

## Development of a Value Evaluation Model of Highway Box-Girder Bridge

**Authors :** Hao Hsi Tseng

**Abstract :** Taiwan's infrastructure is gradually deteriorating, while resources for maintenance and replacement are increasingly limited, raising the urgent need for methods for maintaining existing infrastructure within constrained budgets. Infrastructure value evaluation is used to enhance the efficiency of infrastructure maintenance work, allowing administrators to quickly assess the maintenance needs and performance by observing variation in infrastructure value. This research establishes a value evaluation model for Taiwan's highway box girder bridges. The operating mechanism and process of the model are illustrated in a practical case.

**Keywords :** box girder bridge, deterioration, infrastructure, maintenance, value evaluation

**Conference Title :** ICCEIE 2017 : International Conference on Civil, Environmental and Infrastructure Engineering

**Conference Location :** Kyoto, Japan

**Conference Dates :** November 16-17, 2017