

Technical Review Board Memorandum

Date: January 29, 2016

**Issue: Interim Cost Estimate Recommendation for
Potential Door Jamming Retrofits
(Part of the Seismic Mitigation Program for Schools)**

Discussion:

The potential for doors jamming within their frames has been an ongoing topic of discussion and recently UBC's Earthquake Engineering Research Facility (EERF) has undertaken a testing program to determine if this issue truly represents a real risk requiring remediation when addressing OFC (Operational Functional Components – Non Structural) issues during school seismic retrofit projects.

Initial testing has started at the EERF; however, it could be several months at least until a final determination can be made.

The issue was also recently discussed at the TRB Steering Committee (TRBSC) as there have been questions from the consulting field on appropriate costing when completing project budgets for Project Definition Reports (PDRs). Following these discussions and after reviewing projects TRBSC members are familiar with, the following has been recommended as a reasonable estimate for pricing the door issue into PDR budgets:

- \$5/m² for 1 storey blocks;
- \$4/m² for blocks with more than 1 storey; and
- \$3/m² for gymnasiums.

Recommendation:

It is recommended the above rates be used to develop cost estimates for PDRs, that 75% of the calculated amount be included in the approved project budget, and the remaining 25% be added to the risk reserve.

It is further recommended these rates take effect immediately.

An update on this issue will be provided when the EERF completes the review and testing program.