDS2 - FDS4 + user feedback.

LAYOUT

- Responsive dashboard layout: map + bar + distribution in stacked cards.
- Side text panels guide interpretation.
- Dark theme for visual consistency and accessibility.

FOCUS

- User driven exploration - start broad (map) then narrow to detail (ranking, distribution)
- Highlights inequality patterns b/w metro & regional areas

OPERATIONS DETAIL

- Built with Vega Lite (4 linked views)
- Data sources: Data Vic (Public BBQ '23), ABS (Population by LGA '23)
- Estimated build time 14-16 hours.
- Includes annotations & accessibility checks.

DISCUSSIONS

- Flow is clear: overview → compare → analyze → reflect.
- Supports "storytelling with data" while staying interactive.
- Future improvement: add demographic overlays or BBQ Condition data.

DETAIL OPERATIONS

- Hover: reveals tooltip with council details.
- Metric selector toggles between Total BBQ's and BBQ's per 10K
- Filter by TopN or council name
- Boxplot auto updates with filtered subsets.