



Social Infrastructure Accessibility Mapping

TAFEs

ARUP

APRIL 2024

TAFEs

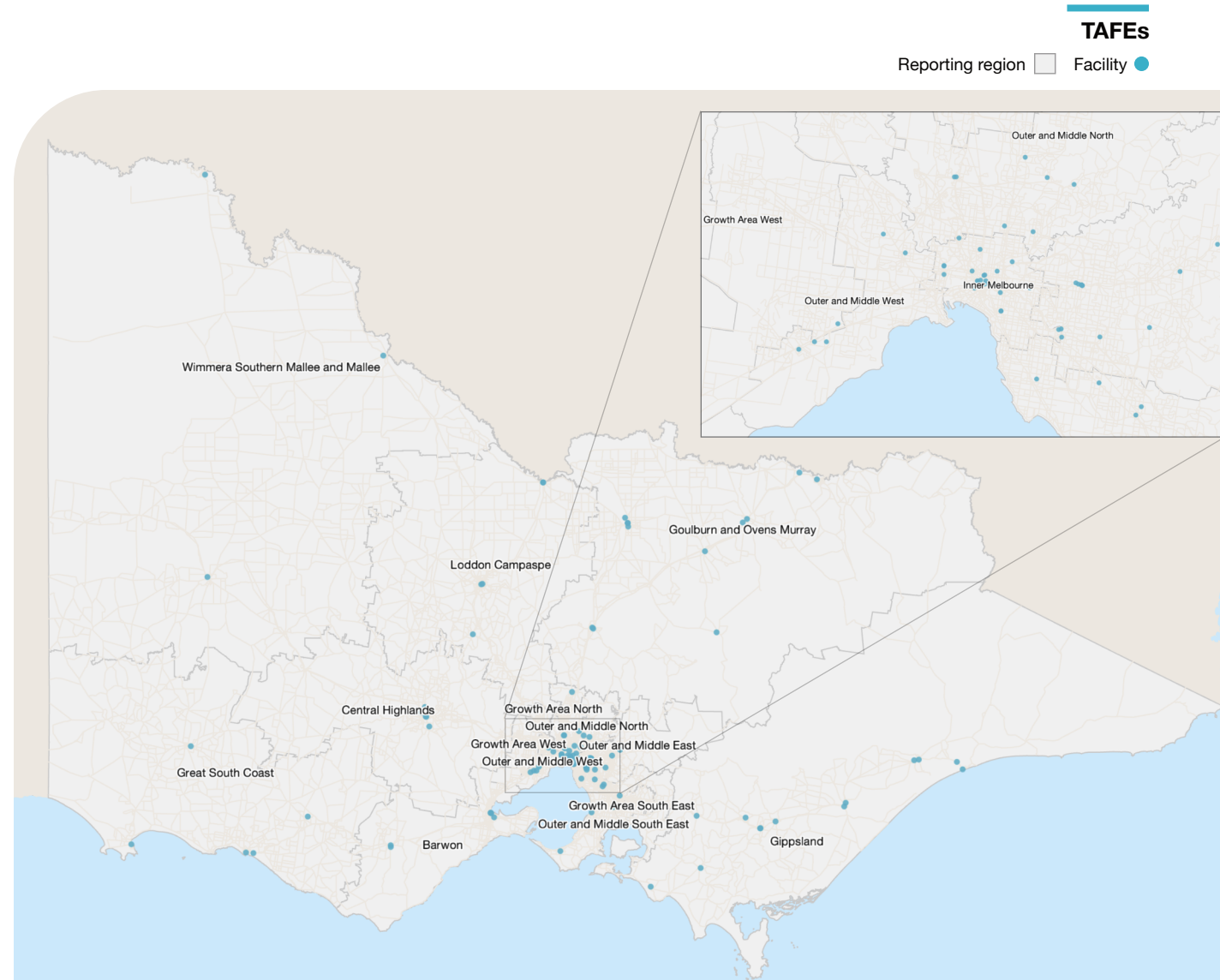
Background

Arup investigated the accessibility of social infrastructure within Victoria across socio-demographic groups and transport modes. Isochrones (journey time catchments) were generated for every considered facility and used to inform what members of the population would be able to access this infrastructure under a variety of travel conditions.

This presentation focuses on accessibility to **TAFEs**. These are Government-funded providers of training and regulated qualifications aligned with the Australian Qualifications Framework and other programs.

The conducted analysis was comprehensive, with outcomes generated for four distinct modes of transport, two time periods, and over twenty different socio-demographic groups. This presentation focuses on a subset of these outcomes corresponding with the cohorts most likely to be using TAFEs. This includes younger people, early school leavers, and people without post-school qualifications. Outcomes for 30- and 60-minute driving and public journeys are specifically shown in this report.

Further analysis was also conducted in differentiating accessibility based on TAFE course offerings by location by determining whether individual facilities offered courses across several categories including construction, health, english and foundational skills.



TAFEs

Driving accessibility by region

The charts below show driving access to TAFEs within 30 minutes during the morning peak. The figure on the left shows the total number of people without access under these conditions by reporting region, whilst the figure on the right shows this same statistic as a proportion of each region's population.

