

Crowding and congestion

Australian Infrastructure Audit

Brisbane, the Gold Coast and Sunshine Coast in 2016

Brisbane's population is growing
and so is its transport task

- The annualised cost of road congestion in Brisbane, Gold Coast and Sunshine Coast was approximately **\$2.1 billion** in 2016.
- Brisbane's drivers experience congestion on a day-to-day basis, although it is lower than other capital cities.
- Brisbane's most significant congestion occurs along the north-south spine, which links Brisbane, the Gold Coast and the Sunshine Coast.
- Despite investment in extra capacity, growth in demand has progressively caused the deterioration of the performance of Brisbane's road network.
- Brisbane has low levels of crowding on all lines.
- Bus networks experience varied levels of crowding. The most crowded sections are those that join bus routes with major busways and areas outside of the rail network.

Brisbane GCCSA
population 2016: 2.4 million



27%

increased in the public
transport task between
2004-05 and 2014-15



In the decade
preceding 2016,
passenger kilometres
increased by

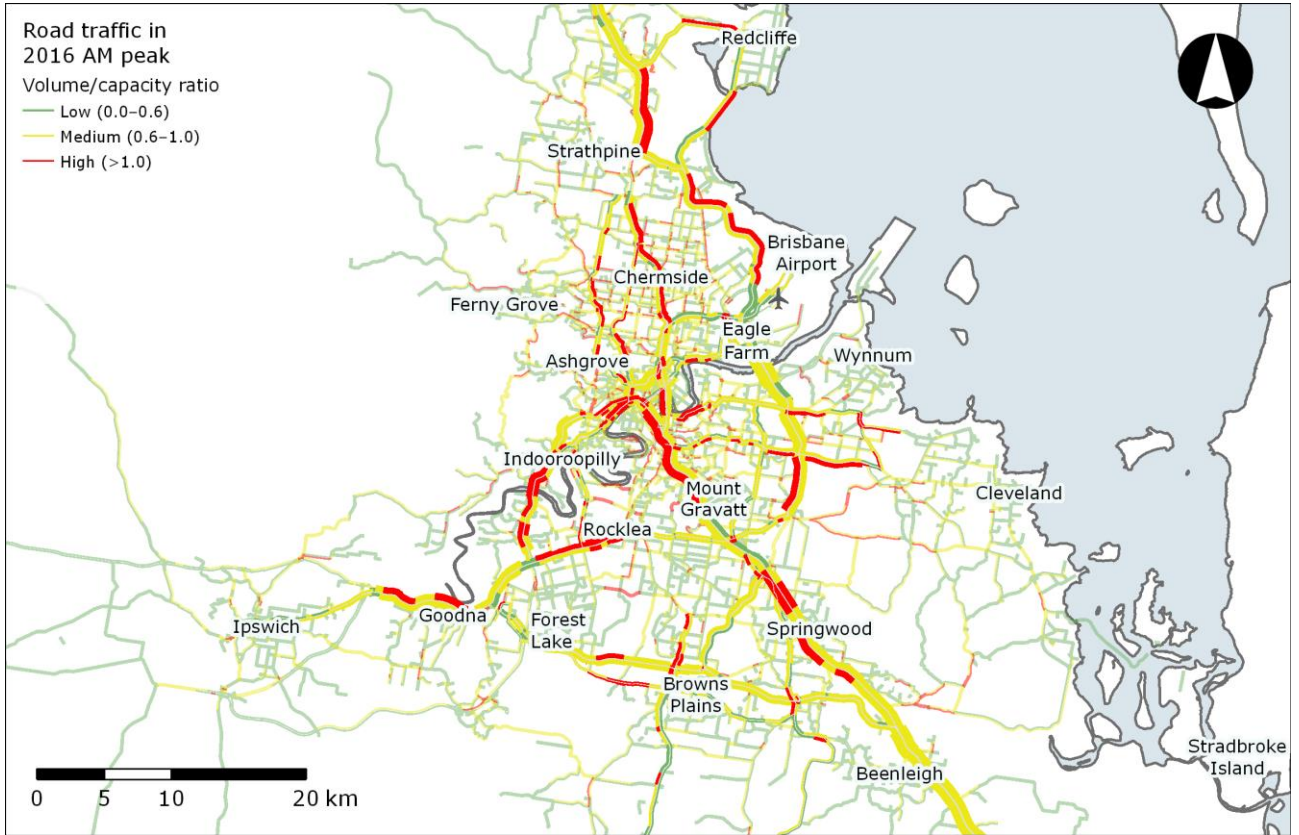
14%

Cost of public
transport crowding
in 2016:

