

# Crowding and congestion

Australian Infrastructure Audit

## Greater Adelaide in 2016

Adelaide has grown and so has  
its transport task

- Our modelling indicates the annualised cost of road congestion for Greater Adelaide was approximately **\$1.4 billion** in 2016.
- In 2016, Adelaideans travelled 66 million kilometres further on the city's road network than in 2006.
- Adelaide's most congested roads are those that accommodate north-south travel.
- More severe levels of congestion are experienced closer to the CBD. These roads provide access to Adelaide's central employment cluster.
- Buses perform the majority of Adelaide's public transport task and carry the greatest number of passenger kilometres, passenger hours and boardings.
- The north-eastern and south-western lines on the rail network reach their seated capacity in the AM peak. However, on average are still under maximum or crush capacity.
- Adelaide's current single tram corridor has been subject to low average crowding even in peak periods.

Adelaide GCCSA population 2016:  
1.3 million



Drivers can expect to  
spend around

# 60%

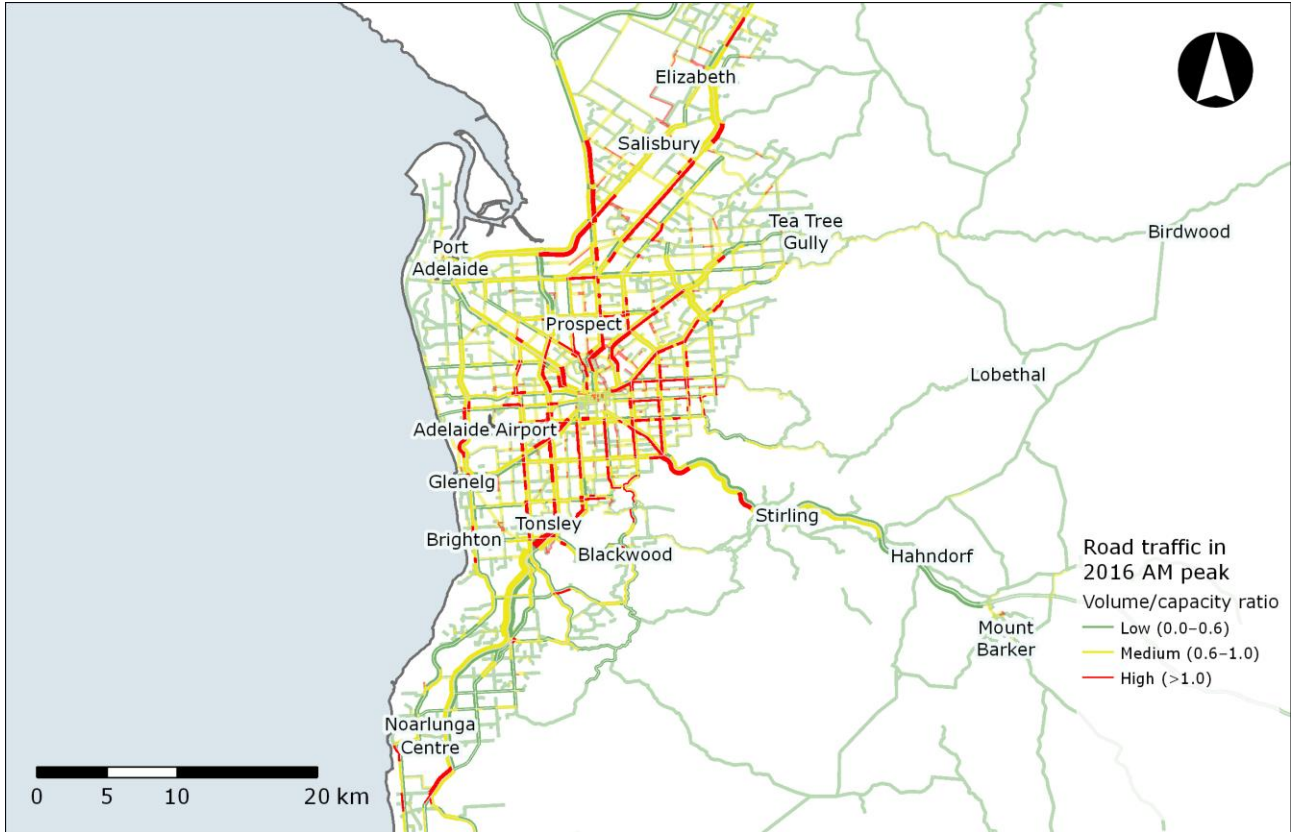
Of their travel time in  
congested traffic



