



## CTP Insurance Regulator

Summary of point-to-point vehicle relativities  
advice for the 2023/24 underwriting year

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# 1 Introducing P2P premium class relativities

Taylor Fry estimates the components of the risk premium for the South Australian CTP scheme and advises the CTP Insurance Regulator on these components. The Regulator integrates our advice with its own views to set a floor and ceiling for insurer CTP premiums.

The Regulator uses our advice on relativities to share the scheme average premium between premium classes.

This briefing summarises our relativities advice for point-to-point (P2P) premium classes:

- **Taxis (Classes 5 and 55)** – Taxis registered or licensed under section 45 (1) of the *Passenger Transport Act 1994* as metered taxis to operate in Metropolitan Adelaide within the meaning of the *Passenger Transport Act 1994*, and taxis (country) that are not required to be registered or licensed pursuant to section 45 (2) of the *Passenger Transport Act 1994*
- **Rideshare vehicles (Classes 48 and 98)** – Vehicles used for carrying passengers for fare by operators with an Operator Accreditation for passenger transport services under a Small Passenger Vehicle Metropolitan and Non-Metropolitan Rideshare Accreditation
- **Chauffeur vehicles (Classes 7 and 57)** – Vehicles used for carrying up to 12 seated persons (including the driver) for fare or other considerations but excluding taxis, hire cars, omnibuses and rideshare vehicles.

We do not present relativities for country ridesharing vehicles as this class has little exposure. Previously, this relativity has been set equal to the relativity for country taxis.

The floor and ceiling premiums for a premium class are calculated as the premium relativity of that class multiplied by the floor and ceiling for Class 1 (private passenger vehicles, district 1). The ratio between the actual premiums offered by the insurers for a given premium class and for Class 1 may be different to the premium relativity of that premium class because insurers may choose to set premiums at different levels within the premium bands.

## 2 Summary of our relativities analysis

We intend our advice on relativities to assist the Regulator to achieve a balance between stability and responsiveness for different premium classes:

- **Stability** – In light of the low number of vehicle registrations in some classes, we take a long-term view of frequency, examining overall trends but avoiding reacting too quickly to potentially anomalous new experience. This caution avoids arbitrary movement in consumers' premiums at each renewal.
- **Responsiveness** – Particularly for classes with high numbers of registrations, it is important that the vehicle relativity reflects the emerging experience.

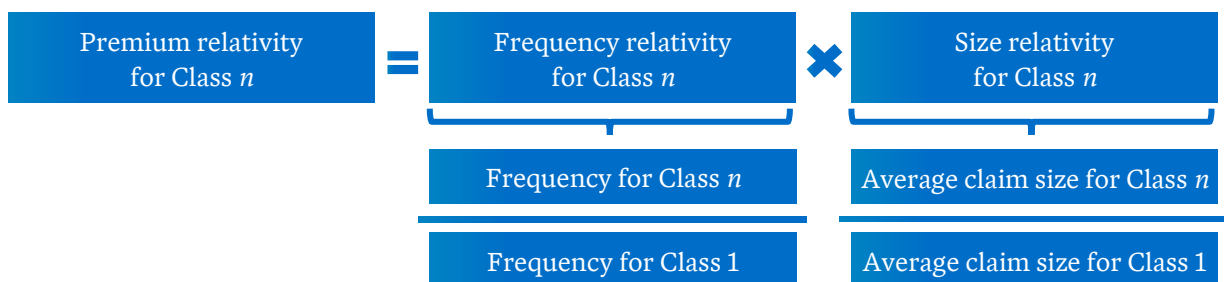
When we report on the experience for each category and the estimated relativities, we illustrate the trade-off between stability and responsiveness by giving 90% confidence intervals around our central estimates of the premium class relativities.

### Impact of COVID-19

Restrictions introduced to contain COVID-19 resulted in a temporary change in relative traffic volumes. We remove accident quarter Jun-20 and Sep-21 experience from our analysis for this reason.

