## Featured Projects at Land Transport Industry Day 2021

## **1. AI-Enabled Detection of Pavement Defects by LightHaus Photonics** [*Re-inventing and enhancing existing inspections/operations, leveraging new tech innovations, for greater productivity and savings.*]

The bicycle-mounted PaveWatcher – Pavement Monitoring System by LightHaus Photonics – increases the efficiency and distance coverage of pavement inspectors. The solution taps on photo-imaging function coupled with Al-capabilities to identify, record and trend pavement defects. This saves time and effort spent on the existing manual process of walking and identifying defects on footpaths, cycling paths, bus stops and covered linkways.

## 2. Low-Cost Road Riding Index Inspection Solution by JPL Consultants

[Making easy-to-use, low-cost tech solutions available to non-tech-savvy smallmedium contractors, thereby enabling greater productivity gains in the industry.]

The Integrated Road Inspection Iris (IRIS 1.0) developed by JPL Consultants provides a low-cost, easy-to-use solution for road contractors to conduct real-time quality inspections over localised roadwork repairs. It helps contractors to quickly measure onsite road surfaces, especially in short localised area, and check the riding quality before the road is open to the public. The instant generation of inspection results output allows for immediate corrective actions while road is still closed, reducing additional remedy efforts after reopening of road lane(s) to traffic.

## 3. Imaging and In-Tunnel GPS-Enabled Street Light Lux Measurement by Cosmiqo

[Enhancing operational capabilities through new tech innovations for greater productivity & safety.]

With the built-in video recording function which is in-sync with lighting measures, LiteSense+ developed by Cosmiqo International enables continuous inspection without traffic disruption. Inspectors no longer have to dismount from their vehicles to record and capture images of dark spots. Furthermore, the solution is also able to function even when the GPS signal is weak/lost, adding to contractors' productivity with operational reliability.