Cost of public transport crowding in  
2016:

# \$1 million

## Adelaide's road network congestion 2016, AM peak



## Adelaide'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
<b>AM peak</b>						
1.	Fullarton Road corridor (N/B)	8	60%	13	\$3.59	\$15.47
2.	Goodwood Road corridor (N/B)	9	59%	15	\$4.14	\$17.85
3.	Magill Road corridor (W/B)	5	55%	8	\$2.21	\$9.52
4.	Lower North East Road / Payneham Road corridor (W/B)	14	55%	20	\$5.52	\$23.79
5.	Glyburn Road corridor (S/B)	5	55%	8	\$2.21	\$9.52
6.	Belair Road / Unley Road corridor (N/B)	11	54%	17	\$4.69	\$20.22
7.	North East Road corridor (S/B)	16	50%	19	\$5.25	\$22.60
8.	Anzac Highway corridor (E/B)	9	49%	11	\$3.04	\$13.09
9.	Port Wakefield Road / Main North Road corridor (S/B)	39	48%	28	\$7.73	\$33.31
10.	Kensington Road corridor (W/B)	5	47%	6	\$1.66	\$7.14
<b>PM peak</b>						
1.	Fullarton Road corridor (S/B)	8	57%	12	\$3.31	\$14.28
2.	Goodwood Road corridor (S/B)	9	56%	14	\$3.87	\$16.66
3.	Payneham Road / Lower North East Road corridor (E/B)	14	52%	18	\$4.97	\$21.41
4.	Unley Road / Belair Road corridor (S/B)	11	51%	15	\$4.14	\$17.85
5.	Glyburn Road corridor (N/B)	5	51%	7	\$1.93	\$8.33
6.	Magill Road corridor (E/B)	5	50%	6	\$1.66	\$7.14
7.	North East Road corridor (N/B)	16	48%	18	\$4.97	\$21.41
8.	Marion Road corridor (S/B)	23	47%	22	\$6.08	\$26.17
9.	Anzac Highway corridor (W/B)	9	46%	10	\$2.76	\$11.90
10.	Main North Road / Port Wakefield Road corridor (N/B)	39	45%	26	\$7.18	\$30.93



## Greater Adelaide in 2031

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

- Our modelling indicates the annualised cost of road congestion for Greater Adelaide will increase to **\$2.6 billion** in 2031.
- Drivers on Adelaide's most used roads can expect to spend between 55% and 70% of their trip in congestion at the AM peak.
- Despite road upgrades to Adelaide's north-south corridor, this will remain one of the city's most congested routes.
- Many of Adelaide's roads will be operating over their design capacity, causing delays to bus passengers, motorists and freight operators.
- Many of the worst-performing corridors in 2031 are marked as National Key Freight Routes by the Australian Government.
- There will be increased rail network demand, particularly on lines linking the outer suburbs to the north and south with the city centre.
- The bus network will become incrementally more crowded, with growth areas expected to become busier.
- The Glenelg tram will continue to experience light crowding providing opportunity for passenger growth and integration with active travel networks.



**Adelaide GCCSA population 2031:  
1.6 million**

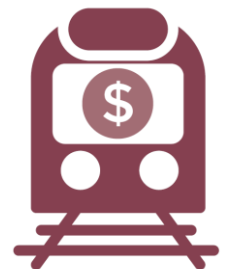


# 24%

increase in car usage

Cost of public transport crowding in 2031:

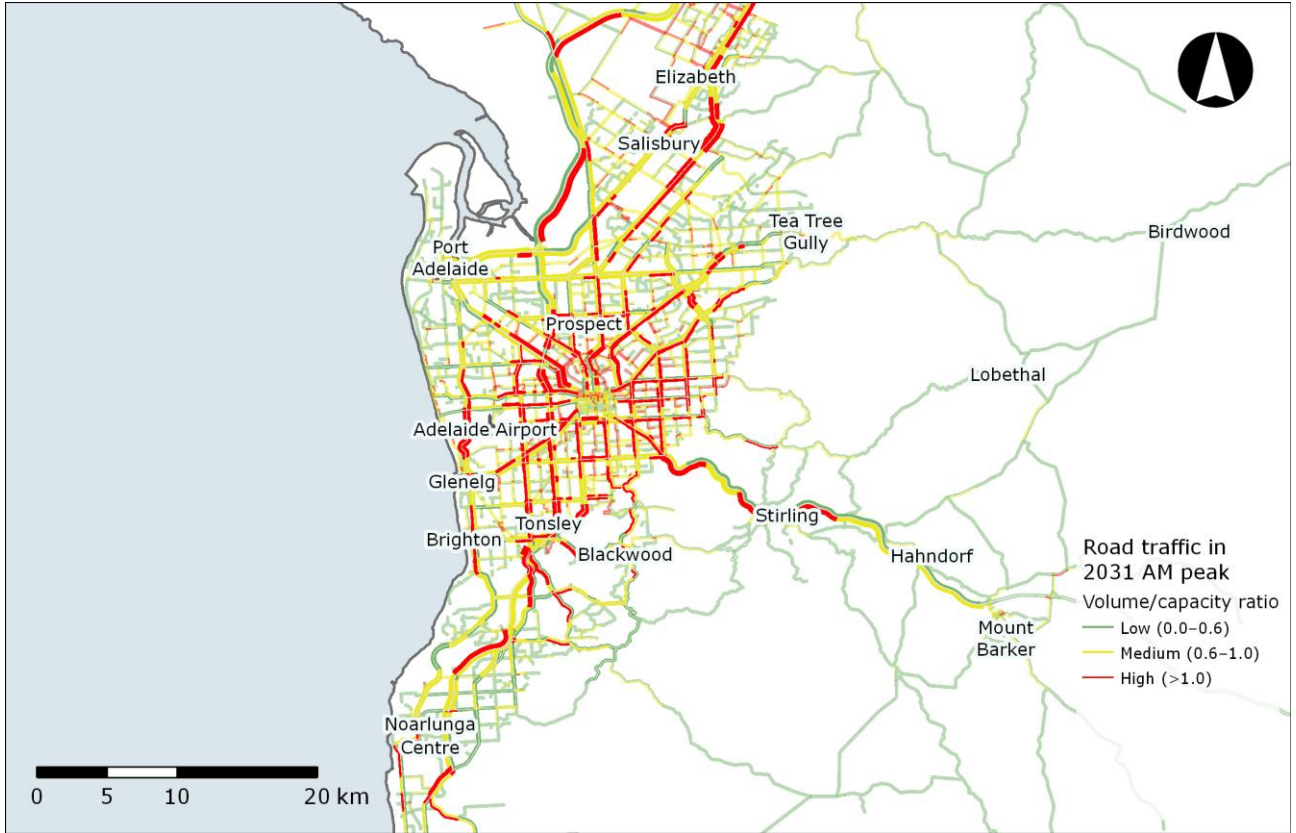
# \$4 million



# 31%

Increase in public transport trips

## Adelaide's road network congestion 2031, AM peak



## Adelaide'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
<b>AM peak</b>						
1.	Fullarton Road corridor (N/B)	8	67%	18	\$4.97	\$21.41
2.	Goodwood Road corridor (N/B)	9	66%	20	\$5.52	\$23.79
3.	Glynburn Road corridor (S/B)	5	66%	12	\$3.31	\$14.28
4.	Magill Road corridor (W/B)	5	66%	12	\$3.31	\$14.28
5.	Lower North East Road / Payneham Road corridor (W/B)	14	64%	30	\$8.29	\$35.69
6.	Belair Road / Unley Road corridor (N/B)	11	63%	24	\$6.63	\$28.55
7.	North East Road corridor (S/B)	16	60%	29	\$8.01	\$34.50
8.	Torrens Road corridor (E/B)	11	59%	20	\$5.52	\$23.79
9.	Kensington Road corridor (W/B)	5	59%	9	\$2.49	\$10.71
10.	Port Road corridor (E/B)	11	57%	19	\$5.25	\$22.60
<b>PM peak</b>						
1.	Fullarton Road corridor (S/B)	8	65%	17	\$4.69	\$20.22
2.	Goodwood Road corridor (S/B)	9	65%	20	\$5.52	\$23.79
3.	Glynburn Road corridor (N/B)	5	63%	11	\$3.04	\$13.09
4.	Payneham Road / Lower North East Road corridor (E/B)	14	62%	27	\$7.46	\$32.12
5.	Unley Road / Belair Road corridor (S/B)	11	61%	22	\$6.08	\$26.17
6.	Magill Road corridor (E/B)	5	60%	10	\$2.76	\$11.90
7.	North East Road corridor (N/B)	16	58%	26	\$7.18	\$30.93
8.	Marion Road corridor (S/B)	23	57%	33	\$9.11	\$39.26
9.	Torrens Road corridor (W/B)	11	56%	18	\$4.97	\$21.41
10.	Port Road corridor (W/B)	11	56%	17	\$4.69	\$20.22