

Consideration for applying data acquired for other purposes to pavement repair work

Junki Shinada¹

¹ UEKI corporation, 1-5-45 Ekimae, Kashiwazaki-Shi, Niigata, 945-8540, Japan.
J-shinada@uekigumi.co.jp

ABSTRACT

In ICT pavement work (repair work) that has been applied since fiscal 2020, measurements are usually performed using TLS and MMS in 3D groundbreaking surveying, which is an essential item, but it takes a lot of time to prepare for measurements, such as the restriction conditions at the site accompanying TLS installation and the installation of a fixed point necessary for correcting the flat and vertical accuracy of MMS, and there are some issues for essential productivity improvement.

In addition, with the construction of a new social infrastructure called digital twin, many industry groups are acquiring and accumulating various three-dimensional spatial information and expanding its utilization, while the acquired data is often used only for the single purpose of the company, and there are few cases of data sharing and utilization to other industries.

In this report, with the aim of constructing a method that leads to further productivity improvement, we aim to drastically reduce the time and man-hours in three-dimensional groundbreaking surveys.

Focusing on the three-dimensional point cloud data acquired for infrastructure equipment inspection held by private companies, we devised a method of applying it to groundbreaking survey data of pavement repair work.

Keywords: ICT Pavement work, TLS, MMS, Three-dimensional point cloud data for infrastructure equipment inspection, Productivity improvement