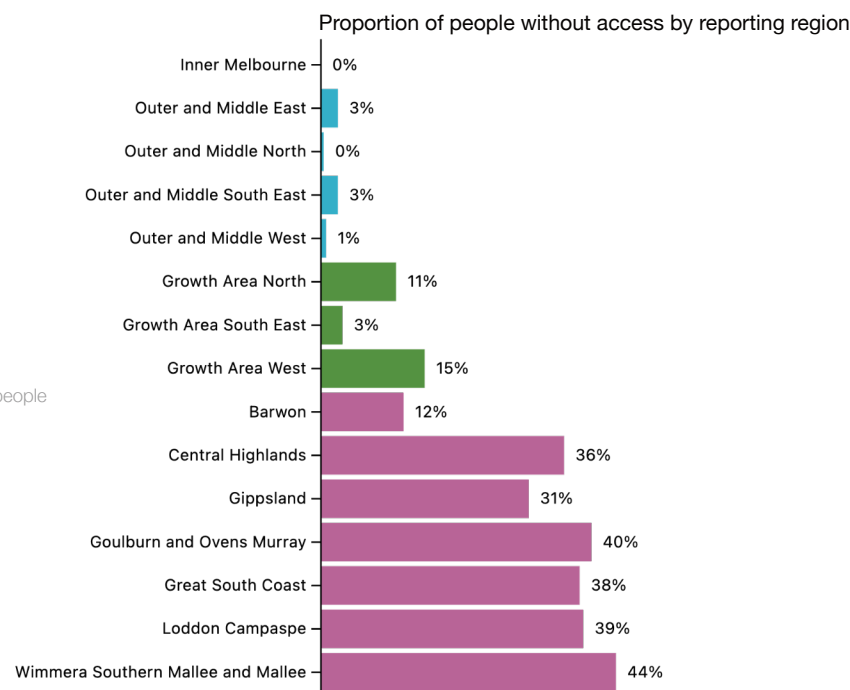
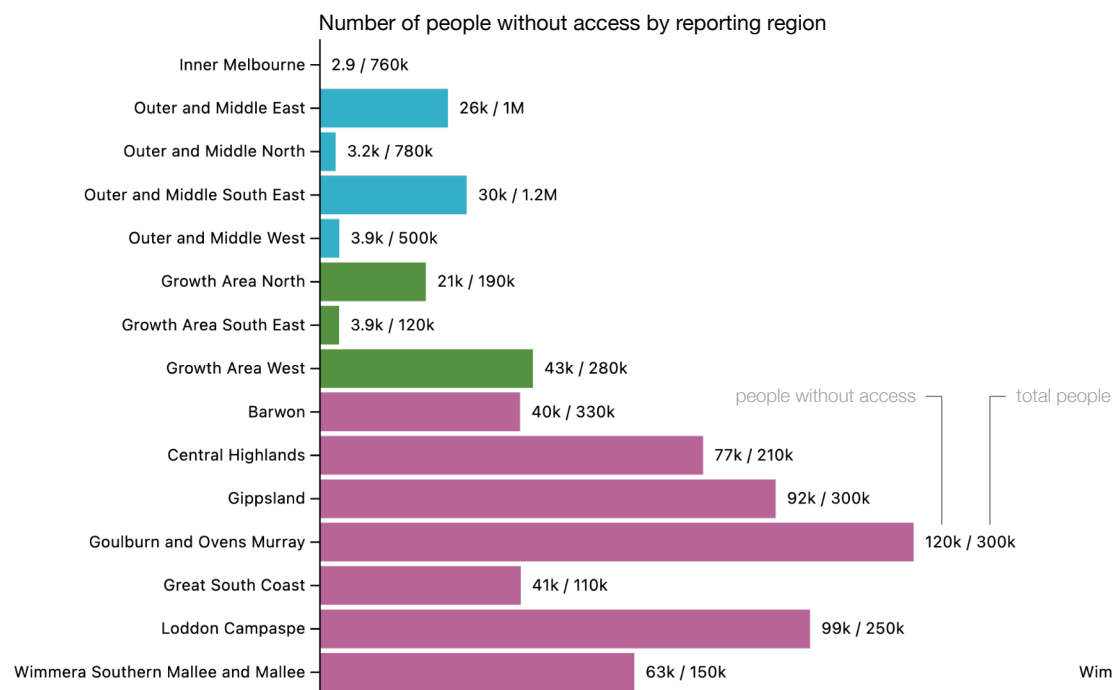
Driving access to TAFEs within metropolitan Melbourne is high, with a large proportion of the

population able to access a facility within 30 minutes during the morning peak period.

Driving accessibility to TAFEs is lower in regional areas. The *Goulburn and Ovens Murray* region contains the highest number of residents (120,000) without access to a TAFE institution within 30 minutes. Overall, 660,000 people across Victoria cannot drive to a TAFE facility within 30 minutes.

