

## **Development of an Inspection Support System Using Tunnel Wall Images**

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Regular inspections are required for the maintenance of railway tunnels. Inspectors determine soundness through visual inspection and hammering test to ensure proper maintenance. With a predicted decline in the labor force, there is a growing need for the digitization and automation of tunnel inspections. In this study, we developed two technologies to address this need. The first is an “Automatic Tunnel Condition Assessment System,” and the second is a “Critical Area Projection System”. This paper describes the overview and verification results of each system.