

Apartments and public transport: Melbourne 2004-2022

Steve Pemberton &
Eric Keys

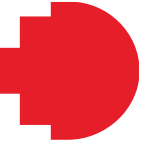
May 2024

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What's next...



Centre for
Urban Research

Our team and our report



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Project website: Packed like sardines

<https://cur.org.au/project/packed-like-sardines-impacts-of-the-apartment-boom-on-public-transport-in-australian-cities/>

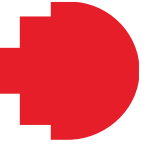
Working paper (available from the website): [Tracking the development of apartment housing activity against public transport service provision in Melbourne: 2004-2022](#)

Integrating apartments and PT: an aspiration, but rarely measured

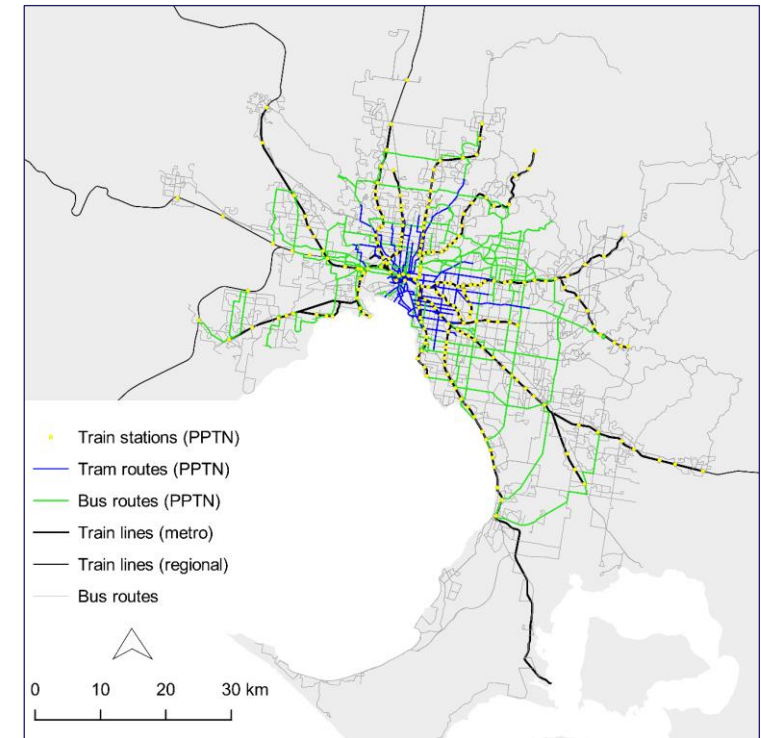


- Development of high-density housing in areas with high-quality public transport is reflected in transport and land use planning policies in many cities (e Silva et al. 2023; Keys et al 2023)
- Benefits of consolidation include reduced car ownership and use, and increased public transport use (Cervero 1994)
- But little is known about what is achieved in practice; outcomes are rarely measured and reported (Ewing et al. 2014)
- Equity in public transport provision, while investigated in previous studies (Currie 2010; Kaeoruean et al. 2020), has been given little attention in areas specific to high-density housing

Overview



- Tracking apartments against public transport service provision 2004-22, taking account of vehicle capacity
- ‘Needs-gap’ analysis: is public transport equity being achieved in areas with many apartments
- **Context:** considerable growth in high-density housing along public transport corridors; Inner Melbourne population growing by 160% in the last 20 years; apartments accounting for two-thirds of all dwellings
- **Relevance:** is policy intent of transport and land use integration being achieved; has it contributed to equity in public transport service provision