### Breakdown of premium relativity

Each premium class relativity is the product of a claim frequency relativity, and an average claim size relativity. The claim frequency relativity relates to claim frequency of the relevant vehicle class to the Class 1 (district 1 private passenger vehicle) claim frequency, and the size relativity is defined similarly.



### Claim frequency and size relativities

The claim frequency relativity for each combination of premium class and accident year is modelled using ten years of experience to 30 June 2022 (excluding the COVID-19 impacted Jun-20 and Sep-21 quarters), down weighting observations in the oldest two years. Where supported by experience, we allow for trends in the relativity.

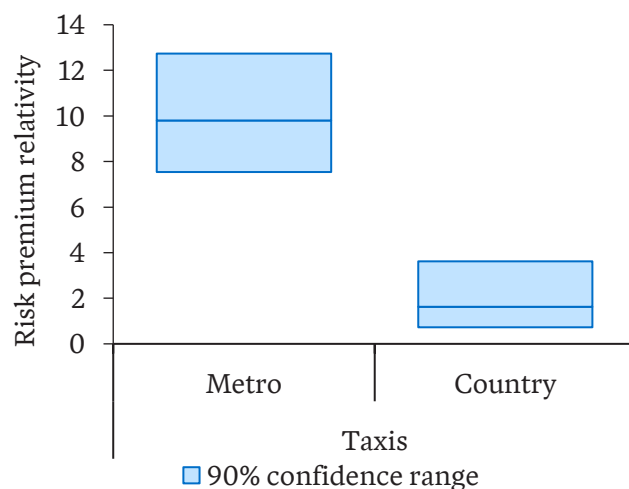
A procedure parallel to that for claim frequency relativities was used for estimation of claim size relativities. We use the ten years of experience to 30 June 2020 (excluding the COVID-19 impacted Jun-20 quarter), down weighting observations in the oldest two years. More recent incurred cost estimates may not be reliable because claimants' medical conditions may not be stable yet which makes estimation of future costs uncertain.

The frequency and size relativities of district 2 to district 1 are modelled as common to all vehicles classes (except light goods carrying vehicles, medium goods carrying vehicles, and taxis where premiums are not rated by garaging address).

### 3 Taxi relativities

Taxis are split into two classes – metro and country. There were 867 metro taxis and 261 country taxis that were registered over 21/22, on average.

Figure 3.1 – Comparison of taxi premium relativity



We show the 90% confidence range for the taxi relativities, with the central line showing our central estimate.

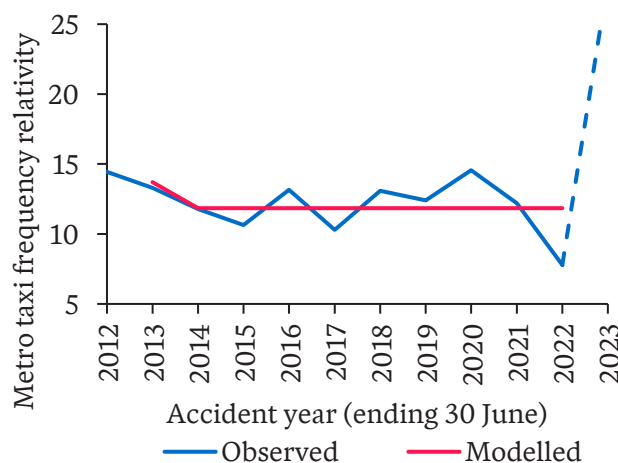
Our range acknowledges the downward trend observed in metro taxi relativity observed over the past decade which has since stabilised.

The country taxi relativity has low exposure (fewer than 300 registrations per year) but has consistently been well below metro taxis. As such, we model the country taxi relativity to be 0.18 of the metro relativity for taxis.

