

# Austroads Project ABT6152 - Standard Bridge Barrier Design Guidelines Update

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**ABSTRACT:** Inconsistency in the design of traffic barriers for bridges has been identified as a major issue in current practice throughout Australia and New Zealand. The need for standardised solutions has been recognised by road jurisdictions, consultants, and contractors. The main areas of concern are the determination of appropriate barrier performance levels, structural design criteria, the lack of standard barrier design details, guidance on retrofitting existing bridge barriers, bridge approach barriers and overpass bridge support protection.

To address this, Austroads commissioned a review of the Austroads Standardised Bridge Barrier Design Report 2013 based on current research, guidance, and standards. Also, part of the purpose of the project was to verify compliance of bridge barrier designs and guidelines against the relevant Australian Standards that have been recently updated, and the American Association of Highway and Transportation Officials (AASHTO) Manual for Assessing Safety Hardware (MASH). To achieve this a comprehensive literature review was undertaken, full scale crash testing was conducted and Finite Element Modelling created and calibrated.

The main output from this project is the updated Austroads Standardised Bridge Barrier Design Guidelines: Update 2024 which includes key aspects such as bridge barrier design procedure and considerations; bridge barrier performance level selection; barrier length of need; consideration for barrier in bridge medians; retrofitting of existing bridge barriers and bridge support protection barriers. This presentation will cover the full extent of the project including project outcomes and learnings.