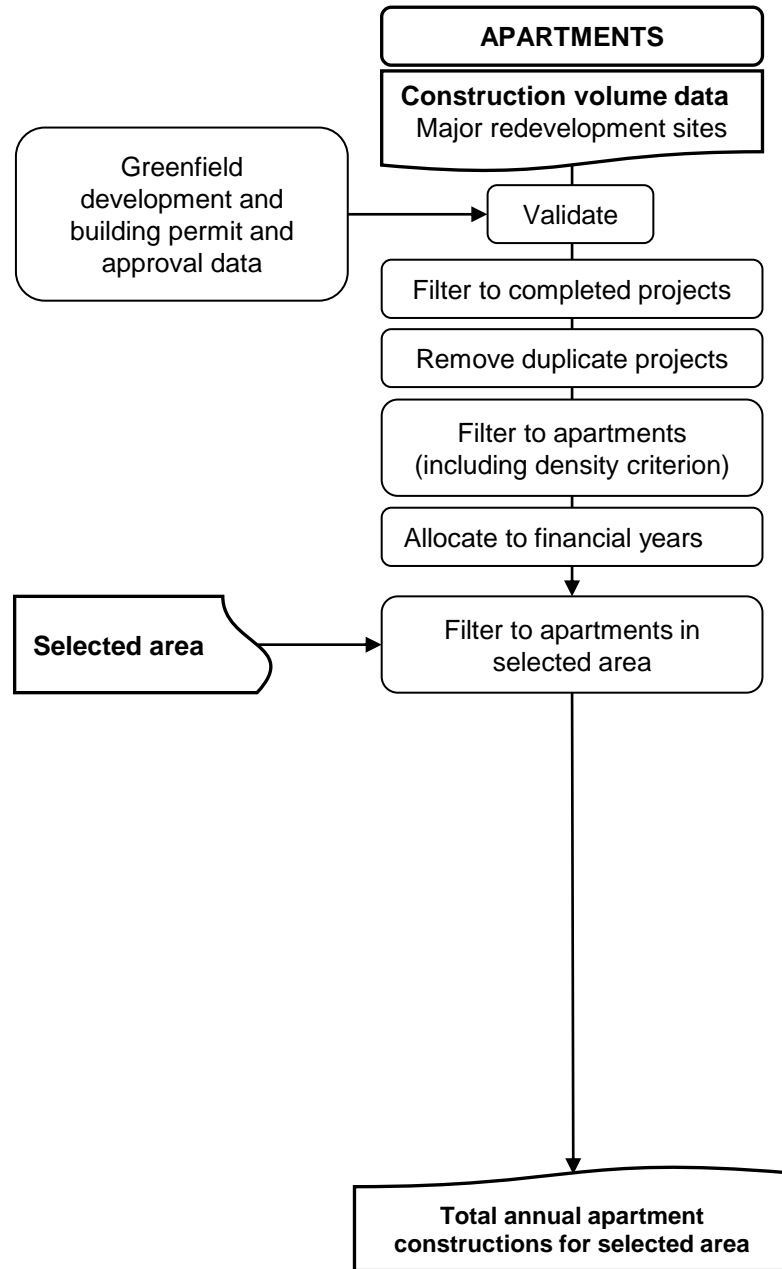


2009

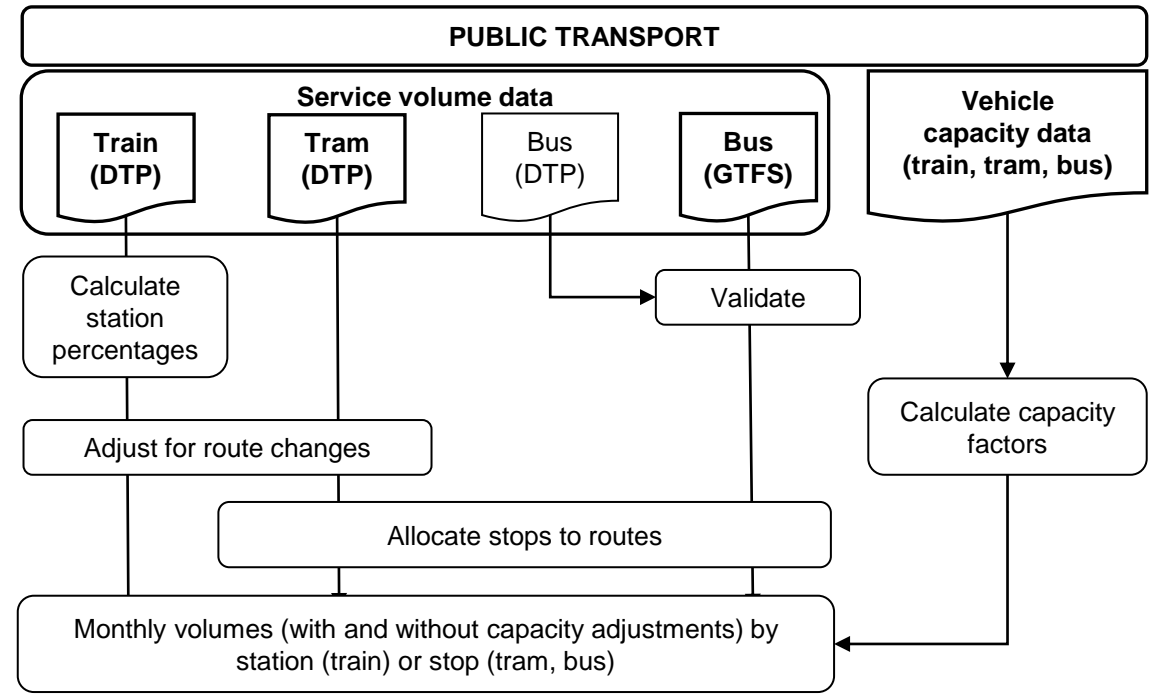
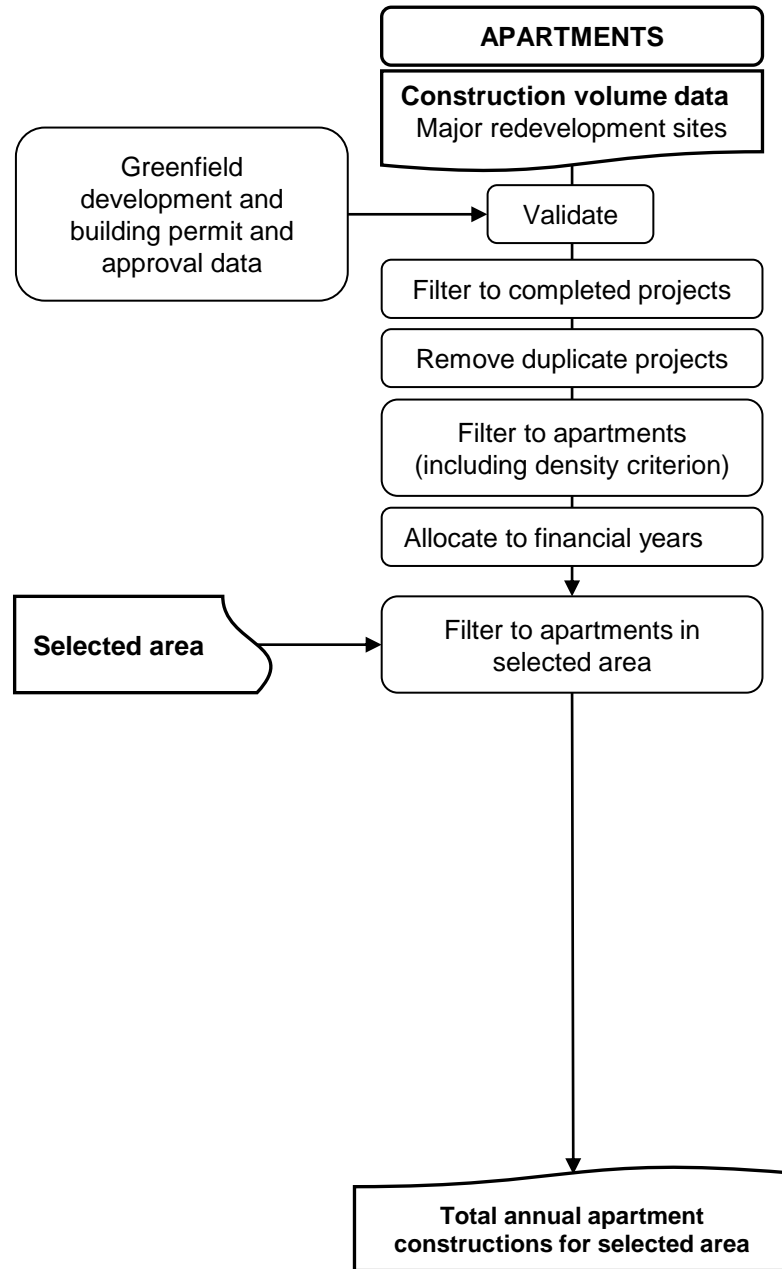




