Method for Verifying the Restorability of Railway Viaducts Using the Recovery Time After an Earthquake as a Verification Index

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We have proposed a method for evaluating the restorability of railway structures. In the proposed method, all earthquake motions expected within the design service life are used as the design earthquakes. In addition, the recovery time after an earthquake, which is directly related to early recovery, is used as the verification index. We also proposed a more practical method of expressing structural conditions with the same recovery time as a nomogram by performing calculations under various conditions in advance. The proposed method allows us to construct structures that are easy to recover in the same procedure as the conventional seismic design, and it is expected to shorten the recovery time after an earthquake.