

**Estimation Method of Lateral Ballast Resistance
of Ballasted Track Damaged by Earthquake**

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This paper presents the results of an analytical study to examine the estimation method of lateral ballast resistance of ballasted track damaged by earthquake. A new analytical procedure with dynamic FEM analysis considering the cumulative strain derived and static FEM analysis considering dependence of deformation modulus on strain was proposed. It has been revealed that the new analytical procedure can roughly estimate the lateral ballast resistance of ballasted track after earthquake by simulating a series of shaking table tests with a large scale model.