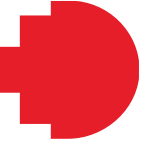
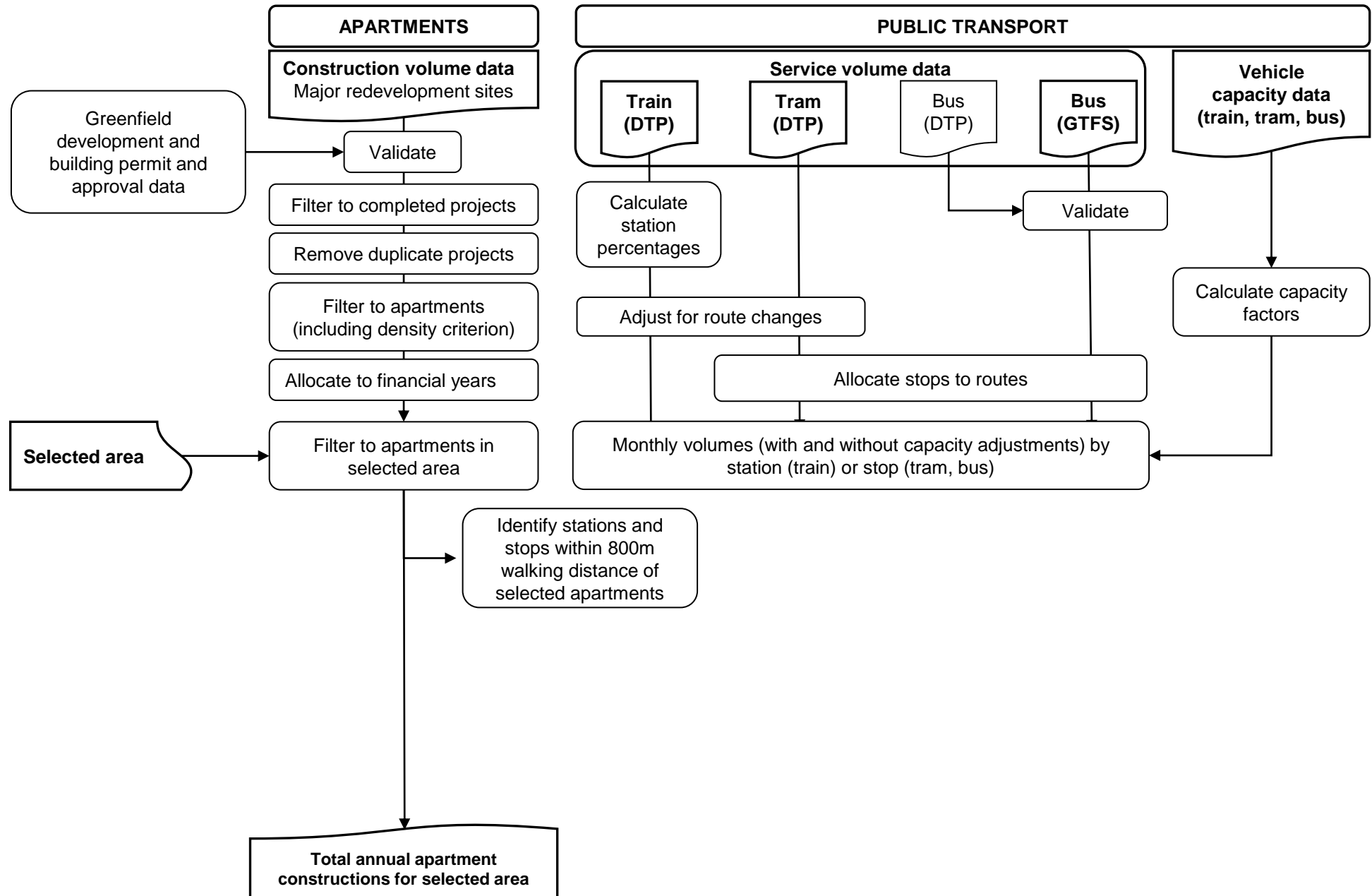
Data and analysis