People without driving access to TAFEs during the morning peak within 30 minutes

Inner Metropolitan Growth Regional



TAFEs

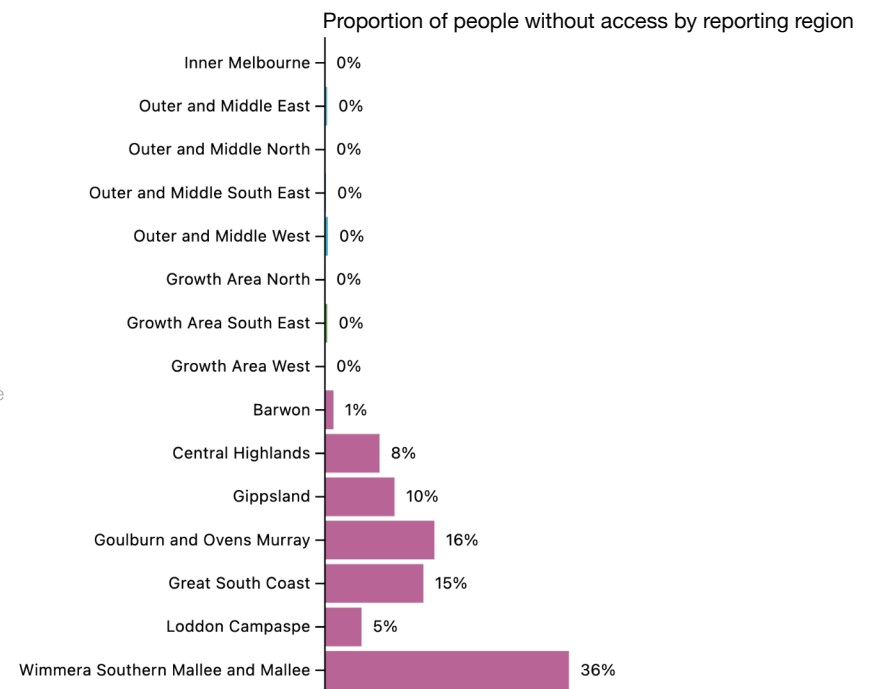
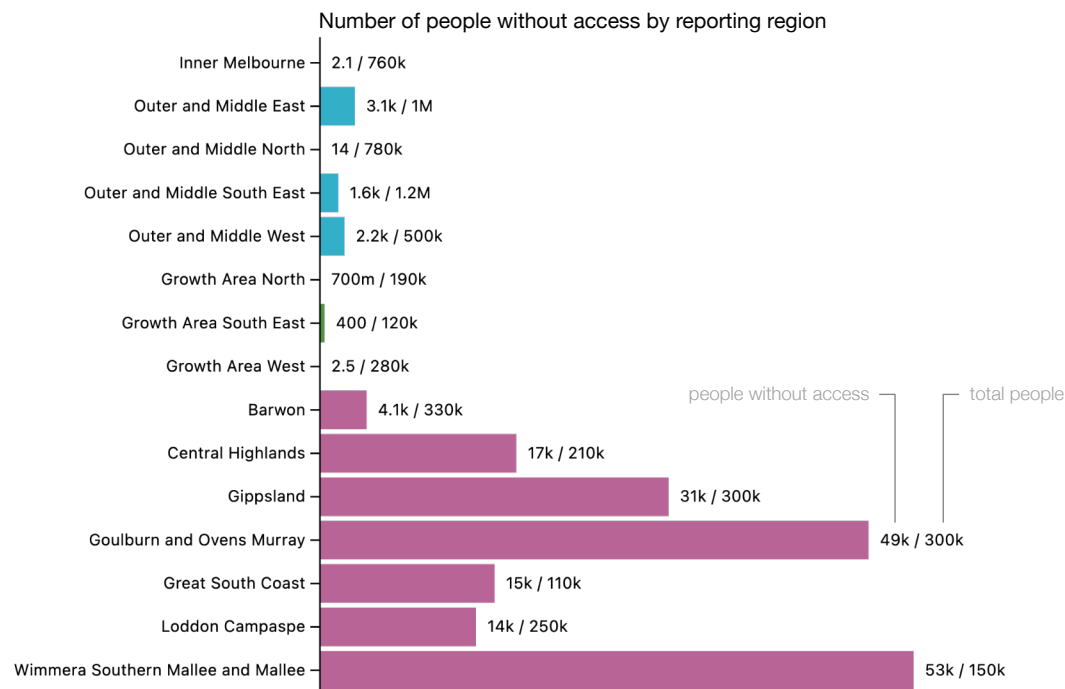
Driving accessibility by region

The charts below show driving access to TAFEs within 60 minutes during the morning peak. The figure on the left shows the total number of people without access under these conditions by reporting region, whilst the figure on the right shows this same statistic as a proportion of each region's population.

Almost everyone in metropolitan Melbourne is capable of accessing a TAFE facility within a 60-minute drive. Accessibility for people living in *Gippsland, Great South Coast, Goulburn and Ovens Murray* and the *Wimmera Southern Mallee* regions is not as high. 190,000 people across the state cannot access a TAFE facility within 60 minutes.

