

Crowding and congestion

Australian Infrastructure Audit

The ACT and Queanbeyan in 2016

Commuters in the ACT and Queanbeyan experience little road congestion and public transport crowding

- Our modelling indicates the annualised cost of road congestion in the ACT and Queanbeyan was approximately **\$289 million** in 2016.
- In 2016, Canberrans drove the most car kilometres per person of any Australian city.
- Designed as a polycentric city, congestion is greatest on arterial roads that connect to Civic.
- Active transport, including walking and bike riding, accounts for 22% of daily trips – 19% more than public transport usage.
- The regions public transport system is operated by buses that have little crowding in the AM peak. However in general, buses become crowded in areas surrounding Civic.

ACT and Queanbeyan population
2016: 445,000



75%

Of total daily trips were
done by car in 2016



7%

increase in distance
travelled by road users
over the past decade



3%

of total daily
trips were on
public
transport in
2016

Canberra's road network congestion 2016, AM peak



Canberra'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.	William Slim Drive / Coulter Drive corridor (S/B)	10	40%	6	\$1.66	\$714
2.	Barton Highway / Northbourne Avenue corridor (S/B)	14	39%	9	\$2.49	\$10.71
3.	Canberra Airport to Civic corridor (W/B)	15	39%	8	\$2.21	\$9.52
4.	Canberra Avenue corridor (W/B)	13	39%	8	\$2.21	\$9.52
5.	Gundaroo Drive / Horse Park Drive corridor (E/B)	11	39%	6	\$1.66	\$714
6.	Gungahlin Drive corridor (S/B)	15	38%	7	\$1.93	\$8.33
7.	Kingsford Smith Drive / William Hovell Drive corridor (S/B)	18	38%	9	\$2.49	\$10.71
8.	Drakeford Drive / Tuggeranong Parkway / Parkes Way corridor (N/B)	33	33%	12	\$3.31	\$14.28
9.	Ginninderra Drive corridor (E/B)	13	32%	5	\$1.38	\$5.95
10.	Horse Park Drive / Gunaroo Drive corridor (W/B)	11	29%	4	\$1.10	\$4.76
PM peak						
1.	Coulter Drive / William Slim Drive corridor (N/B)	10	39%	6	\$1.66	\$714
2.	Horse Park Drive / Gundaroo Drive corridor (W/B)	11	37%	6	\$1.66	\$714
3.	Canberra Avenue corridor (E/B)	13	35%	7	\$1.93	\$8.33
4.	Northbourne Avenue / Barton Highway corridor (N/B)	14	35%	7	\$1.93	\$8.33
5.	Civic to Canberra Airport corridor (E/B)	15	34%	7	\$1.93	\$8.33
6.	Gungahlin Drive corridor (N/B)	15	33%	6	\$1.66	\$714
7.	William Hovell Drive / Kingsford Smith Drive corridor (N/B)	18	33%	7	\$1.93	\$8.33
8.	Parkes Way / Tuggeranong Parkway / Drakeford Drive corridor (S/B)	32	30%	11	\$3.04	\$13.09
9.	Monaro Highway corridor (S/B)	21	29%	6	\$1.66	\$714
10.	Ginninderra Drive corridor (W/B)	13	27%	4	\$1.10	\$4.76



The ACT and Queanbeyan in 2031

The ACT and Queanbeyan region's transport networks are forecast to become more congested

- Our modelling forecasts the annualised cost of road congestion in the ACT and Queanbeyan was approximately **\$504 million** in 2031.
- Roads connecting Canberra to western and north-western development areas, as well as neighbouring centres in NSW, are expected to become increasingly congested.
- Public transport boardings, in-vehicle passenger kilometres and in-vehicle passenger hours are all predicted to double from 2016.
- Buses are expected to remain the most heavily used public transport mode, even after the construction of Canberra Metro light rail.
- Canberra's bus services are expected to see a 66% increase in boardings by 2031, this can be attributed to the Rapid network of routes with extended operating hours and frequent services.
- The Canberra Metro light rail will provide improved access to Civic for residents in the northern suburbs, and is forecasted to attract significant patronage close to Civic.



ACT and Queanbeyan population
2031: 558,000

27%

more trips will be generated by 2031



Cost of public transport crowding in 2031:

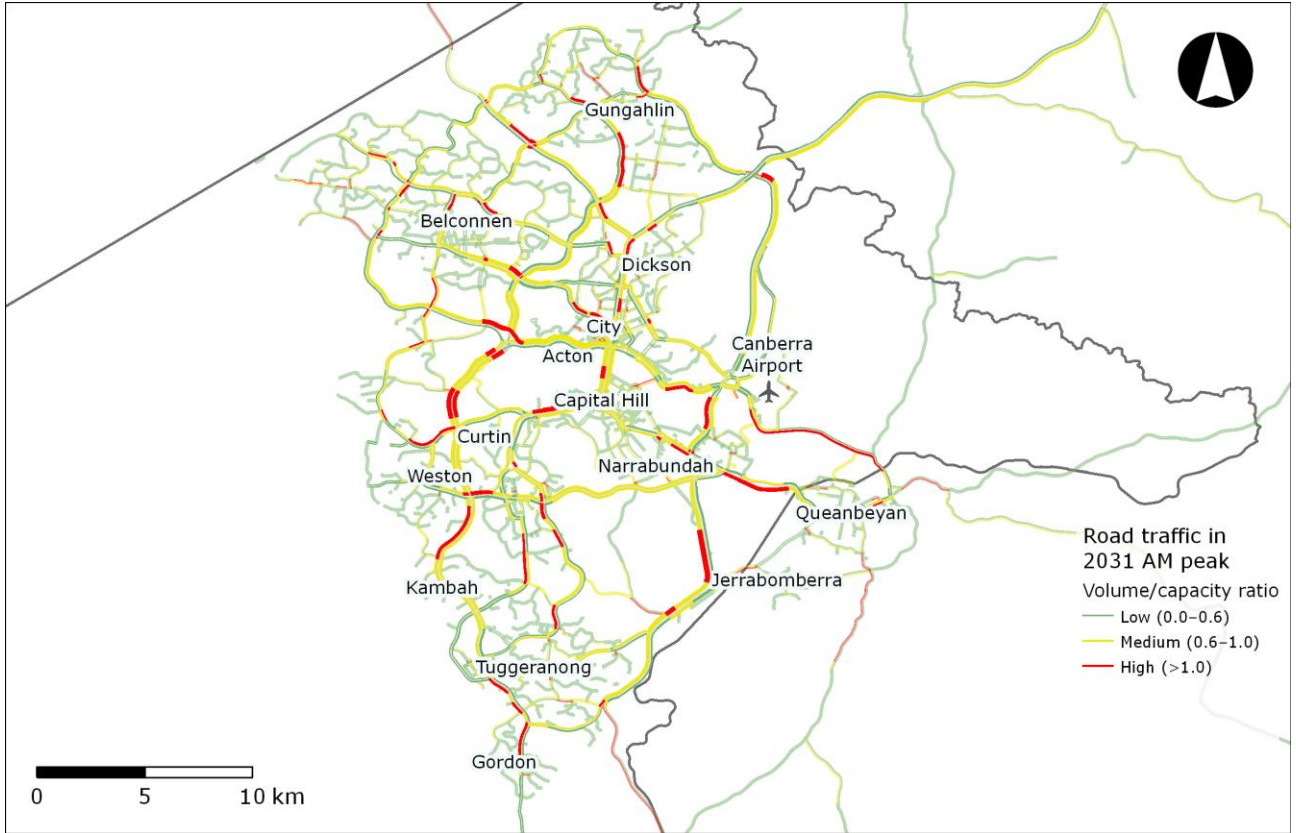
\$8 million



4%

Public transport mode share by 2031

Canberra's road network congestion 2031, AM peak



Canberra'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.	Canberra Airport to Civic corridor (W/B)	15	54%	15	\$4.14	\$17.85
2.	Canberra Avenue corridor (W/B)	13	51%	12	\$3.59	\$15.47
3.	Barton Highway / Northbourne Avenue corridor (S/B)	14	45%	11	\$3.04	\$13.09
4.	Gungahlin Drive corridor (S/B)	15	38%	7	\$1.93	\$8.33
5.	Ginninderra Drive corridor (E/B)	13	38%	7	\$1.93	\$8.33
6.	Kingsford Smith Drive / William Hovell Drive corridor (S/B)	18	35%	8	\$2.21	\$9.52
7.	Drakeford Drive / Tuggeranong Parkway / Parkes Way corridor (N/B)	33	35%	13	\$3.59	\$15.47
8.	Cotter Road corridor (E/B)	7	35%	3	\$0.83	\$3.57
9.	Monaro Highway corridor (N/B)	20	34%	8	\$2.21	\$9.52
10.	Belconnen Way / Barry Drive corridor (E/B)	12	34%	6	\$1.66	\$7.14
PM peak						
1.	Civic to Canberra Airport corridor E/B	15	50%	13	\$3.59	\$15.47
2.	Canberra Avenue corridor E/B	13	46%	11	\$3.04	\$13.09
3.	Northbourne Avenue / Barton Highway corridor (N/B)	14	39%	9	\$2.49	\$10.71
4.	Monaro Highway corridor (S/B)	21	35%	8	\$2.21	\$9.52
5.	Cotter Road corridor (W/B)	7	34%	3	\$0.83	\$3.57
6.	East-west corridor via Hindmarsh Drive (W/B)	14	33%	6	\$1.66	\$7.14
7.	Ginninderra Drive corridor (W/B)	13	33%	5	\$1.38	\$5.95
8.	Gungahlin Drive corridor (N/B)	15	32%	6	\$1.66	\$7.14
9.	East-west corridor via Isabella Drive (E/B)	6	31%	2	\$0.55	\$2.38
10.	Parkes Way / Tuggeranong Parkway / Drakeford Drive corridor (S/B)	32	31%	11	\$3.04	\$13.09