

Bridge defects and

ERA – Bridge Inspection Manual

Bridge Inventory and Inspection

Bridges are key elements of the road network by virtue of their strategic locations. In case they are damaged, their loading capacities can be severely impaired and unfavorable and costly consequences will occur. Therefore, maintaining a full stock of bridges in good condition to secure the safety of traffic at any time is the utmost important duty for the road administrator, the Ethiopian Roads Authority.

Why bridge Inventory?

The bridge **inventory** is necessary with the purpose of having a unified database to ensure the safety of the traveling public as required by internationally accepted Highway Acts. It includes identification information, bridge types and specifications, operational conditions, bridge data including geometric data and functional description, and inspection data. Any bridge more than 4m long used for vehicular traffic is included in the Inventory database. All drainage structures having less than 4m are considered as culvert as per the revised ERA bridge design manual 2013.

In ERA history, nationwide bridge Inventory has been conducted for the first time in 2006 after the in-house developed ERA BMS software was officially launched. The bridge and culvert database with wide range information was established then.