People without driving access to TAFEs during the morning peak within 60 minutes

Inner Metropolitan Growth Regional



TAFEs

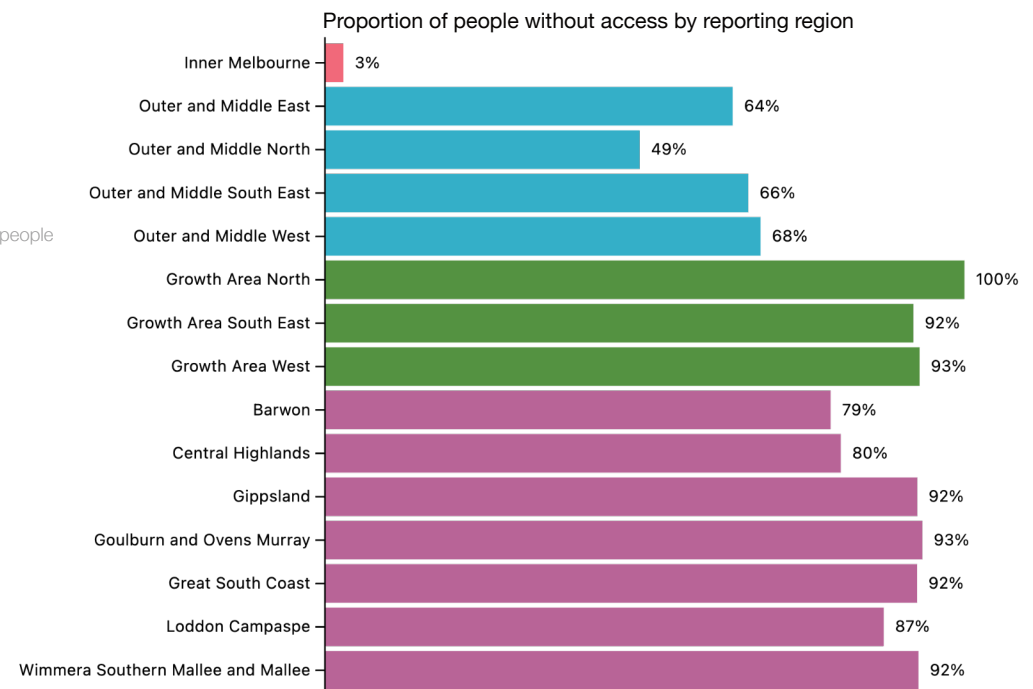
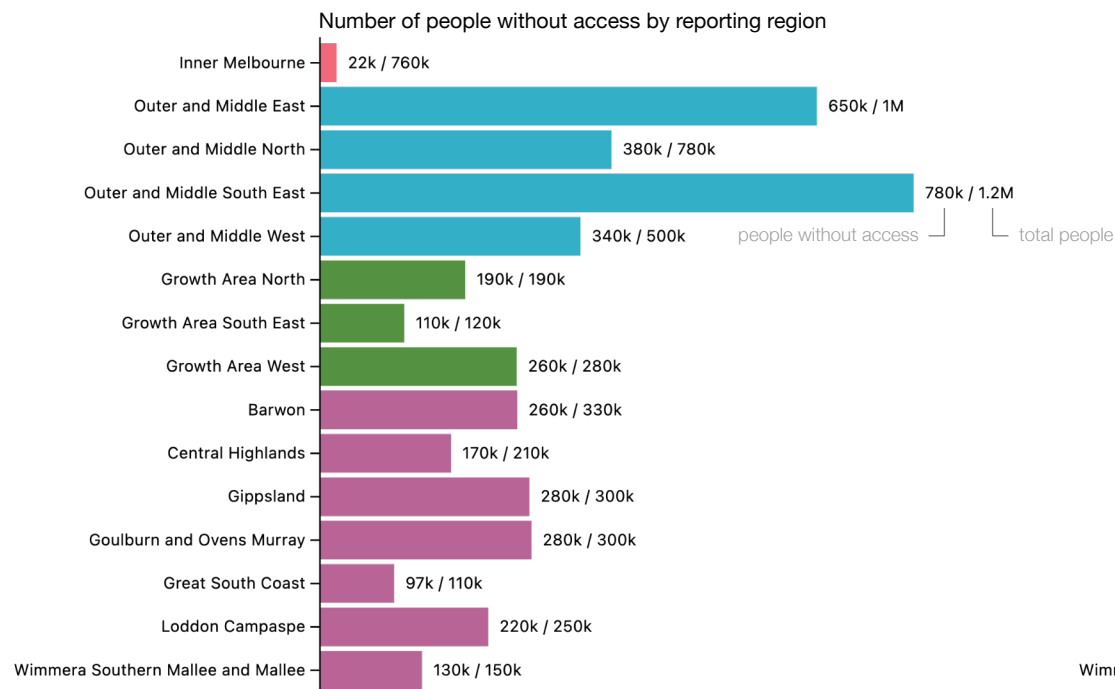
Public transport accessibility by region

The charts below show public transport access to TAFEs within 60 minutes during the morning peak. The figure on the left shows the total number of people without access under these conditions by reporting region, whilst the figure on the right shows this same statistic as a proportion of each region's population.

4.2 million people in Victoria cannot access a TAFE facility within a 30-minute public transport journey. The *Outer and Middle South East* region contains 780,000 people without access under these conditions - the highest across all reporting regions. Access is lowest in proportion to population across growth areas of the state.

People without public transport access to TAFEs during the morning peak within 30 minutes