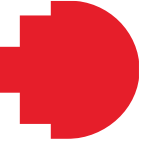
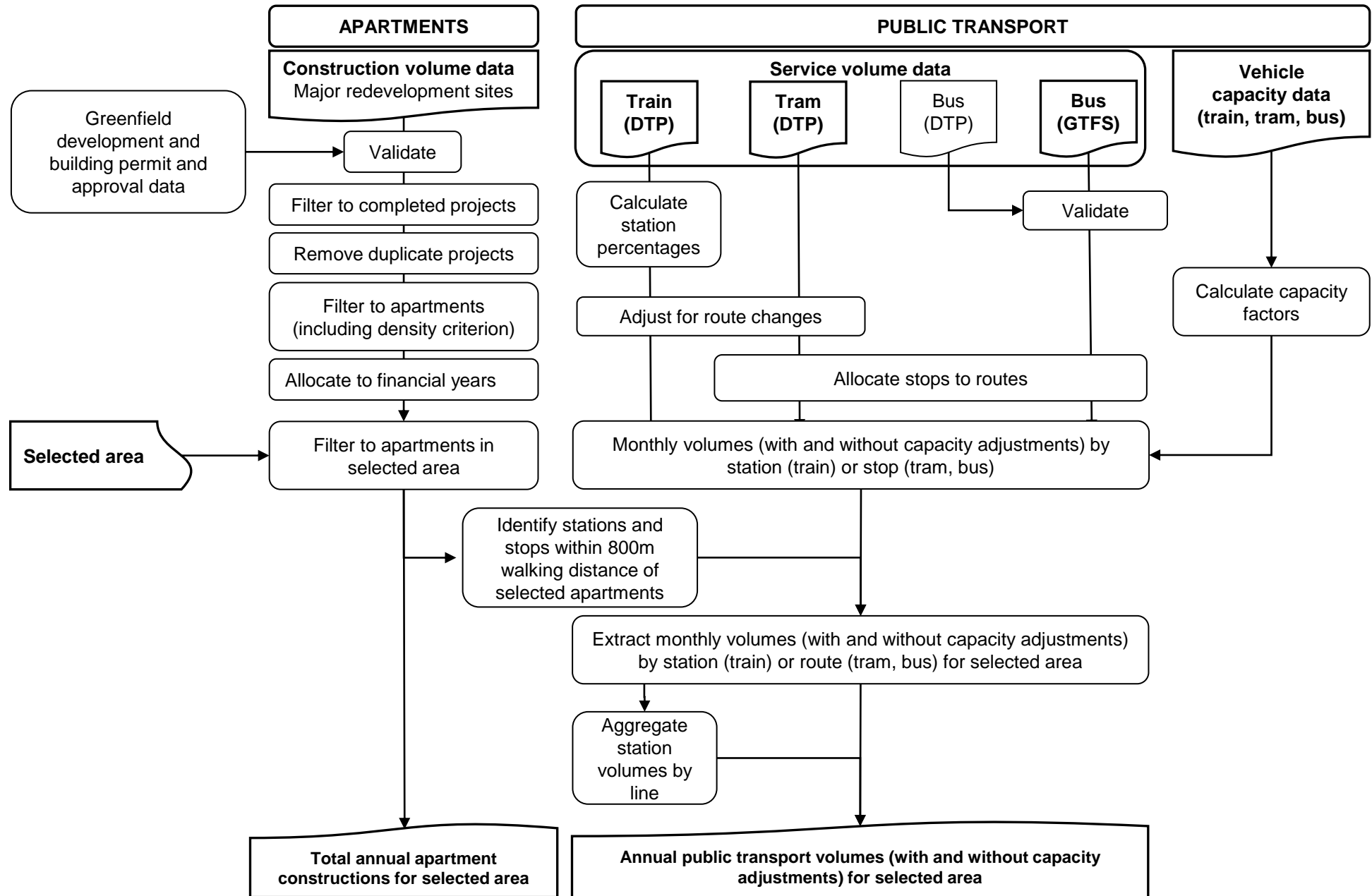
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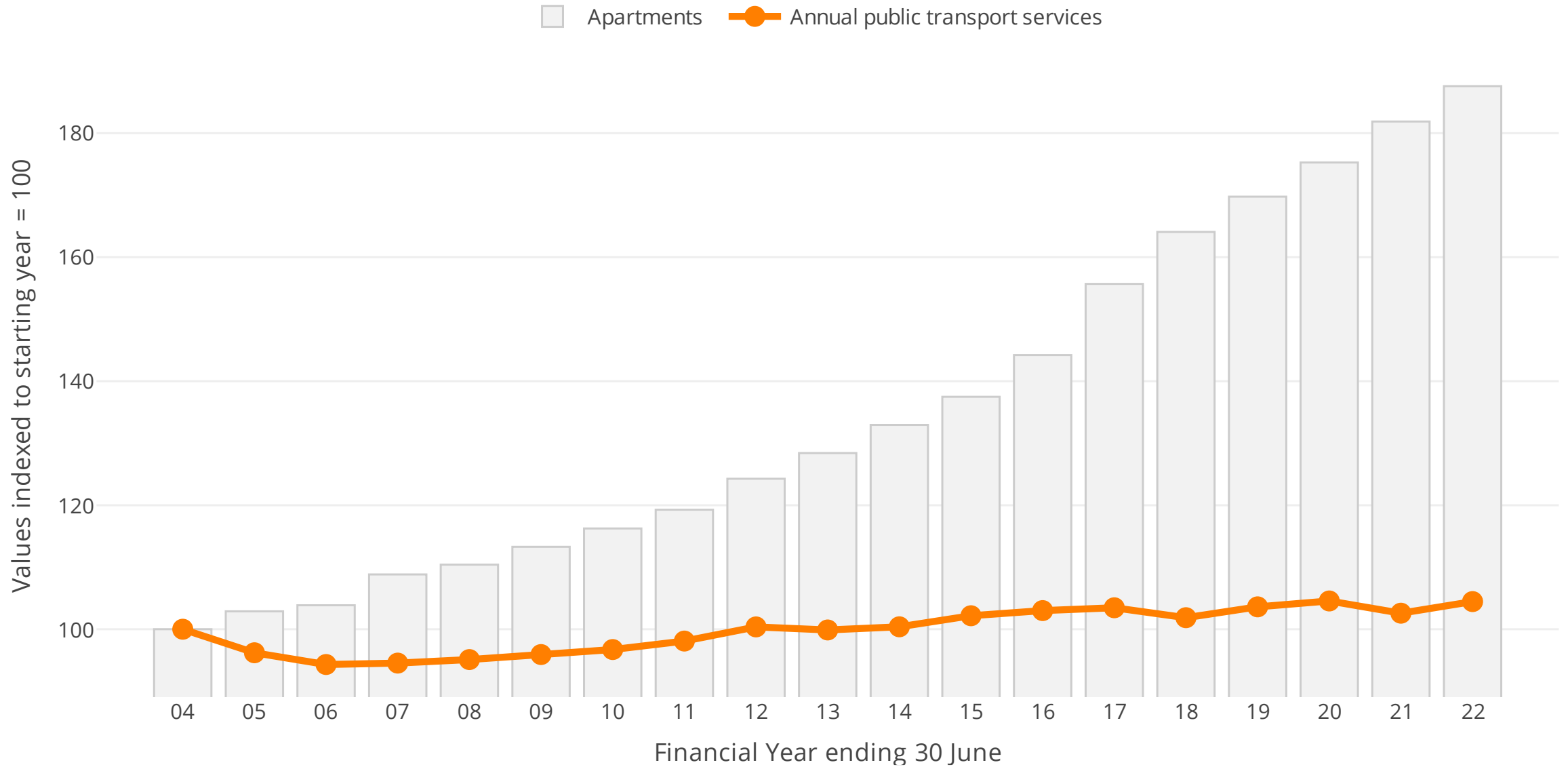
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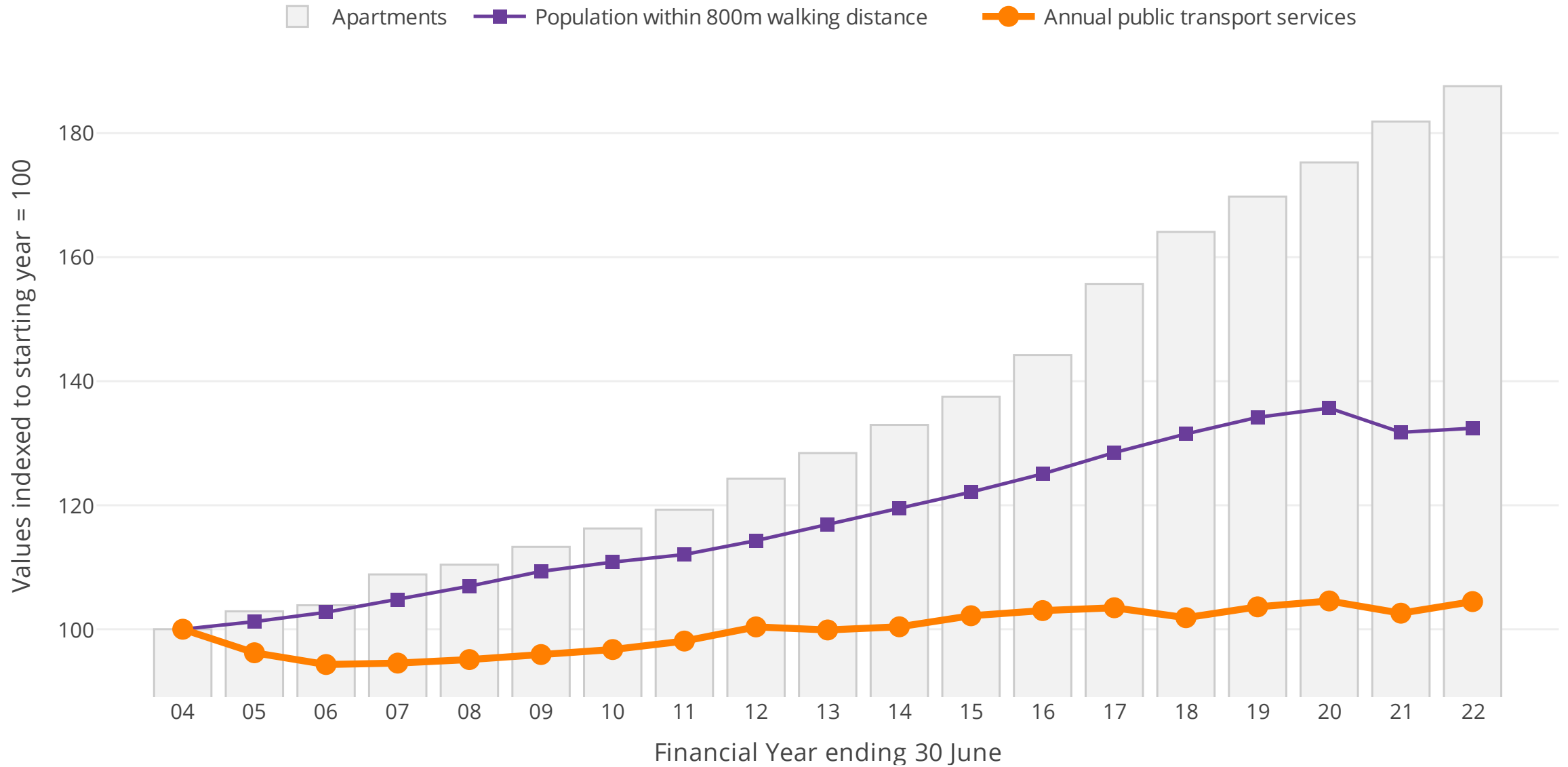
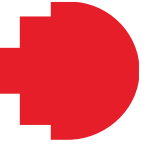
Data and analysis