\$14 million



Brisbane's road network congestion 2016, AM peak



Brisbane'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.	Ipswich Motorway to Indooroopilly via Centenary Highway (N/B)	10	68%	18	\$4.97	\$21.41
2.	Thorneside to Woolloongabba via Wynnum Road (W/B)	17	59%	25	\$6.90	\$29.74
3.	Loganholme to Mount Gravatt via Pacific Motorway (N/B)	17	58%	14	\$3.87	\$16.66
4.	Ipswich Motorway to Indooroopilly via Oxley Road (N/B)	8	57%	13	\$3.59	\$15.47
5.	M1 to Inner City Bypass via Kelvin Grove (S/B)	14	57%	22	\$6.08	\$26.17
6.	Thorneside to Woolloongabba via Old Cleveland Road (W/B)	21	56%	25	\$6.90	\$29.74
7.	Beenleigh to city via Pacific Motorway (N/B)	35	55%	27	\$7.46	\$32.12
8.	Bald Hills to Tingalpa (Gateway Motorway) (S/B)	26	55%	20	\$5.52	\$23.79
9.	Moggill Road to Inner City Bypass via Coronation Drive (N/B)	5	52%	7	\$1.93	\$8.33
10.	M1 to Inner City Bypass via Bridgeman Road (S/B)	16	50%	20	\$5.52	\$23.79
PM peak						
1.	Indooroopilly to Ipswich via Centenary Highway (S/B)	9	66%	14	\$3.87	\$16.66
2.	Woolloongabba to Thorneside via Wynnum Road (E/B)	17	54%	20	\$5.52	\$23.79
3.	Indooroopilly to Ipswich via Oxley Road (S/B)	8	52%	10	\$2.76	\$11.90
4.	Inner City Bypass to M1 via Kelvin Grove (N/B)	14	50%	17	\$4.69	\$20.22
5.	Tingalpa to Bald Hills (Gateway Motorway) (N/B)	26	50%	16	\$4.42	\$19.03
6.	Mount Gravatt to Loganholme via Pacific Motorway (S/B)	16	48%	9	\$2.49	\$10.71
7.	Woolloongabba to Thorneside via Old Cleveland Road (E/B)	21	48%	18	\$4.97	\$21.41
8.	City to Beenleigh via Pacific Motorway (S/B)	34	48%	20	\$5.52	\$23.79
9.	Inner City Bypass to Moggill Road via Coronation Drive (S/B)	5	47%	6	\$1.66	\$7.14
10.	Inner City Bypass to Moggill Road via Milton Road (S/B)	7	46%	5	\$1.38	\$5.95



Brisbane, the Gold Coast and Sunshine Coast in 2031

Even with committed investment, Brisbane's transport networks are forecast to become more congested

- Our modelling indicates the annualised cost of road congestion for Brisbane, Gold Coast and Sunshine Coast will triple to **\$6 billion** in 2031 if further investment does not occur.
- By 2031, Brisbane's most congested roads will be those linking the city centre with growth areas to the south-west.
- Trips by public transport will grow at a faster rate than by car, continuing a shift towards public transport use.
- The cost of public transport crowding is expected to be six times higher, compared to 2016.
- Patronage on rail is forecast to increase more than buses this is due to increased road congestion and improvements to the rail network.
- Brisbane's south-western rail lines will experience high levels of crowding due to projected population growth in Ipswich and surrounding areas.
- Without adequate infrastructure and services to support population growth, bus crowding in outer suburbs will be intensified further by 2031.



**Brisbane GCCSA
population 2031: 3 million**

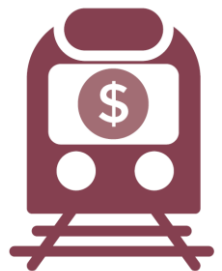
21%

increase in car usage



Cost of public transport crowding in 2031:

