

Axle Load Estimation of Moving Vehicles Using BWIM Technique

Authors : Changgil Lee, Seunghee Park

Abstract : Although vehicle driving test for the development of BWIM system is necessary, but it needs much cost and time in addition application of various driving condition. Thus, we need the numerical-simulation method resolving the cost and time problems of vehicle driving test and the way of measuring response of bridge according to the various driving condition. Using the precision analysis model reflecting the dynamic characteristic is contributed to increase accuracy in numerical simulation. In this paper, we conduct a numerical simulation to apply precision analysis model, which reflects the dynamic characteristic of bridge using Bridge Weigh-in-Motion technique and suggest overload vehicle enforcement technology using precision analysis model.

Keywords : bridge weigh-in-motion(BWIM) system, precision analysis model, dynamic characteristic of bridge, numerical simulation

Conference Title : ICSET 2016 : International Conference on Structural Engineering and Technology

Conference Location : Rome, Italy

Conference Dates : May 02-03, 2016