

Crowding and congestion

Australian Infrastructure Audit

Melbourne and Geelong in 2016

Melbourne has grown – and so has the time and effort it takes to move around the city

- The annualised cost of road congestion in Melbourne and Geelong was approximately **\$5.5 billion** in 2016.
- Congestion is exacerbated during the morning peak on western and eastern suburb roads that provide access to the inner city.
- The route between Melbourne Airport and the city is the busiest and most congested route, and is the worst performing in both peak periods.
- Unlike Sydney, Melbourne's congestion is largely limited to motorway, freeways and arterials. Local streets remain accessible and amenity is high.
- Road congestion, increased residential densities around transport interchanges, improvements to public transport service levels and frequencies have contributed to increased public transport demand.
- Bus and tram networks experience increased congestion as they mix with general traffic. However, they generally experience low levels of crowding.
- Rail networks have driven higher passenger volumes in the outer suburbs of Melbourne due to population growth.

Melbourne GCCSA population 2016:
4.9 million



9%

increase in distance
travelled by road users
over the past decade

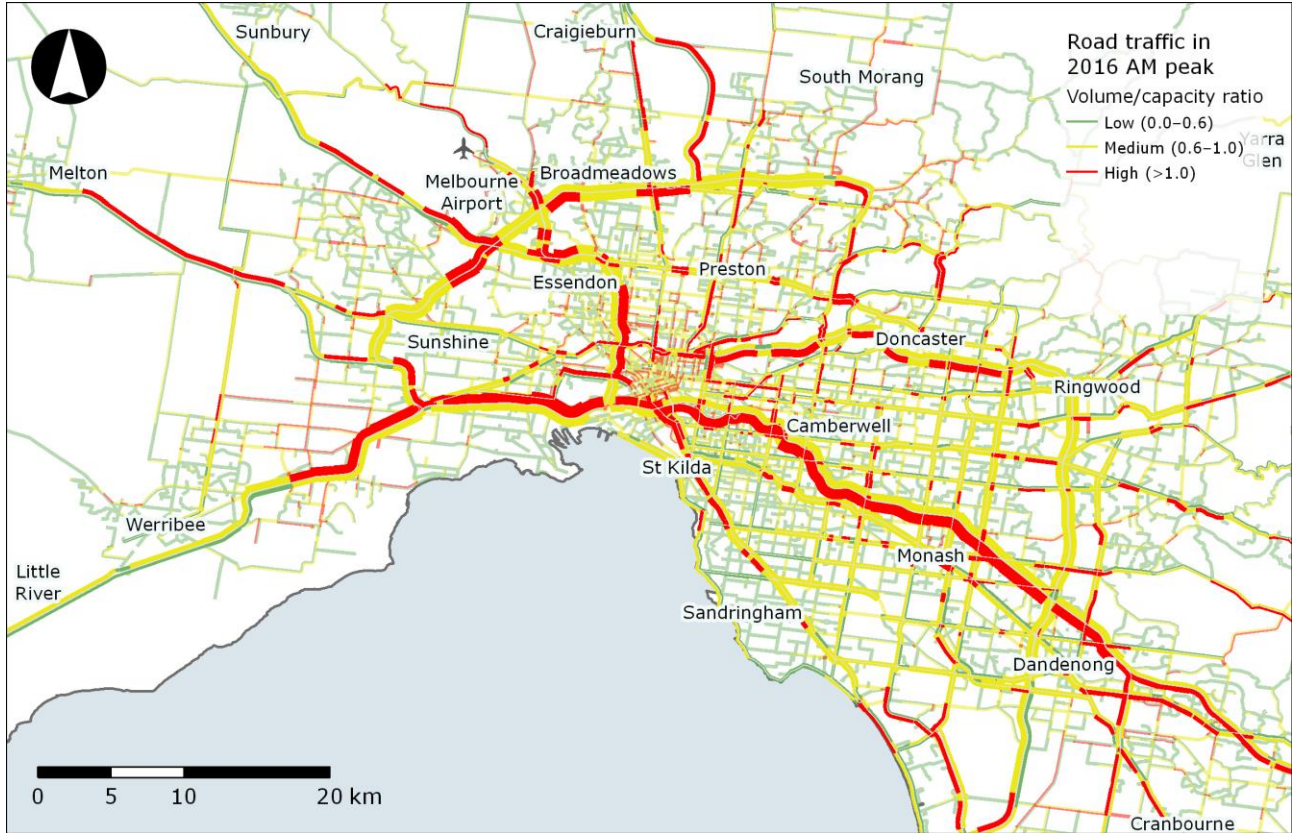


18% of people used
public transport
to travel to work
in 2016

Cost of public transport crowding in
2016:

\$75 million

Melbourne's road network congestion 2016, AM peak



Melbourne's most congested roads (user experience) 2016

City rank	Corridor including origin / destination connected (direction)	Length (km)	Share of journey time due to congestion	Delay per vehicle (mins)	Cost of congestion for a car	Cost of congestion for a heavy commercial vehicle
AM peak						
1.	Airport to city via Tullamarine Freeway (S/B)	17	67%	24	\$6.63	\$28.55
2.	Metropolitan Ring Road to Eastern Freeway via Greenborough Road / Rosanna Road (S/B)	11	63%	21	\$5.80	\$24.98
3.	Tullamarine Freeway to West Gate Freeway via CityLink Western Link (S/B)	10	61%	10	\$2.76	\$11.90
4.	Eastern Freeway to CityLink via State routes 29 and 38 (W/B)	5	60%	10	\$2.76	\$11.90
5.	Epping to city via High Street / St Georges Road (S/B)	17	59%	31	\$8.56	\$36.88
6.	Brooklyn to South Melbourne via Docklands Highway (E/B)	10	59%	18	\$4.97	\$21.41
7.	Gisborne South to Tullamarine Freeway via Calder Freeway (E/B)	31	59%	29	\$8.01	\$34.50
8.	City to Ringwood via Eastern Freeway (W/B)	23	59%	22	\$6.08	\$26.17
9.	CityLink to Eastern Freeway via State routes 38 and 29 (E/B)	5	58%	9	\$2.49	\$10.71
10.	Pakenham to city via Princes Freeway / Monash Freeway (W/B)	57	57%	49	\$13.53	\$58.29
PM peak						
1.	Eastern Freeway to Metropolitan Ring Road via Rosanna Road / Greenborough Road (N/B)	11	57%	17	\$4.69	\$20.22
2.	City to Airport via Tullamarine Freeway (N/B)	18	56%	16	\$4.42	\$19.03
3.	CityLink to Eastern Freeway via State routes 38 and 29 (E/B)	5	52%	7	\$1.93	\$8.33
4.	West Gate Freeway to Tullamarine Freeway via CityLink Western Link (N/B)	10	52%	7	\$1.93	\$8.33
5.	Eastern Freeway to CityLink via State routes 29 and 38 (W/B)	5	51%	7	\$1.93	\$8.33
6.	City to Pakenham via Monash Freeway / Princes Freeway (E/B)	58	50%	36	\$9.94	\$42.83
7.	Ringwood to city via Eastern Freeway (E/B)	23	50%	15	\$4.14	\$17.85
8.	City to Epping via St Georges Road / High Street (N/B)	17	49%	21	\$5.80	\$24.98
9.	Tullamarine Freeway to Gisborne South via Calder Freeway (W/B)	32	46%	19	\$5.25	\$22.60
10.	Monash Freeway to Tooradin via South Gippsland Highway (S/B)	32	45%	22	\$6.08	\$26.17

Melbourne and Geelong in 2031

Even with committed investment, Melbourne's transport networks are forecasted to become more congested

- Our modelling indicates the cost of road congestion Melbourne and Geelong will double to approximately **\$10.4 billion** in 2031, if further investments are not made.
- Population growth in Melbourne's periphery will increase pressure on transport infrastructure, and corridors that link them to major activity centres.
- Trips on public transport are forecast to grow significantly due to service expansions, infrastructure improvements, and increased time and monetary costs associated with driving.
- Suburban rail patronage is expected to increase dramatically, with passenger kilometers expected to rise by 88%.
- Car travel is projected to remain as the most popular form of travel, accounting for approximately 77% of average weekday kilometers.
- Corridors serving growth areas particularly in outer suburbs in the north will become the most congested as a result of population growth.
- Regional rail services are expected to experience growing crowding.