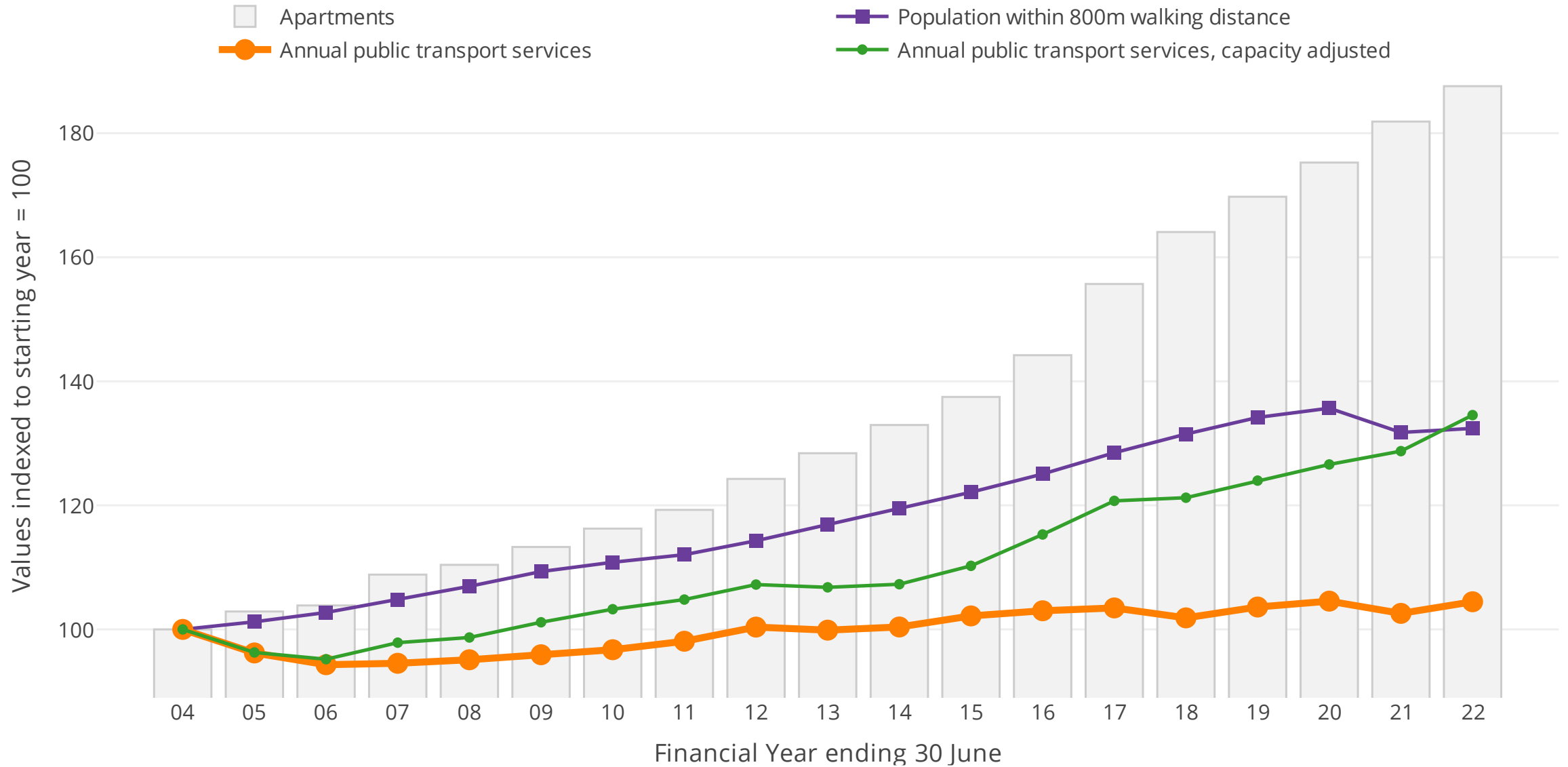
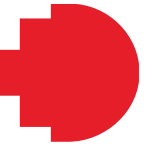
Greater Melbourne: apartments v train/tram