Inner Metropolitan Growth Regional



TAFEs

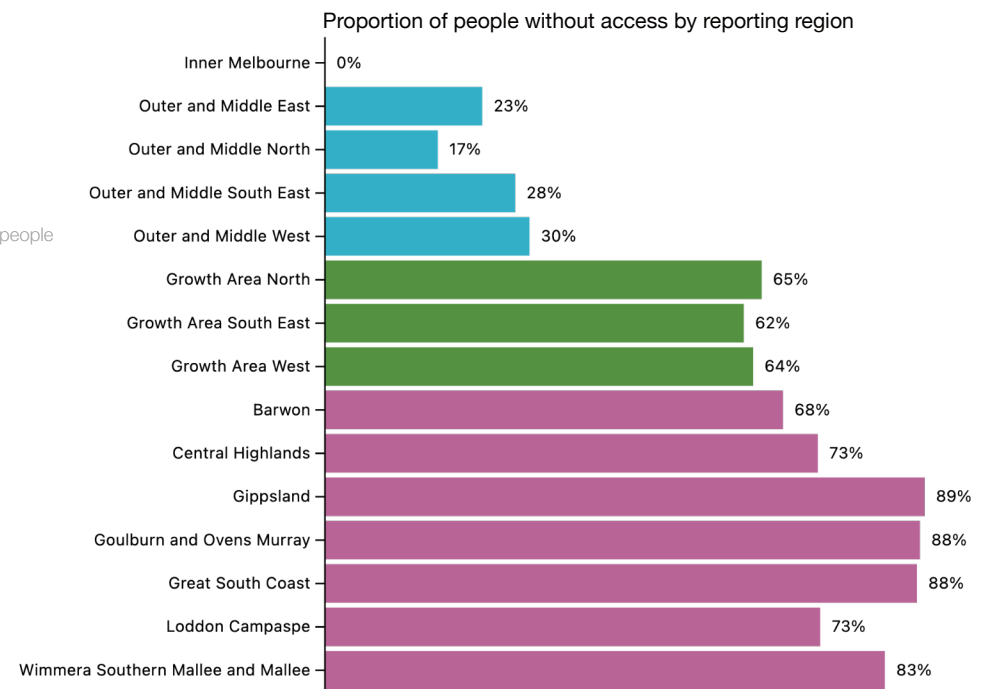
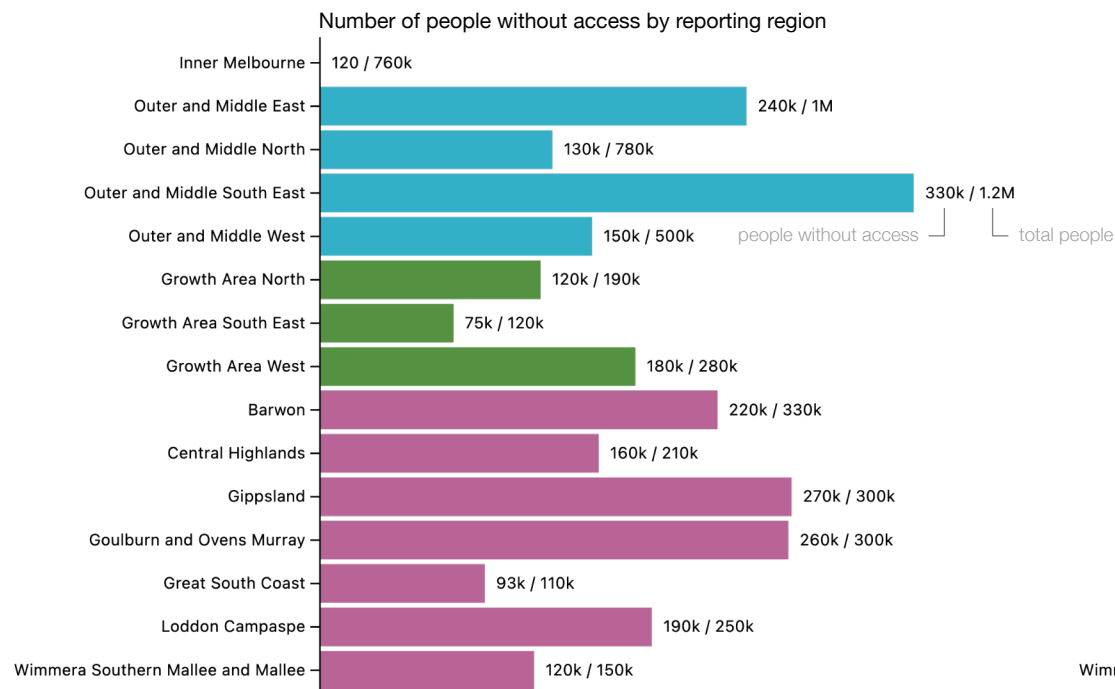
Public transport accessibility by region

The charts below show public transport access to TAFEs within 60 minutes during the morning peak. The figure on the left shows the total number of people without access under these conditions by reporting region, whilst the figure on the right shows this same statistic as a proportion of each region's population.

2.5 million people in Victoria cannot access a TAFE facility within a 60-minute public transport journey. The *Outer and Middle South East* region contains 330,000 people without access under these conditions - the highest across all reporting regions. Access is lowest in proportion to population across regional areas of the state.

People without public transport access to TAFEs during the morning peak within 60 minutes

Inner Metropolitan Growth Regional



TAFEs

Accessibility by TAFE offering

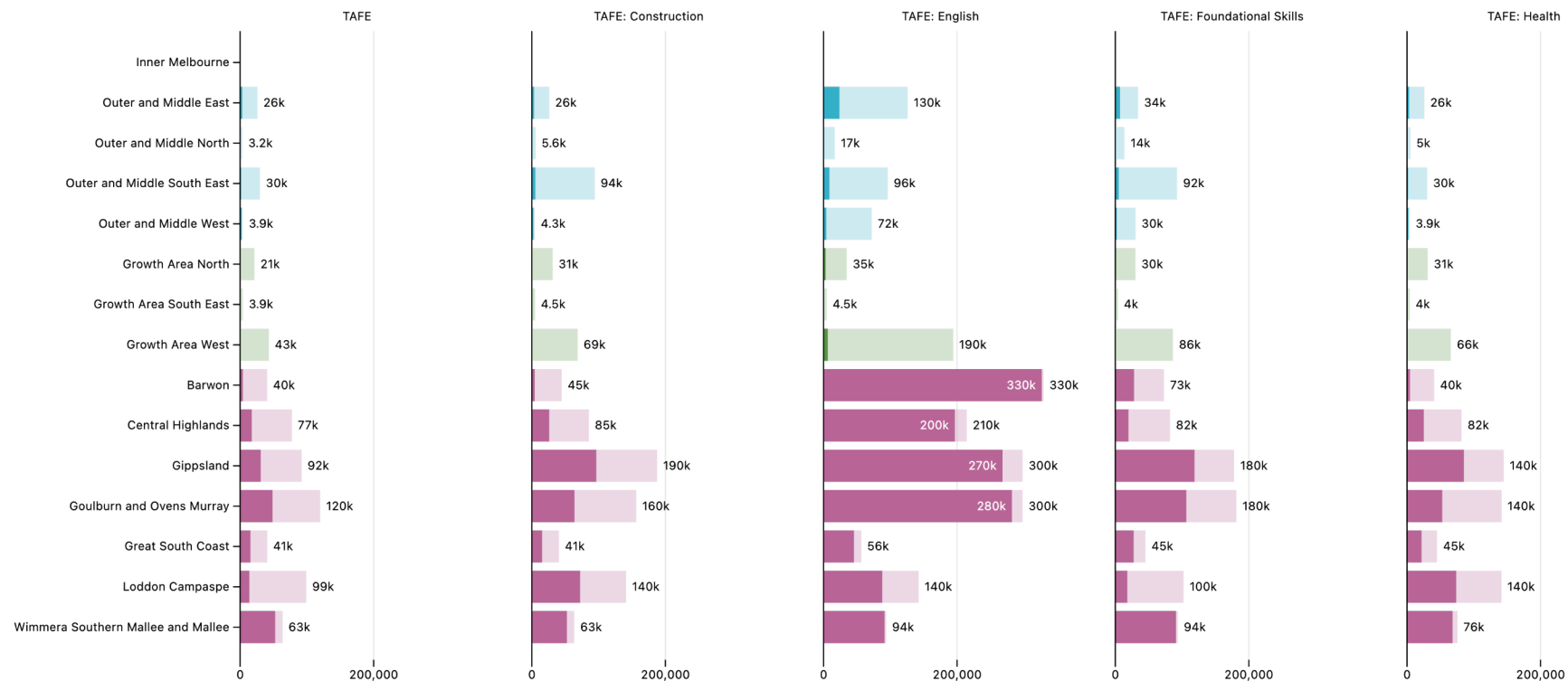
The chart below shows the total number of people without access to a TAFE facility within a 30-minute or 60-minute drive during the morning peak. Results have been presented across several different categories of TAFE offering as not all facilities offer the same range of courses.