Melbourne GCCSA population
2031: 6 million

24%

increase in car usage



There will be a net
increase of

90,000

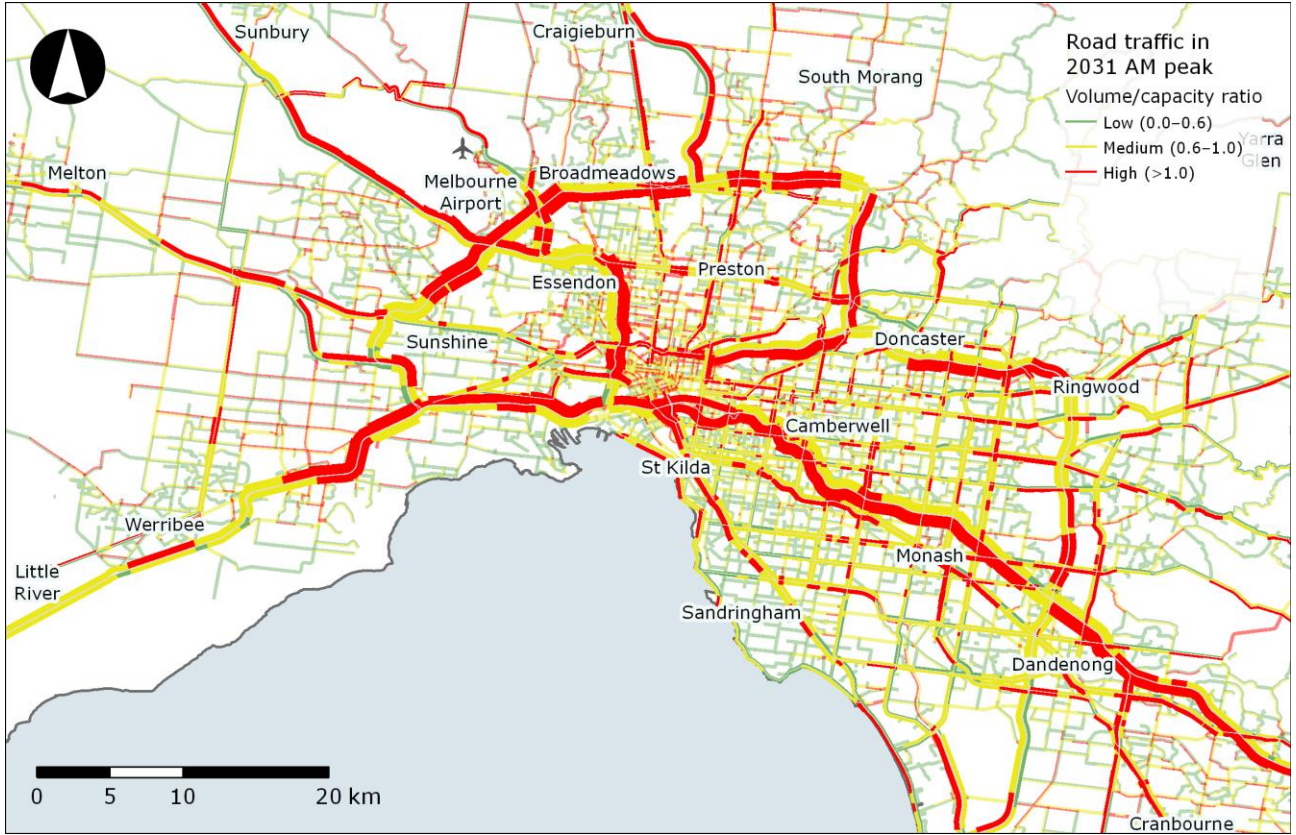
People every year
from 2016 to 2031



52%

Increase in trips on
Melbourne's public
transport

Melbourne's road network congestion 2031, AM peak



Melbourne's most congested roads (user experience) 2031

City rank	Corridor including origin / destination connected (direction)	Length (km)	Share of journey time due to congestion	Delay per vehicle (mins)	Cost of congestion for a car	Cost of congestion for a heavy commercial vehicle
AM peak						
1.	Donnybrook to Metropolitan Ring Road via Hume Freeway (S/B)	18	77%	39	\$10.77	\$46.40
2.	Gisborne South to Tullamarine Freeway via Calder Freeway (E/B)	31	72%	51	\$14.08	\$60.67
3.	Airport to city via Tullamarine Freeway (S/B)	17	71%	32	\$8.84	\$38.07
4.	Eastern Freeway to CityLink via State routes 29 and 38 (W/B)	5	70%	16	\$4.42	\$19.03
5.	CityLink to Eastern Freeway via State routes 38 and 29 (E/B)	5	68%	14	\$3.87	\$16.66
6.	Epping to city via High Street / St Georges Road (S/B)	17	66%	42	\$11.60	\$49.97
7.	Geelong to city via Princes Freeway / Westgate Freeway (E/B)	57	65%	69	\$19.06	\$82.09
8.	Pakenham to city via Princes Freeway / Monash Freeway (W/B)	57	64%	67	\$18.50	\$79.71
9.	Craigieburn to city via Sydney Road (S/B)	27	64%	63	\$17.40	\$74.95
10.	Bacchus Marsh to Metropolitan Ring Road via Western Freeway (E/B)	41	64%	46	\$12.70	\$54.72
PM peak						
1.	Metropolitan Ring Road to Donnybrook via Hume Freeway (N/B)	18	73%	31	\$8.56	\$36.88
2.	City to Airport via Tullamarine Freeway (N/B)	18	66%	26	\$7.18	\$30.93
3.	Tullamarine Freeway to Gisborne South via Calder Freeway (W/B)	32	63%	37	\$10.22	\$44.02
4.	CityLink to Eastern Freeway via State routes 38 and 29 (E/B)	5	62%	11	\$3.04	\$13.09
5.	Eastern Freeway to CityLink via State routes 29 and 38 (W/B)	5	61%	11	\$3.04	\$13.09
6.	City to Geelong via West Gate Freeway / Princes Freeway (W/B)	56	59%	51	\$14.08	\$60.67
7.	City to Epping via St Georges Road / High Street (N/B)	17	57%	28	\$7.73	\$33.31
8.	Metropolitan Ring Road to Bacchus Marsh via Western Freeway (W/B)	41	57%	34	\$9.39	\$40.45
9.	City to Pakenham via Monash Freeway / Princes Freeway (E/B)	58	56%	47	\$12.98	\$55.91
10.	City to Craigieburn via Sydney Road (N/B)	26	55%	43	\$11.88	\$51.16