

## Development of a Bridge Weigh-In-Motion System

By Gonzalez, Arturo

Condition: New. Publisher/Verlag: LAP Lambert Academic Publishing | A technology to convert the bridge response to the passage of traffic into data on vehicle configurations, speeds, times of travel and weights | Weigh-in-Motion (WIM) data can be used to predict future traffic volumes and weights for the planning of new infrastructure, the management of maintenance activities, the identification/reduction of overloading problems and the evaluation of the performance of pavements and bridges. Most WIM systems are based on sensors placed in or on the pavement that measure the wheel force applied over them during a very short time. The value of this force varies as a result of road roughness and vehicle dynamics leading to limited accuracy for estimating static weights. Additionally, these systems experience durability problems due to traffic and environmental conditions. An alternative approach to WIM that addresses these limitations is the use of an instrumented bridge to weigh vehicles (B-WIM). This approach is the subject of research in this book. Inaccuracies derived from discrepancies between theoretical B-WIM algorithms and bridge measurements are investigated both theoretically and experimentally. The text also describes the development of a B-WIM system in Ireland, including all aspects of installation, calibration, data collection and...



## Reviews

This publication is wonderful. I actually have go through and i am sure that i am going to going to study once more once more down the road. I am easily could get a enjoyment of studying a written book.

## -- Mozelle Halvorson

Completely one of the best publication I have actually read. Indeed, it is perform, nonetheless an interesting and amazing literature. Your lifestyle span will likely be transform when you complete reading this book. -- **Mrs. Agustina Kemmer V** 

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