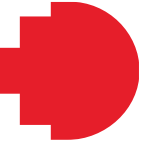
... and population



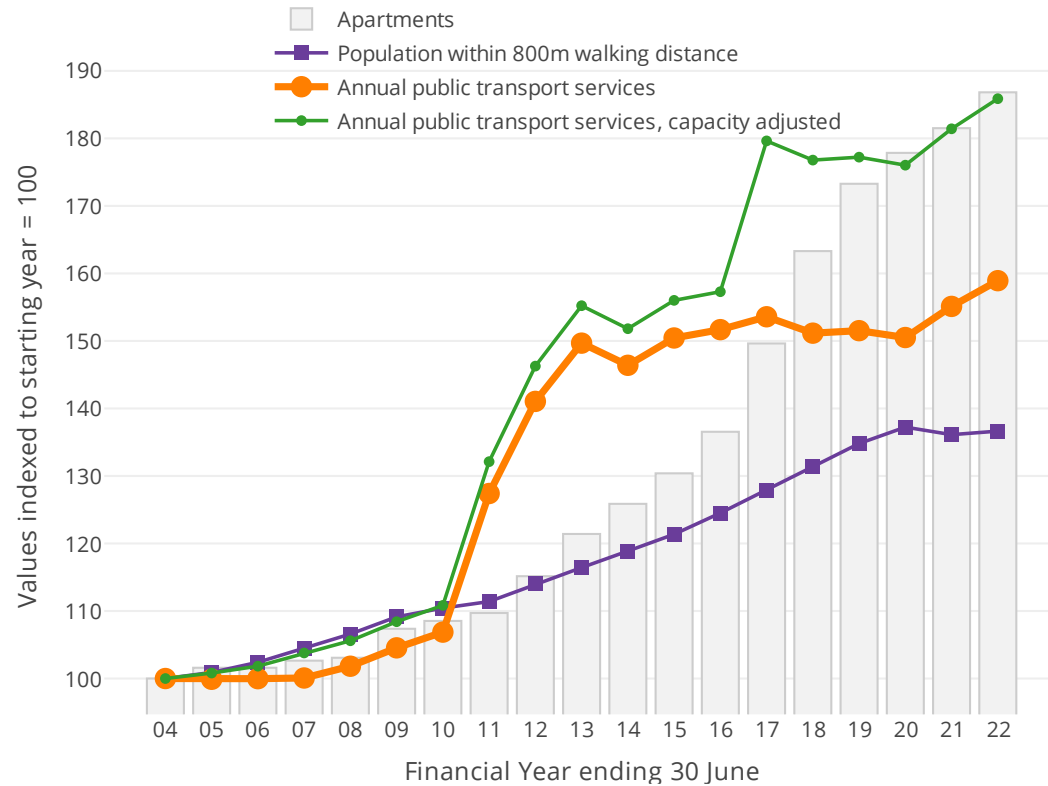
... and capacity-adjusted train/tram



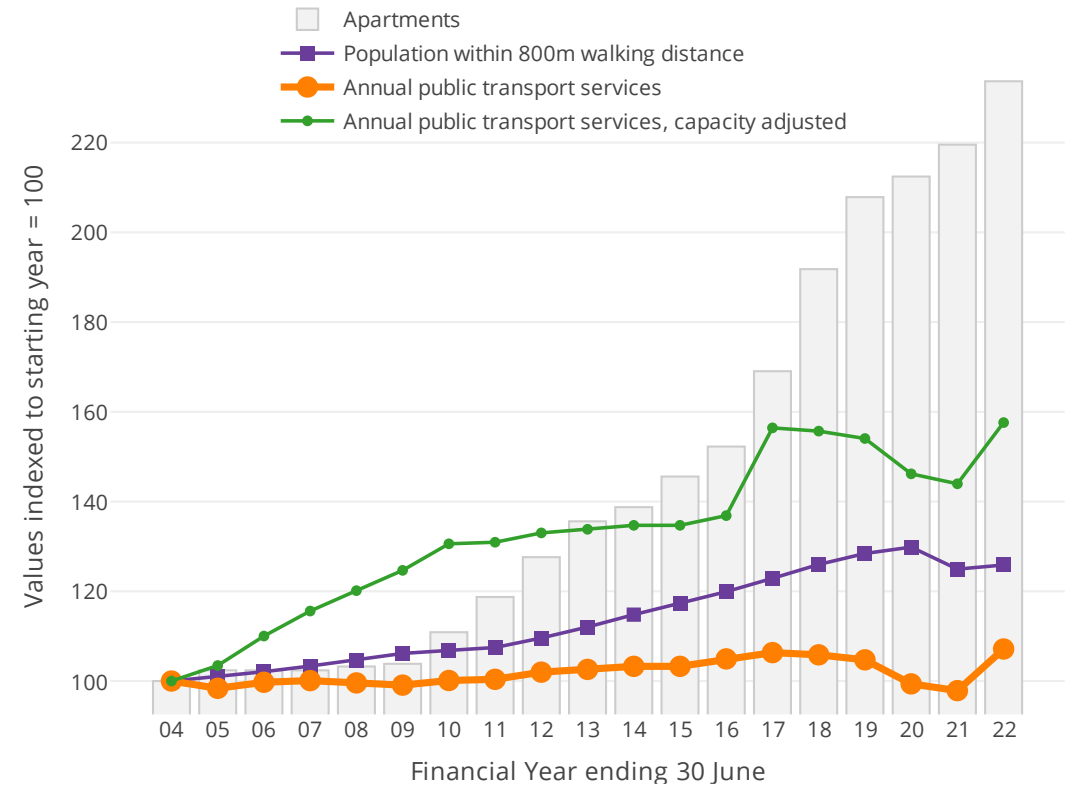
A tale of two rail lines



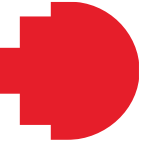
Frankston line (Glen Huntly to Frankston)



Upfield line (Jewell to Upfield)



Online dashboard



Data selection:

Select an area type:
 Greater Melbourne

Select data to display:

- Apartments?
- Population?
- Annual services?
- Annual services, capacity adjusted?

Select modes:

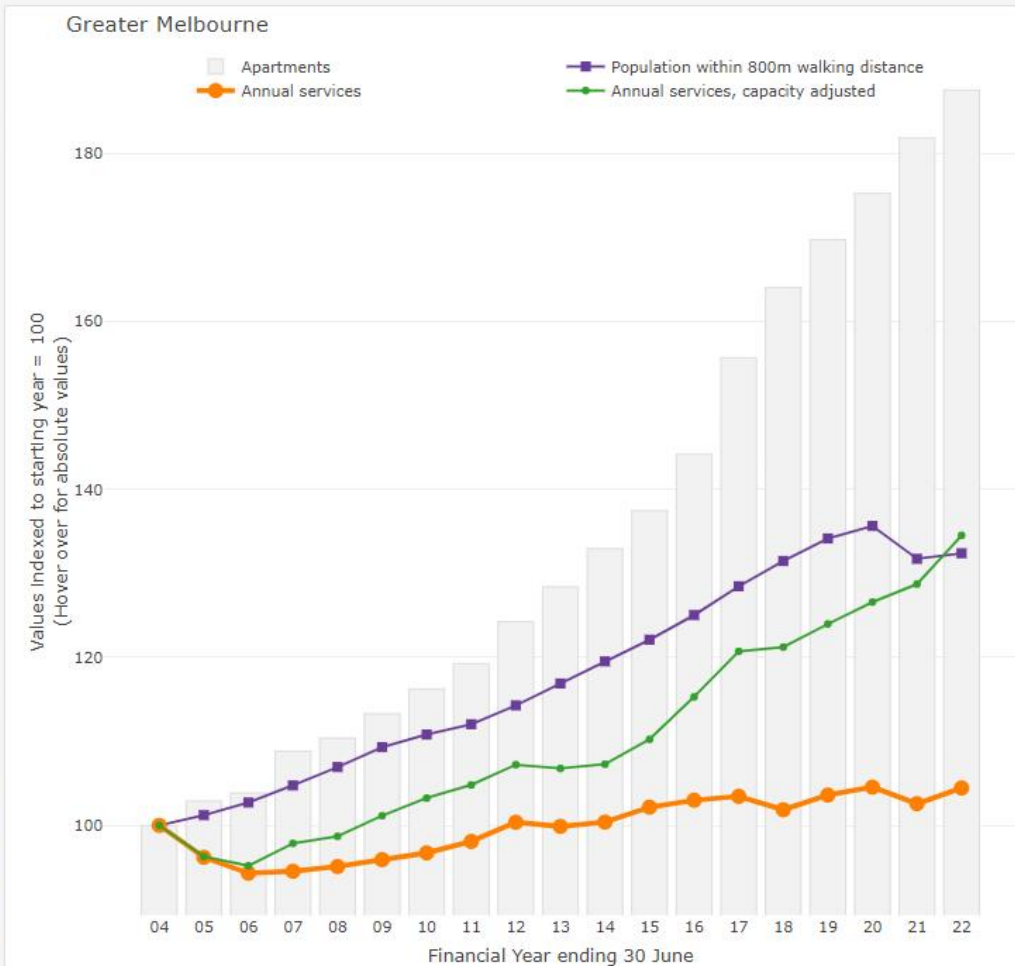
- Train
- Tram
- Bus *

* if Bus is selected, only data from 2016 can be shown

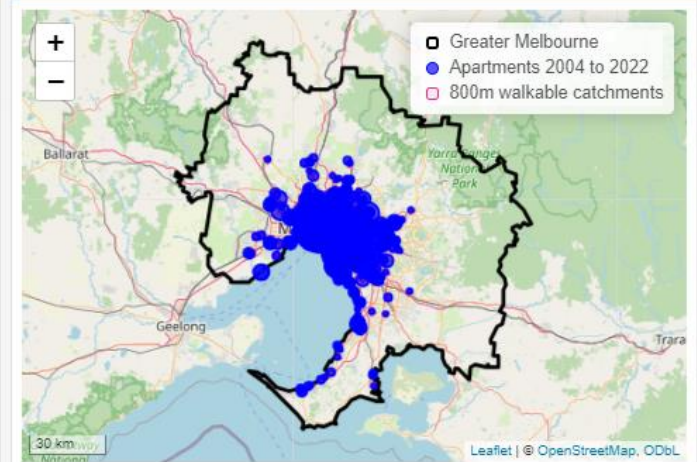
Select years:
 2004 2022

Information:

- About this dashboard
- Data information
- Contact

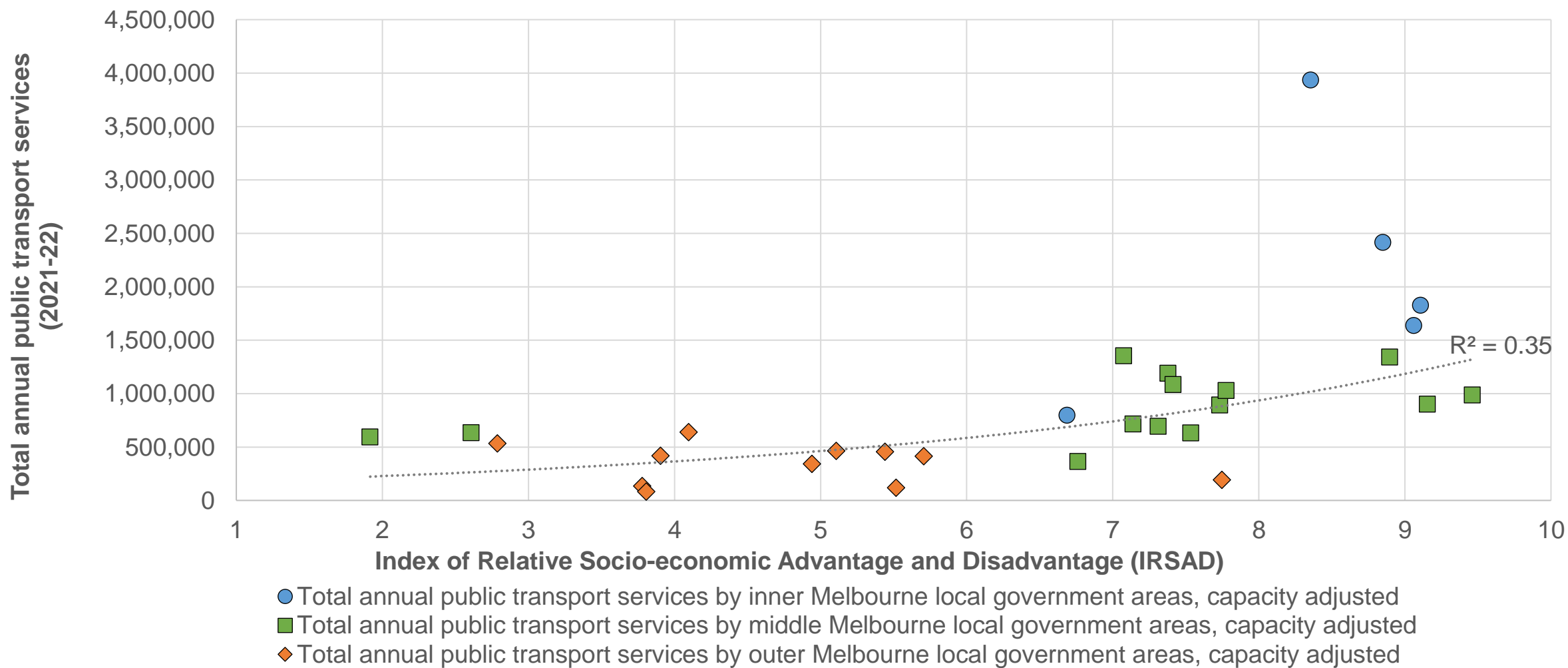


- + 87.6 %**
Apartment change
- + 32.4 %**
Population change
- + 4.5 %**
Public transport change
- + 34.6 %**
Public transport change, capacity adjusted

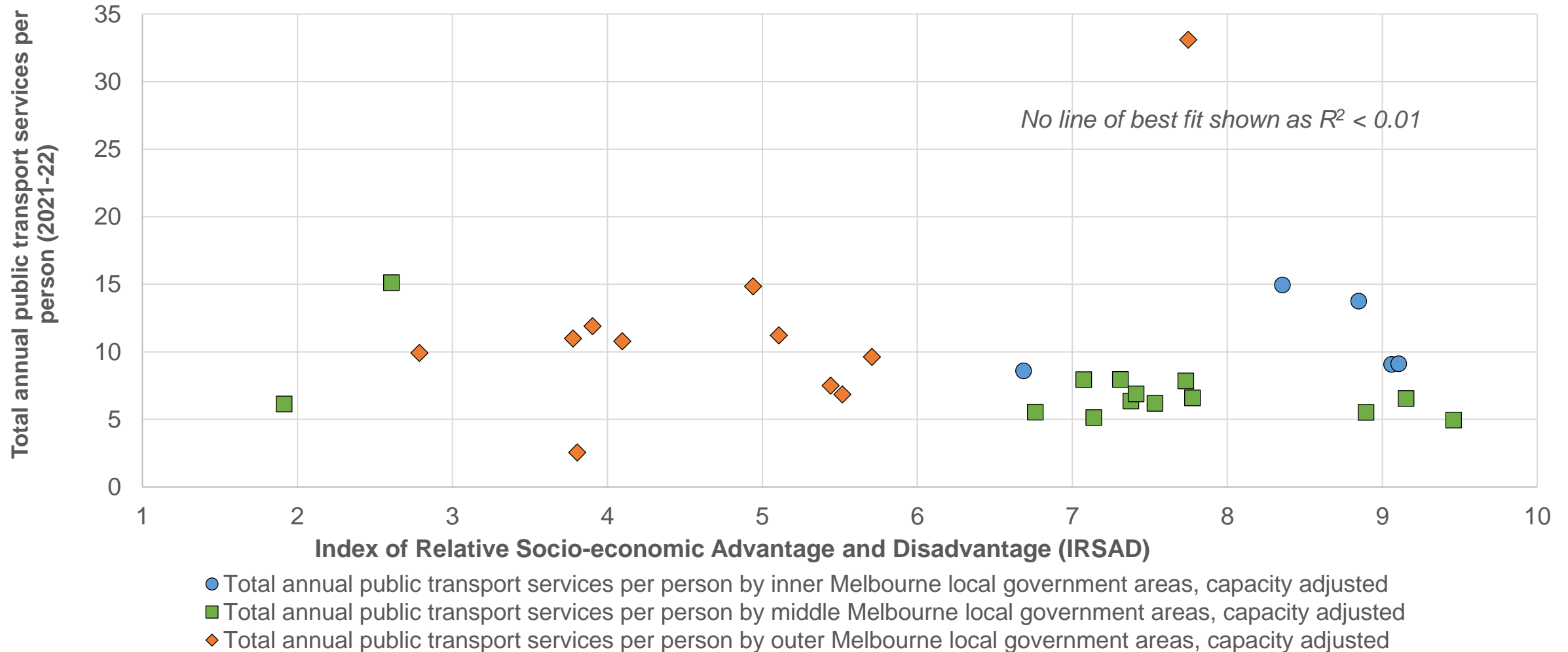
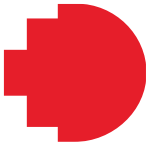


