

Submission to public consultation on Automated Vehicle Safety Reforms

Introduction

I am the forecaster behind Austroads Future Vehicle forecasts (2030 initial edition and 2031 update). This submission provides a commentary on those published Austroads forecasts, but it is a product of and the opinion of Transoptim.

Those forecasts were undertaken by me in 2019-20 using a methodology I had developed for the purpose. The forecasts were updated in 2021 as the first of a potential series of regular updates, and it is the updated version (released 2021) cited in your consultation paper alongside work by BITRE.

In your consultation sessions you have indicated a desire to hear from industry regarding timeframes for the arrival of Automated Vehicles. The presented timeframe in those sessions was for initial arrival of vehicles in 2026. This would correlate to the timeframe in Austroads (2021) for vehicles capable of some (early) Operational Design Domains (ODDs) of SAE Level 4 automation in the medium scenario. Austroads (2021) also forecast a 2024 initial availability for SAE Level 3 conditional automation (again in limited ODDs) in the medium scenario.

Progress has lagged behind forecasts

The forecast method for the Austroads forecasts (described in Austroads, 2020) was based on the available evidence base at that point in time. Austroads (2020) noted that many of the publicly available forecasts at that time, including those on behalf of NTC (2018), appeared to have been superseded by events and had become unrealistically optimistic.

This pattern of forecasts becoming outdated by slower than forecast progress was included in Austroads (2031), including to cite changes in one of the other forecasters sufficiently transparent to have left their prior as well as current forecasts accessible to the public.

Progress appears likely to continue to lag behind forecasts

The published timeframes from Automated Driving System (ADS) developers appear to have in general slipped further between 2021 and now, even before accounting for the attrition and consolidation that has occurred in the sector during that period.

Over this period, *some* deployments of Level 4 automation have increased scale in the United States and other markets, but they appear to remain fundamentally pre-commercial in their maturity.

Over this period there have also been some advances in the still rather limited availability of Level 3 conditional automation, but in a manner that appears to remain in stages before rapid acceleration in availability or uptake.

Over the same period there have been clear advances in availability and uptake of other vehicle technologies; but these serve most usefully as a contrast to indicate what has not yet happened in vehicle automation.

No updated forecast, but reasonable to expect delay

Transoptim has not sought to undertake the structured analysis that would permit an updated forecast, and so no specific update is offered. Notwithstanding, the pattern of events since the development of the Austroads (2021) forecast update makes it reasonable to assume a delay of several years compared to previous expectations.

References

Austroads (2021), *Future Vehicles Forecasts Update 2031*, AP-R654-21
Austroads, Sydney,

Austroads (2020), *Future Vehicles 2030*, AP-R623-20, Austroads, Sydney

National Transport Commission (NTC) 2018, *Safety Assurance for Automated Driving Systems*, Decision Regulation Impact Statement, November 2018