

ABSTRACT

The bridge is one of the transport infrastructure essential for life. The bridge connects the one region to another separate or restricted by rivers, ravines, waterways. Bridges help people improving the quality of life. Along with increasing time, the quality of the bridge will decline. So we need a fixed bridge maintenance in order to function properly. However, maintenance of infrastructure is limited by the number of funds. Limited funds resulted in inequality decision to prioritize bridge repair. In this study used Analytic Hierarchy Process (AHP) and Technique For Order Preference by Similarity to Ideal Solution (TOPSIS) to determine the priority of bridge repairs. AHP and TOPSIS involve criteria such support: Mobility, Role, Investment Conditions and Physical Condition river which will be calculated in determining the priority of bridge repairs. By using qualitative and quantitative data, AHP and TOPSIS can solve complex problems but limited to the data obtained. Results from this study is the selection of priority bridge repair Ngawi district is bridge Ngrayudan III with a value of 93.20% accuracy.

Keywords: Transportation, Bridge, Priority, AHP, TOPSIS