Regions in metropolitan Melbourne provide good access to TAFE facilities by car. Areas in regional Victoria contain more people without driving access to a TAFE institution within 30 or 60 minutes. For example, 120,000 people in *Gippsland* cannot reach a facility offering foundational skills training within 30 minutes.

People without driving access to TAFEs during the morning peak by course category

Inner Metropolitan Growth Regional

Within 30 minutes Within 60 minutes



TAFEs

Accessibility by
TAFE offering

The chart below shows the total number of people without access to a TAFE facility within a 30-minute or 60-minute public transport journey during the morning peak. Results have been presented across several different categories of TAFE offering as not all facilities offer the same range of courses.

Only people living within the Inner Melbourne region have good access to TAFE via public transport within 30 or 60 minutes. All other parts of Victoria demonstrate poor levels of public transport access to TAFE courses across different categories.

People without public transport access to TAFEs during the morning peak by course category

Inner Metropolitan Growth Regional

Within 30 minutes Within 60 minutes



TAFEs

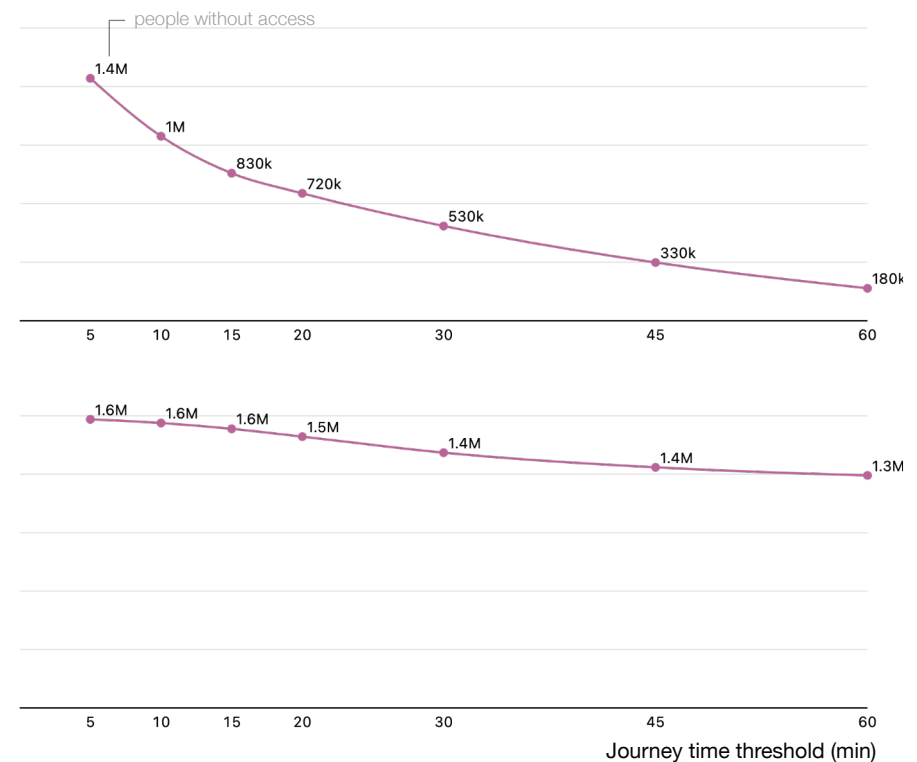
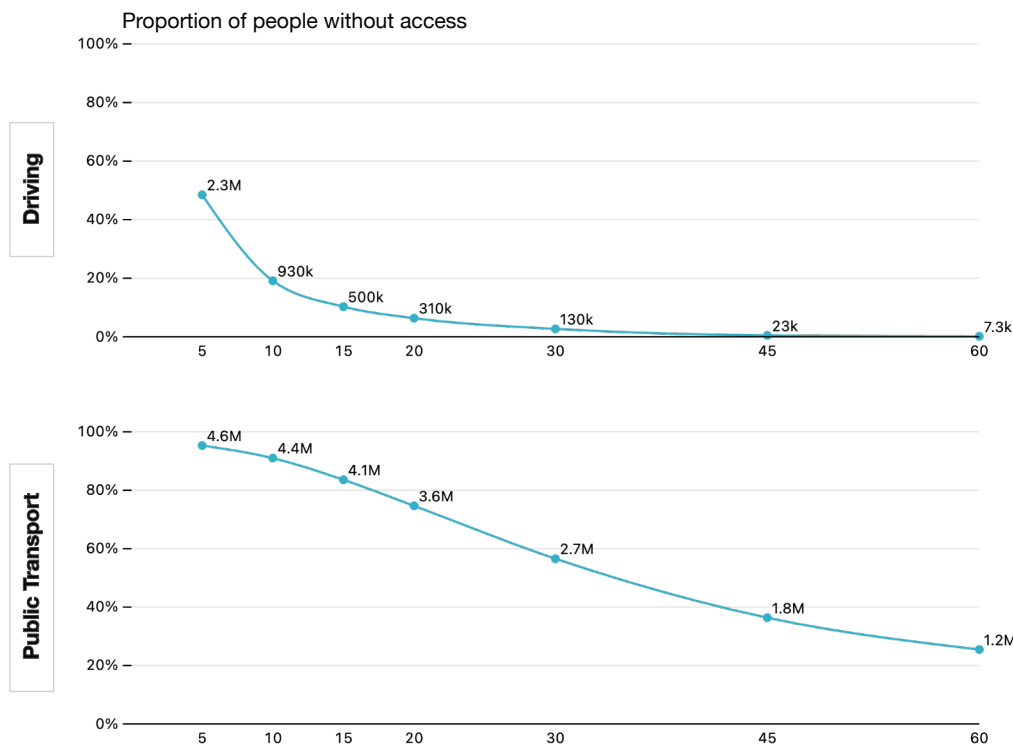
Accessibility across
journey times

