

## Appendix

The source dataset used for interstate arrivals and departures comes from “Migration, Australia, 2019–20 Financial Year” Australian Bureau of Statistics, accessed October 24, 2022, <https://www.abs.gov.au/statistics/people/population/migration-australia/2019-20>.

State	Interstate arrivals	Interstate departures
NSW	89,873	110,760
Vic.	77,197	74,954
Qld	101,789	76,441
SA	23,726	25,886
WA	29,211	31,621
Tas.	12,962	11,749
NT	13,517	16,214
ACT	20,394	21,044

### Checklists: Practical Accessibility Testing for Data Visualizations

#### Content Testing Checklist

- ☐ Chart contains a descriptive title.
- ☐ Chart contains a suitable summary in the chart or in the surrounding text.
- ☐ Chart uses plain language.
- ☐ Chart axes are labeled clearly.
- ☐ Chart series are labeled clearly.
- ☐ The numerical data is formatted clearly.
- ☐ If the chart can be used for analysis or forming one's own insights and is not adequately described by the chart summary, then a raw data table or a CSV download of the raw data is provided as an alternative.

If chart is interactive,

- If present, tooltips contain clear information.

#### Visual Testing Checklist

- ☐ All text is at least 12px (or 9pt) in size, ideally 16px (or 12pt).
  - ☐ Small text and its background colors meets a minimum contrast ratio of 4.5:1 (see explanation of contrast ratios in Color Contrast Checkers section, above). “Small text” is defined as text smaller than 24px (or 18pt) or as bold text smaller than 18.5px (or 14pt).
  - ☐ The contrast ratio of shapes, icons, and large text relative to their background color meets a minimum of 3:1.
  - ☐ Color alone is not used to denote meaning – that is, contrast, markers, or patterns are also used to differentiate data and are labeled appropriately (i.e., with a legend, or nearby text).
  - ☐ Text font is sans-serif (that is, the letterforms in the font do not have decorative marks or flourishes. Examples of sans-serif fonts include Arial, Courier, and Helvetica).
  - ☐ The chart is able to be zoomed or magnified.
  - ☐ If the chart has a transparent background, it meets the above contrast requirements in high-contrast (forced styles) mode.
  - ☐ If the chart is animated, it must not contain flashing that could cause seizures.
  - ☐ If the chart is animated, it must be able to be paused/stopped, the animation should not automatically play.
- If chart is interactive,
- ☐ Active elements have clear focus styles that meet a contrast minimum of 3:1.
  - ☐ The chart is able to be understood in high-contrast (forced styles) mode.
  - ☐ If there is animation, the chart respects the user's system animation setting, and for longer animations, it must contain a stop/start button and not automatically play.

## Nonvisual Testing Checklist

- ☐ There is an appropriate text description of the chart.

If the chart is interactive,

- ☐ A chart heading is provided so that screen reader users can quickly skip to the chart using the heading shortcut.
- ☐ The anatomy of the chart is provided, including how many data points it contains.
- ☐ If necessary, interaction instructions are provided (for example, toggling data series on or off).
- ☐ Interactive elements on the chart should have the appropriate ARIA roles and labels.
- ☐ Visual changes to the chart are announced through an `<aria-live>` element or `<role="status">`, for example whether a data series is toggled on or off.

## Interaction Testing Checklist

If the chart is interactive,

- ☐ Keyboard tab to the chart focuses on the first interactive element.
- ☐ Tab key should navigate to different sections of the chart, such as the data series, legend, and menu, rather than between every single interactive element.
  - ☐ Arrow keys should navigate between data points or toggle between data series, legend items, or menu options.
  - ☐ Space/Enter should activate buttons or toggles.
- ☐ Mouse hover, pressing Space or Enter, or touch on a mobile device shows or hides annotations such as tooltips, if present.
- ☐ The chart does not have keyboard traps.
- ☐ The chart does not rely on custom keyboard shortcuts.