A S$24 million testbed aimed at improving road safety and reducing travelling time with the help of 5G technology has been launched by M1 and Nanyang Technological University (NTU).

The telco and university said in a joint statement on Thursday (Oct 17) that they will be integrating 5G technology into Singapore’s first cellular vehicle-to-everything (C-V2X)
As part of the trials, three 5G base stations will be deployed across NTU, and C-V2X equipment will be installed in shuttle buses and self-driving vehicles that ply the campus.

C-V2X communications is used to enhance safety by relaying real-time traffic navigation and hazard information to users in advance. The organisations said that it can send traffic warning notifications at road junctions, thus helping to optimise road usage by reducing travelling time and minimising the risk of accidents.

Qualcomm, which also provides C-V2X solutions, says on its product page that the technology enables vehicles to “communicate with each other and virtually everything around them”. This helps provide non-line-of-sight awareness and a higher level of predictability for improved road safety, it said.

According to M1, C-V2X can deliver ultra-fast and reliable low-latency communications over a wider coverage area. This will allow the design and deployment of 5G-connected mobility solutions, including collision avoidance, real time traffic routing, and network security.

NTU has already completed 12 V2X research projects with industry partners so far – including one with Continental and Schaeffler in 2018 that allowed drivers and users of PMDs to detect one another.

As part of its collaboration with M1, more industry partners will be invited to explore the integration of the technology with self-driving vehicles, traffic infrastructure and unmanned aircraft systems.

**Haidilao at Marina Square to get 5G network**
Apart from road traffic, M1 will also deploy a 5G network for consumers at hot pot chain Haidilao’s upcoming Marina Square mall.

This will allow customers waiting in line to experience virtual and augmented reality games in a special “5G experience corner”.

Using Huawei’s 5G technology, the new outlet will also be equipped with self-developed smart machines such as Intelligent Kitchen Management System (IKMS), a customised automatic soup base machine, and food delivery robots.

Willis Sim, chief corporate sales and solutions officer at M1, said in a statement that the Singaporean company has been developing and leveraging its 5G capabilities to support real-life applications across a wide range of industries for “quite some time now”.

The Marina Square branch will be the twelfth Singapore outlet for the 25-year-old Chinese company, whose Sichuan native founder, Zhang Yong, was in August named Singapore’s richest person with a net worth of US$13.8 billion (S$18.9 billion).