The charts below show the proportion of people without access to TAFEs via driving or public transport in the morning peak within various journey time thresholds.

Results have been split between reporting regions within metropolitan Melbourne (inner, middle, outer and growth) and regional areas. Labels show the absolute number of people without access.

People without access to TAFEs during the morning peak across journey times

Metropolitan Melbourne Regional



TAFEs

Accessibility across demographic groups

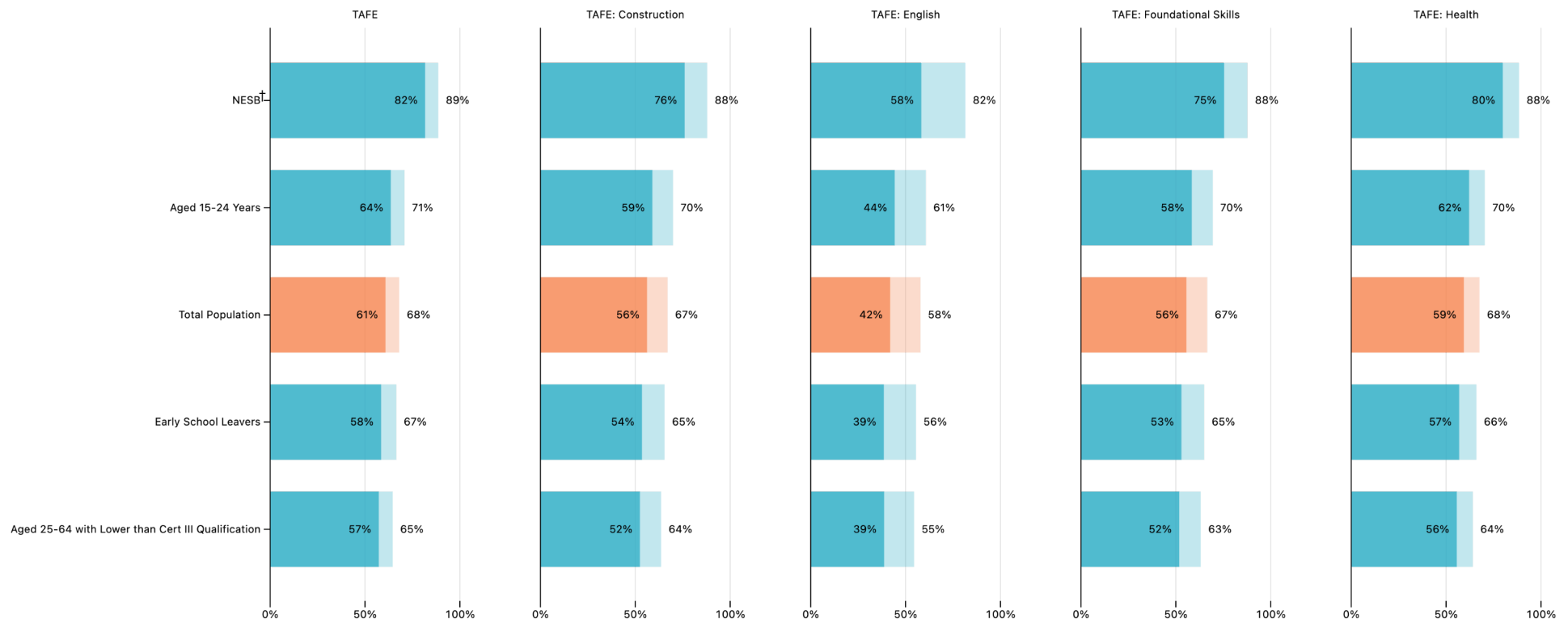
The chart below summarises statewide accessibility to TAFE facilities via public transport during the morning peak across different socio-demographic groups. Results have been presented across several different categories of TAFE offering as not all facilities offer the same range of courses.

