In 2010, the RAC developed a model for projecting motor vehicle counts which was the basis for an estimate of “an extra 400,000 vehicles on Western Australian roads by 2020”. The RAC noted that this estimate was at the conservative end of the range. The model was based upon ABS population projections and ABS motor vehicle census count data. Since this model was developed some of the underlying parameters have changed, leading to an understanding that the model may be understating the growth rate. In the past two years alone (2011/12), vehicle registrations have increased by 281,410.

**The Model**

To provide a more rigorous and timely estimate of future growth in licensed vehicle counts, the RAC has developed an updated model using an alternative and more detailed dataset. The model uses recent Department of Transport (Licensing) data to project licensed vehicle counts to 2020. The model uses licensed vehicle counts from 2007 to 2012 by individual licensing sub-categories and aggregates up to two headline counts; licensed motorised vehicles and total licensed vehicles. The total licensed vehicle count includes towed objects such as caravans, trailers and semi-trailers. Caravans (10.83%) and trailers (7.89%) in particular have experienced relatively high annual average growth rates which significantly impacts on the 2020 projections.
The projected licensed motorised vehicle count is more relevant and useful for interpreting the impact of growth on issues such as congestion. The projected licensed motorised vehicle count also excludes a range of licensed motorised industrial vehicles such as tractors, plant and cranes so the count can be summarised more simply as cars, bus, trucks and motorcycles.

The growth rates by licensed vehicle category show substantial variation; for instance, motorcycles under 250cc have experienced an average annual growth of 12.89% over the period whilst motor cars have experienced an average annual growth rate of 4.25%.

The outcomes
The outcomes from the updated model include:

- An additional 1.0 million licensed motorised vehicles on WA roads in 2020, in comparison to 2012. (actual projected increase 990,907)
- A minimum of 88,000 motor cars and motor wagons each year. (64,701 cars, 24,043 wagons)
- A minimum of 12,500 motorcycles each year. (7,236 under 250cc, 5,269 over 250cc)
- 2.0 million licensed motorised vehicles on WA roads in 2011.
- 2.5 million licensed motorised vehicles on WA roads in 2015.
- 3.0 million licensed motorised vehicles on WA roads in 2019.

The reasons
The growth in licensed vehicles has a number of potential sources:

- Population growth - at the end of the June quarter 2012, ABS estimated the WA population had increased by 78,000 persons over June quarter 2011;
- Business growth; and
- Increases in the number of licensed vehicles per person.

Qualifications
These licensed vehicle counts are based on Department of Transport (Licensing) data. The data reflects two sets of changes, an inflow of newly licensed vehicles and an outflow of deregistered vehicles. Systemic issues relating to these flows impacts on annual changes. A five year average has been used to mitigate these system issues.

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