Table 3.1 – Details of taxis

Vehicle	District - Class	Exposure (2022)	Adopted 2022-23	Central estimate			90% confidence range		Adopted 2023-24
				Freq	Size	Risk premium	Lower	Upper	
Taxi	Metro - 5	867	10.36	11.84	0.83	9.80	7.55	12.74	9.80
	Country - 55	261	1.83	1.55	1.05	1.63	0.73	3.62	1.63

Figure 3.2 – Trend in metro taxi frequency



We observe a steady decrease in the metro taxi frequency relativity for taxis up to 2014. We have recognised this reduction in relativity by fitting a downward trend in taxi claim frequency, effectively taking a nine-year average when modelling the central estimate. Our central estimate for the metro taxi frequency relativity is 11.84.

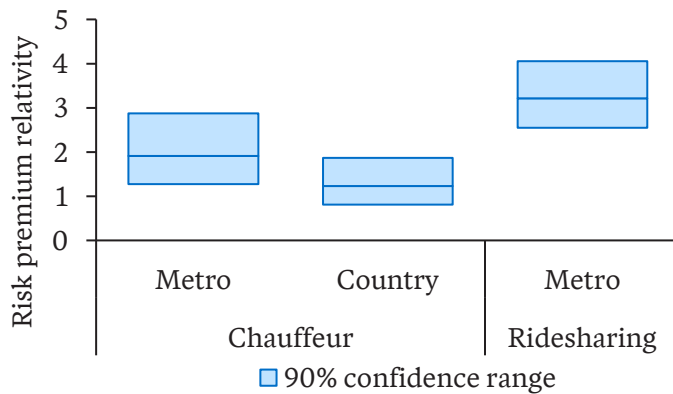
We do not model a trend for the country taxi frequency relativity.

Accident year 2022/23 has a high frequency relativity but is excluded from the current analysis because it is immature. However, we will give it credibility next year.

## 4 Ridesharing and chauffeur vehicle relativities

Ridesharing and chauffeur vehicles were classified together under small public passenger vehicles until 30 June 2019 after which a new premium class was introduced separately for rideshare vehicles. There were 4,403 rideshare metropolitan vehicles and 716 chauffeur vehicles registered over 21/22 on average.

Figure 4.1 – Comparison of ridesharing and chauffeur vehicles



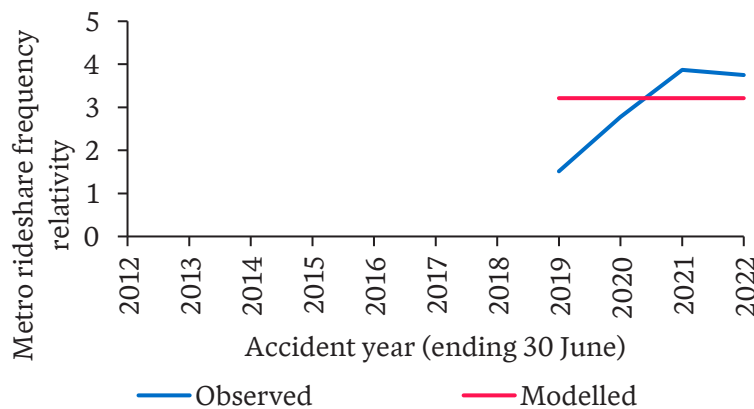
We show the 90% confidence range for the chauffeur and rideshare relativities, with the central line showing our central estimate.

We have insufficient experience to set the size relativity for rideshare vehicles different to Class 1.

Table 4.1 – Details of ridesharing and chauffeur vehicles

Vehicle	District – Class	Exposure (2022)	Adopted 2022-23	Central estimate			90% confidence range		Adopted 2023-24
				Freq	Size	Risk premium	Lower	Upper	
Chauffeur	Metro – 7	473	1.93	1.91	1.00	1.91	1.27	2.87	1.91
	Country – 57	243	1.22	0.97	1.27	1.23	0.81	1.86	1.23
Rideshare	Metro – 48	4,403	3.11	3.21	1.00	3.21	2.55	4.05	3.21

Figure 4.2 – Trend in metro rideshare frequency relativity



The frequency relativity experience for rideshare vehicles in the metro region has stabilised in recent years.



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