

“No More” Delivery by Two-Wheeled Vehicle Pushed to Speed Competition KOSHA’s Pilot Project on Big Data Collection through Real-Time Monitoring

#1. Mr. Kim, a delivery worker affiliated with A Company specialized in local delivery, was overwhelmed with soaring demands for delivery on Friday evening in June, 2021. Despite 2 alerts from automatic allocations for a pick-up in 20 minutes, he didn’t know which to pick up first because of substantial distance between two restaurants. As the target delivery time is gradually shortened, the letters displaying the time is now red-colored. All he can do now is to escalate the speed of his two-wheeled vehicle.

#2. Mr. Park, a delivery worker who joined the delivery platform B, only delivers one order at a time but becomes agonized every time he faces a red light. His location and expected arrival time is notified to a customer in real time, but he only has the address to deliver. He has to worry about possibility for disadvantages from delivery assignments if he ever gets unfavorable review for failing to meet the expected delivery time.

- The KOSHA (President: Doo-Yong Park) launched the “Two-Wheeled Vehicle Real-Time Monitoring Project” in order to understand the current situations surrounding dangerous delivery practices, including speeding by two-wheeled vehicle, and calculate the safe delivery time.
- The “Two-Wheeled Vehicle Real-Time Monitoring Project” is a pilot project aiming to collect basic data in order to develop a system capable of calculating safe delivery time in real time through collection and analysis of big data on driving by delivery workers.

- Driving data will be collected in real time from over 100 delivery workers in 5 regions, such as Seoul, Gyeonggi-do, Incheon, Busan and Gwangju, through installation of IoT device equipped with LTE communication modules at two-wheeled vehicle for about 4 months.

- The project is designed to collect the information on speed fluctuation during straight movements and turns by means of GPS signals and 6-axis sensors (3 axes for acceleration and 3 axes for Gyro).

- With collected data, analysis will be conducted upon driving information, real-time traffic volume and weather (temperature, rainfall, snowfall, etc.) together with Hanyang University (Department of Transportation & Logistics Engineering).

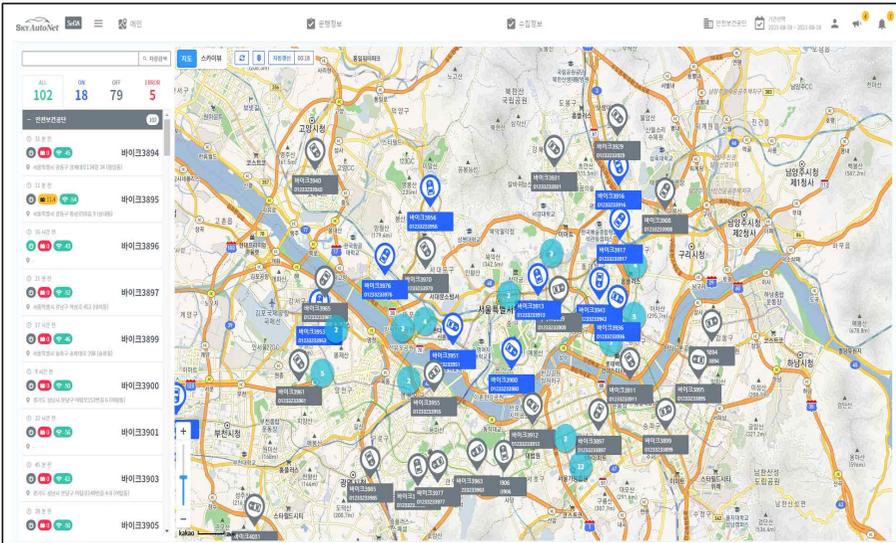
- It plans to present a guideline on safe driving by establishing the regions prone for accident risks and aims to develop the ‘safe delivery time calculation system’ designed to provide guidance in real time based on calculation of safe delivery time and unveil the system in Open-API* during the second half of this year.

* Open Application Programmer Interface is an open computer program applicable to existing program or capable of comparing calculated data.

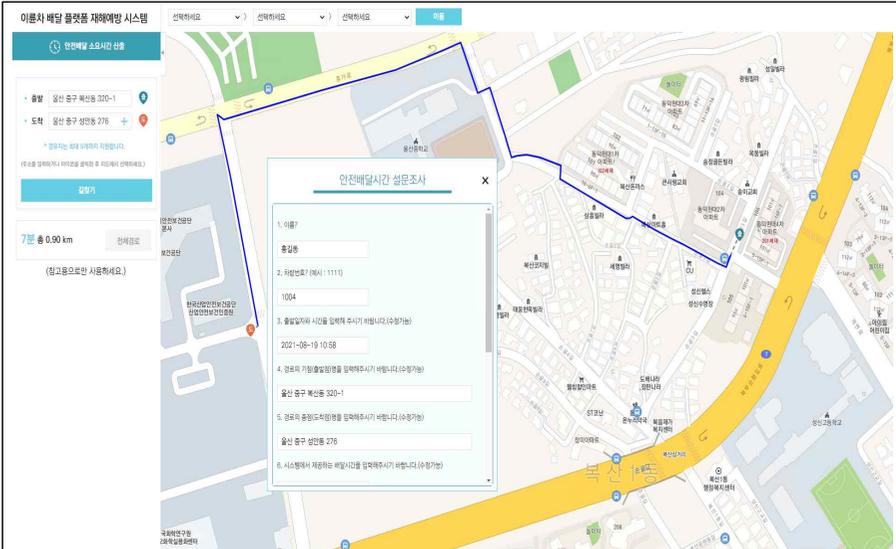
- Moon-Do Lee, the Director General of the Occupational Safety & Health Future Institute (OSHFI), said, “With prolonged COVID-19, both delivery demands and delivery-related accidents are surging.” He stressed, “We are dedicated to gradually reducing fatal accidents for two-wheeled vehicle

delivery workers by planning a new accident-prevention business system and distribute the system for business sites to easily use the system.” (END)

Addenda Screen of Real-Time Pilot Monitoring (big data collection) System for Two-Wheeled Vehicle



Screen of Real-Time Monitoring System for Two-Wheeled Vehicle



Example of the system on calculation of safe delivery time currently under development in a format of navigation service (scheduled for pilot operation in the 2nd half of 2021)