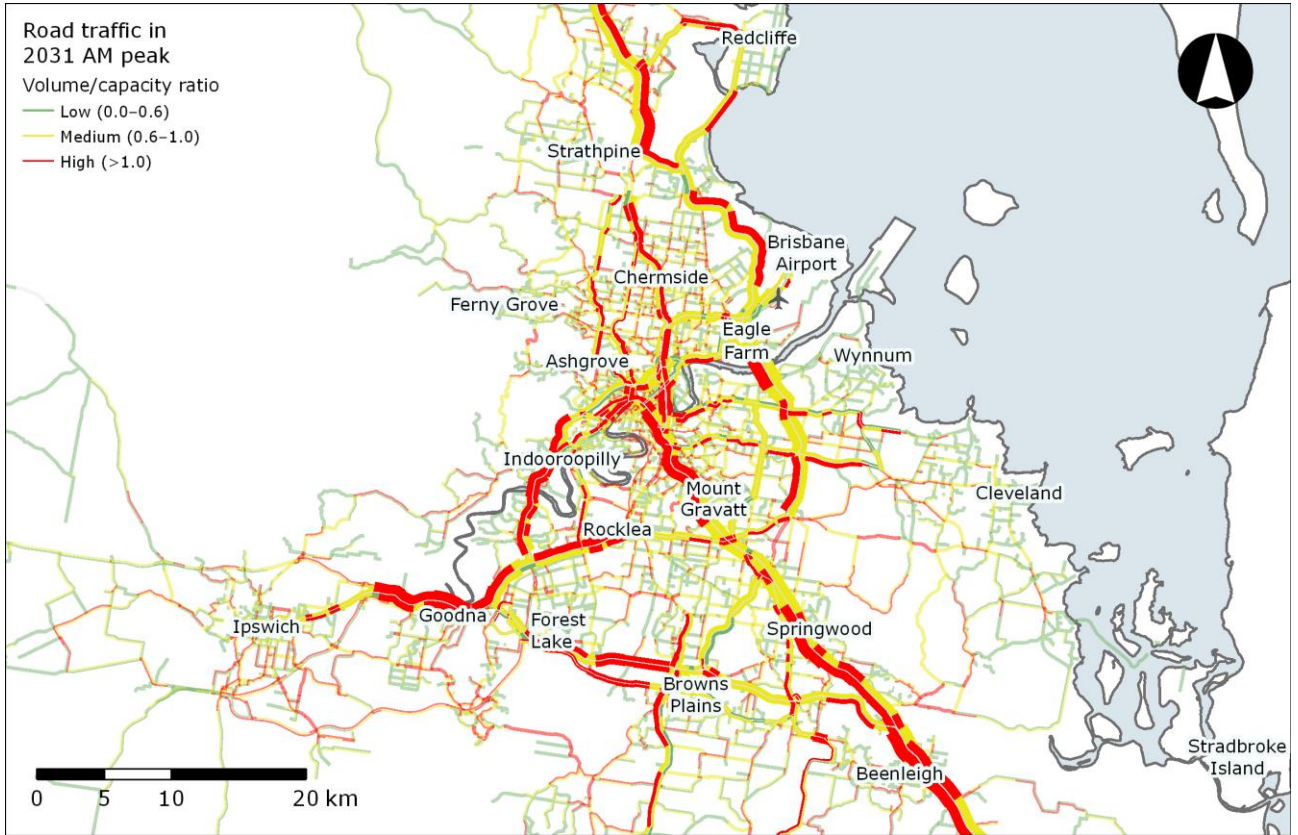
\$90 million



55%

Increase in public transport journeys

Brisbane's road network congestion 2031, AM peak



Brisbane'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.	Ipswich Motorway to Indooroopilly via Centenary Highway (N/B)	10	76%	26	\$7.18	\$30.93
2.	Helensvale to Beenleigh via Pacific Motorway (N/B)	26	73%	37	\$10.22	\$44.02
3.	Beenleigh to city via Pacific Motorway (N/B)	35	71%	53	\$14.64	\$63.05
4.	Loganholme to Mount Gravatt via Pacific Motorway (N/B)	17	70%	23	\$6.35	\$27.36
5.	Beaudesert to North Logan via Mount Lindesay Highway (N/B)	47	68%	73	\$20.16	\$86.85
6.	Goodna to Mount Gravatt via Ipswich Motorway / Kessels Road (E/B)	19	68%	34	\$9.39	\$40.45
7.	Ipswich to Goodna via Brisbane Road / Ipswich Motorway (E/B)	15	68%	28	\$7.73	\$33.31
8.	M1 to Inner City Bypass via Gympie Road / Lutwyche Road (S/B)	13	65%	12	\$6.90	\$29.74
9.	Moggill Road to Inner City Bypass via Coronation Drive (N/B)	5	65%	12	\$3.31	\$14.28
10.	Ipswich Motorway to Indooroopilly via Oxley Road (N/B)	8	65%	18	\$4.97	\$21.41
PM peak						
1.	Indooroopilly to Ipswich via Centenary Highway (S/B)	9	74%	20	\$5.52	\$23.79
2.	Beenleigh to Helensvale via Pacific Motorway (S/B)	27	71%	36	\$9.94	\$42.83
3.	Goodna to Ipswich via Ipswich Motorway / Brisbane Road (W/B)	15	69%	27	\$7.46	\$32.12
4.	City to Beenleigh via Pacific Motorway (S/B)	34	66%	42	\$11.60	\$49.97
5.	Mount Gravatt to Loganholme via Pacific Motorway (S/B)	16	63%	16	\$4.42	\$19.03
6.	North Logan to Beaudesert via Mount Lindesay Highway (S/B)	47	63%	56	\$15.47	\$66.62
7.	Mount Gravatt to Goodna via Kessels Road / Ipswich Motorway (W/B)	18	61%	23	\$6.35	\$27.36
8.	Inner City Bypass to Moggill Road via Coronation Drive (S/B)	5	60%	10	\$2.76	\$11.90
9.	Inner City Bypass to M1 via Lutwyche Road / Gympie Road (N/B)	13	60%	20	\$5.52	\$23.79
10.	Indooroopilly to Ipswich Motorway via Oxley Road (S/B)	8	59%	14	\$3.87	\$16.66