Early school leavers and those aged 25-64 without a Certification III qualification or higher have slightly lower than average public transport accessibility to TAFE compared to the general population.

TAFE accessibility by socio-demographic group by course category

For morning peak public transport journeys within 30 and 60 minutes

■ Within 30 minutes ■ Within 60 minutes



†Non-English Speaking Background (NESB) households

TAFEs

Accessibility over time

The figure to the right shows the expected change in statewide accessibility to TAFE institutions between 2021 and 2036 for those aged 15-24 years, as well as the total population. Accessibility is characterised as the proportion of people that can access a TAFE facility within 60 minutes via public transport during the morning peak.

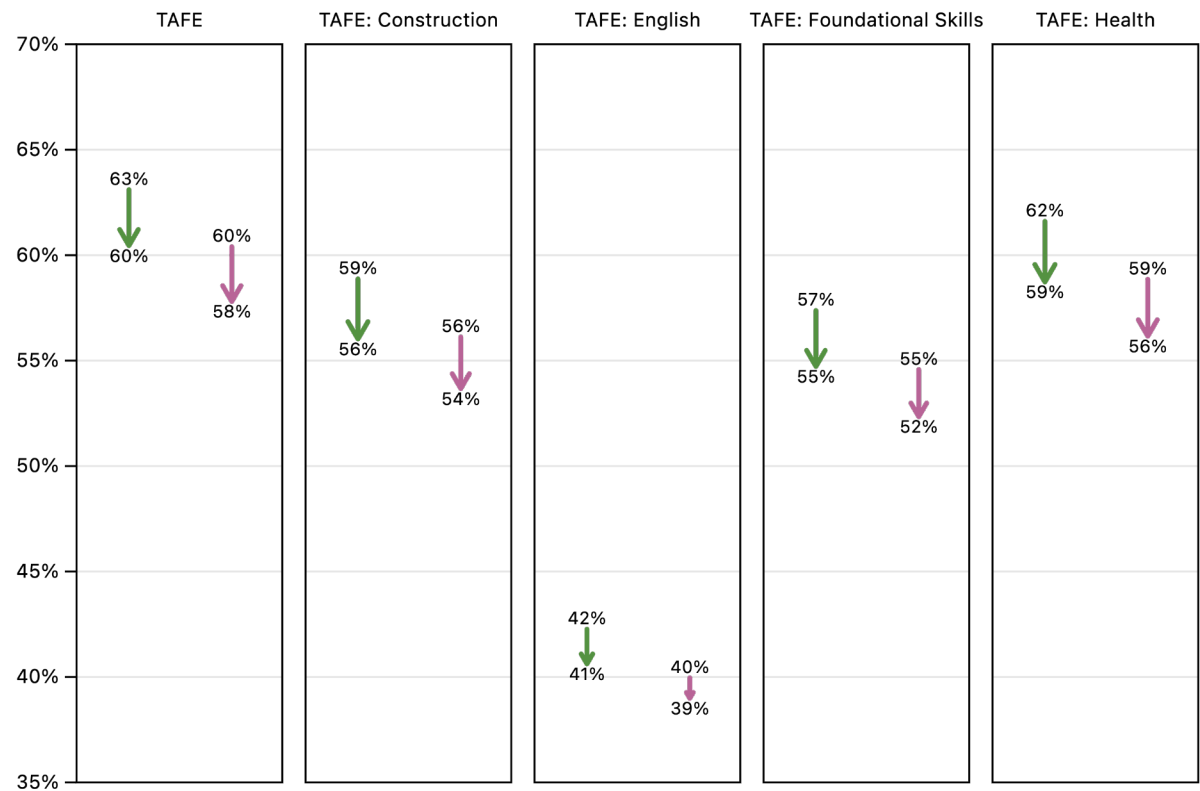
Accessibility is broadly expected to decrease over time, predominantly due to an increase in the number of residents living in areas that are currently not developed (and thus further away from existing TAFE facilities).

Where there is change in accessibility over time, this is because more people are projected to be living closer or farther from existing facilities. This analysis has not included future changes to the provision of additional infrastructure or changes in network conditions.

Current and future public transport accessibility to TAFE

For morning peak public transport journeys within 60 minutes

■ Aged 15-24 Years ■ Total Population 2021 → 2036



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Accessibility analysis methodology

All analysis conducted in this report used a multi-step methodology to generate outcomes across socio-demographic groups from network accessibility.

1. Locations of TAFEs were derived from data provided by the *Victorian Department of Jobs, Skills, Industry and Regions*.
2. Travel time isochrones were generated across all facilities for combinations of travel modes (driving, public transport[†], walking, cycling), time periods (morning peak or inter-peak), and journey time thresholds (ranging from 5 to 120 minutes). These utilised a family of network routing models developed by Arup using a combination of open transport network data and simulated congested travel times derived from the Victorian Integrated Transport Model (VITM).
3. Spatial analysis was conducted to determine the spatial intersection of socio-demographic groups against the isochrones. This was used, for instance, to determine what proportion of the population were able to access a certain type of infrastructure under one of the considered travel conditions.

[†]Public transport travel times include walking required to access and egress from stops.

Example isochrone analysis visualisation

Facilities shown are not TAFEs.

Travel time threshold (min) 120 60 45 30 15 10 5 Facility ●

