



13 December 2019

National Transport Commission
Level 3/600 Bourke Street
Melbourne, VIC, 3000

Dear Tim,

**RE: 'Barriers to the safe use of motorised mobility devices: discussion paper' and
'Barriers to the safe use of personal mobility devices'.**

I congratulate you and the team at NTC for delivering two very thorough and helpful documents dealing with Motorised Mobility Devices (MMDs) and Personal Mobility Devices (PMDs). Making a distinction between those two types of devices and spelling out that distinction clearly in these documents is a valuable contribution to the development of appropriate regulations for these types of vehicles. The reports present a comprehensive discussion of the pros and cons associated with their use and integration into the transport system and outline some pragmatic regulatory options.

The calculation of kinetic energy to highlight the differential impacts of changes in the mass and maximum speed of MMD helps to ground the discussion. That analysis (Tables 1 and 2 in the MMD paper) clearly highlights the considerable increase in kinetic energy which would need to be dissipated in a crash at 15 kph over 10 kph. Given that 10 kph is the current speed limit for those vehicles there is compelling logic for not raising it to 15 kph given a considerable increase in injury risk in the event of a crash. I would dispute however the statement on page 9 of the MMD paper that 10 kph 'is the equivalent to walking speed'. It is closer to a run or at the least a very brisk jog. If we were starting from scratch, and were using walking as the basis for speed limits on footpaths, then a value lower than 10 kph would have a stronger foundation. However given that many users currently have devices with a maximum speed of 10 kph then there is a clear justification for not lowering that limit because of the confusion and expense for existing users. While we might set a lower limit if starting from scratch today it is also fair to say that the crash evidence does not point to speed being a substantial contributing factor at present with overturning and user behavior perhaps much larger risk factors.

Given the reference point of 10 kph for MMDs on footpaths, I believe that presents a strong precedent for a 10 kph limit for PMDs on footpaths. PMDs have the potential to enhance access to public transport and possibly reduce car trips directly (or via an impact on reducing ridesharing trips) so their role in addressing the considerable challenges facing our urban transport systems means that it would be shortsighted to unnecessarily restrict their usefulness in the urban transport system. While acknowledging the risk associated with allowing PMDs on the footpath, the reality is that in many parts of the urban area, particularly in middle and outer suburbs, footpaths have very, very low utilization. There is certainly merit in site specific assessments to determine the intensity of pedestrian activity and where deemed appropriate use local laws to prohibit use of PMDs on footpaths. That would be appropriate for example, in the inner city or in activity centres away from the CBD where there is high use of footpaths by pedestrians.

In terms of the options for regulating speed and network access, my professional sense of the relative risks involved would be that PMDs should not be permitted on any road sign posted above 50 kph. A 25 kph maximum speed for PMDs is comparable to that currently permitted for power assistance on an e-bike. Based on that precedent I believe there is justification for that being an appropriate speed limit for PMDs when operating on shared paths and local roads.

In closing, I would but add that our understanding of the use and risks associated with PMDs is very limited particularly with new forms of PMDs rapidly emerging. I believe there would be merit in seeking to understand more from the experience in Brisbane and Adelaide where e-scooters are operating and from undertaking pilot studies in other cities. Given the experience in US cities such as Portland, a one year trial could provide valuable insight to provide additional insight and reassurance about policy settings going forward.

Yours sincerely,



Professor Geoff Rose
Director, Monash Institute of Transport Studies