Link to dashboard: <https://apartments-melb.shinyapps.io/dashboard/>

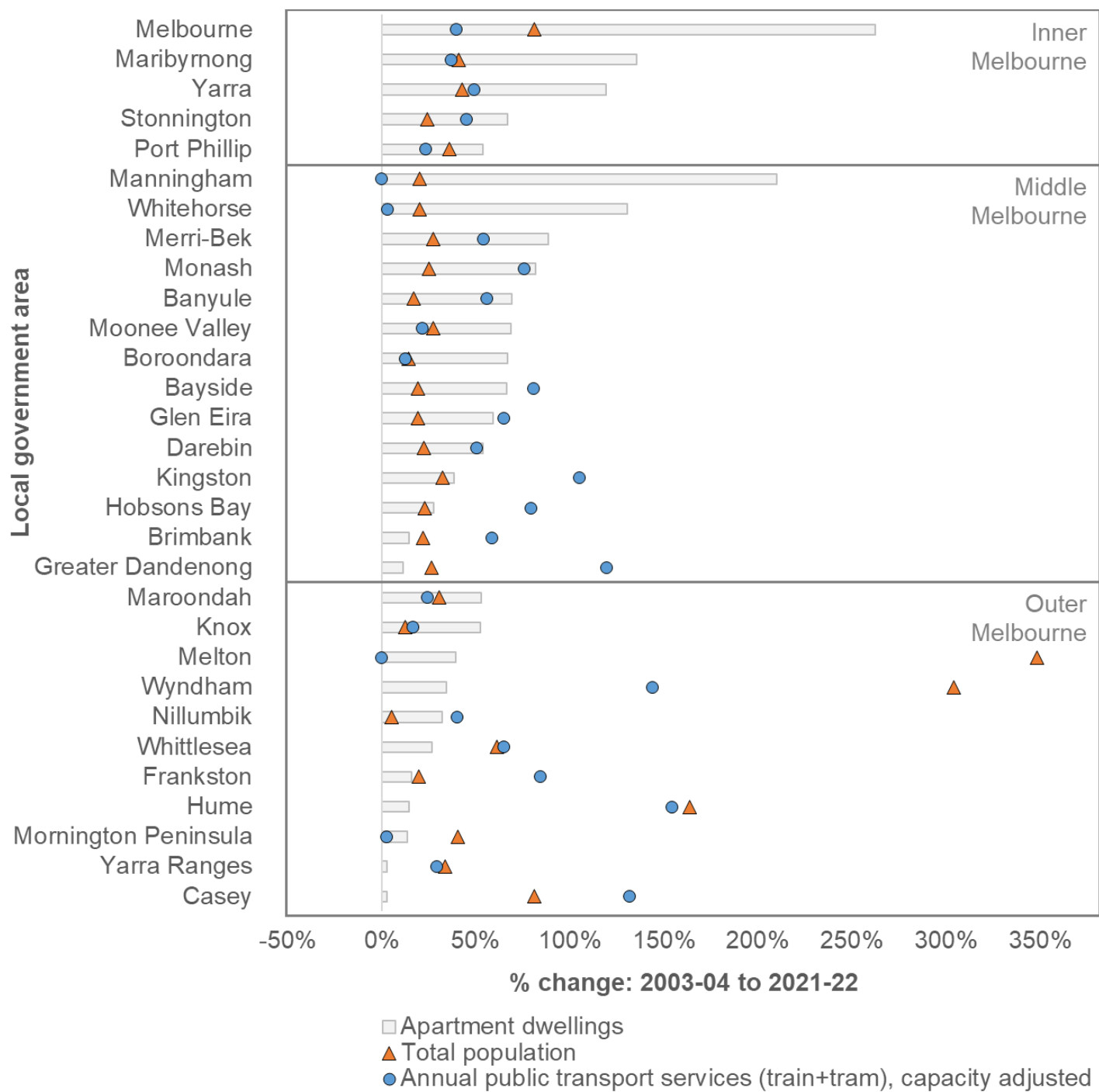
Socio-economic advantage vs PT: weak relationship



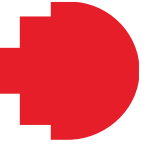
... and no relationship on per capita basis



Changes in apartments & train/tram by LGA

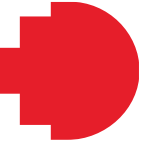


So what does it all mean?



- Little evidence for PT changing in response to apartment development
- Rather, apartments are developed in areas already well served by PT: one-way integration only between transit and land use
- PT has kept pace with population by using larger vehicles – fleet modernisation – generally not frequency increases
- Capacity-adjusted services have kept up with population growth at a metropolitan level (in areas within 800m of high-density housing), but not equally across all LGAs or train/tram corridors
- No relationship between socio-economic advantage and PT supply per person (in areas within 800m of high-density housing), implying that vertical equity is less of an issue for those living in high-density housing

Discussion



Packed like sardines: Impacts of the apartment boom on public transport in Australian cities

Home / Projects / Packed like sardines: Impacts of the apartment boom on public transport in Australian cities

This project is investigating the impacts of high-density housing on public transport use and service provision to directly inform policy and practice for reducing passenger overcrowding and enhancing liveability in cities.

Project dates: 2022-2026



Project Overview

Recent growth in high density housing along public transport corridors is associated with overcrowded public transport services in Australian cities, yet this complex and interconnected relationship is not well understood. This project expects to generate new knowledge in the field of transport and land use integration and produce much needed cross-sectional and longitudinal evidence of the impacts of the apartment boom on public transport. Greater alignment between high density housing and public transport will contribute to enhanced liveability in our cities through reduced overcrowding on public transport, greater travel choices and improved accessibility.



References



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