

This webinar provided an overview of the [RMC-TotalRisk software tool](#). Presented by Woodrow Fields and Haden Smith (IWR Risk Management Center), with an overview from Susie Byrd (Flood Risk Management Planning Center of Expertise), it highlights the only tool currently certified for life safety risk assessments in Civil Works feasibility studies. RMC-TotalRisk is a robust risk analysis software designed with a streamlined, user-friendly interface. The software simplifies the complexity of risk assessments by connecting the core components of risk through a clear and intuitive risk diagram.



Key Resources:

- [RMC-TotalRisk software tool](#)
- [Certification of the Risk Management Center's TotalRisk Software Version 1.0 for Life Risk Analysis](#)
- [Engineer Circular \(EC\) 1105-2-412](#), Assuring Quality of Planning Models, 31 March 2011 (EC 1105-2-412 remains in effect per [Planning Bulletin 2013-02](#))

This summary of the Question/Answer session of the webinar is not a transcription; questions and responses have been edited and reordered for clarity.

TotalRisk Certification & Capabilities

Is TotalRisk a certified planning model only for flood risk management (FRM) projects?

TotalRisk is certified as a life risk analysis planning model for FRM feasibility studies by the Flood Risk Management Planning Center of Expertise (FRM-PCX) (refer to [the tool's certification memo](#)). The FRM-PCX plans to coordinate with the Coastal Storm Risk Management (CSRM) PCX on certifying TotalRisk for CSRM feasibility studies in the future. Currently, TotalRisk is not certified to be used for life risk analysis with results from coastal models, including Beach-fx and G2CRM.

Important note: TotalRisk is not certified to evaluate economic consequences for feasibility studies. Only HEC-FDA v2.0.x is certified for that purpose, and there are no current plans to certify TotalRisk for economic analysis for feasibility studies. TotalRisk can be used to compute expected annual life loss estimates using LifeSim results as the consequence input. In short, the certified economic risk analysis tool is HEC-FDA 2.0; the certified life risk analysis tools are LifeSim and TotalRisk.

When will TotalRisk be available on the [USACE App Portal](#)?

While it is unknown when TotalRisk will be available on the App Portal, the software does not need to be installed and is a portable application. It can be downloaded from [RMC Software & Tools](#) or the [USACE RMC GitHub page](#).

Does the model consider the time to evacuate from various areas or the risk to emergency egress routes?

No, but these factors are accounted for in LifeSim.

TotalRisk Model Application

What is preventing certifying TotalRisk as a planning model for event-impact relationships other than event-fatality?

The primary limitation is not with TotalRisk itself, but with relevant supporting resources. Additional LifeSim training materials focused on economic damages need to be developed. The challenge lies in providing guidance on how to conduct detailed damage calculations in LifeSim, including how to incorporate uncertainty in parameters such as foundation heights, depth-damage functions, and structure values.

Which study team discipline has primary responsibility for using TotalRisk?

Using TotalRisk is a multidisciplinary effort. The team's hydrology and hydraulics (H&H) engineer typically contributes in the early stages, with potential involvement from geotechnical and other engineering disciplines if system response functions are included. Economics generally leads the analysis and carries it through completion, with strong support from the other disciplines. Regardless of who primarily sets up the model, each study team discipline member needs to review the final model to make sure their data was input correctly.