



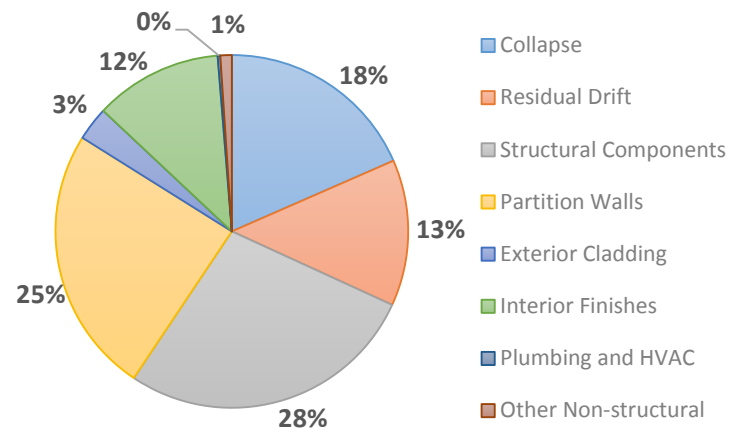
## What is the Seismic Performance Prediction Program (SP3)?

The Seismic Performance Prediction Program (SP3), created by the Haselton Baker Risk Group, brings the next generation of seismic loss assessment to the engineering world. Placing the advanced FEMA P-58 methodology into the hands of engineers, SP3 enables quick and unprecedented understanding of the relationship between building-specific features and seismic risk. With our user-friendly interface and advanced numerical methods, you can obtain in-depth probabilistic seismic loss results in minutes, enabling efficient and effective decision-making.

## What Types of Projects is SP3 Useful For?

SP3 gives you a detailed understanding of performance and can be used for a wide range of projects:

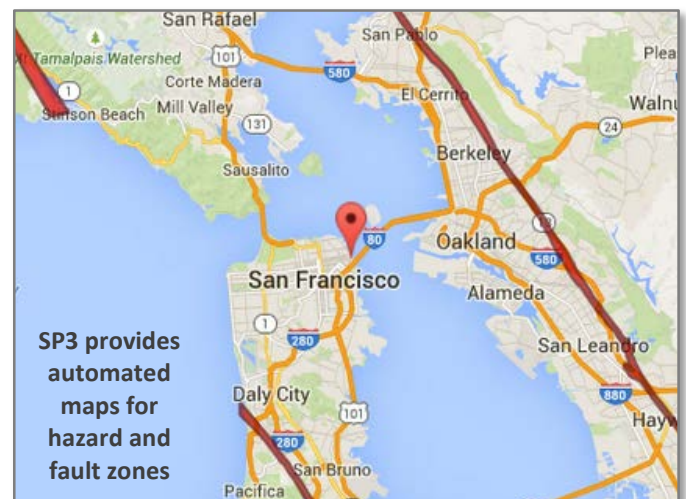
- **New Design.** Enables resilience-based design to achieve lower loss and building downtime (works for both schematic and final design).
- **Building Retrofit.** Provides detailed information on the performance for pre- and post-retrofit conditions. This facilitates risk-informed retrofit designs and cost-benefit analysis.
- **Insurance Risk.** Enables quantitative and detailed prediction of annualized losses, which can be used to assess insurance risk and premiums.
- **Due-Diligence.** Provides an advanced and reliable method for probable maximum loss (PML) analysis.
- **Seismic Ratings.** Implements the U.S. Resiliency Council seismic rating system and automatically computes your star rating.



SP3 provides a detailed breakdown of which building components contribute to loss

## The FEMA P-58 Methodology

FEMA P-58 is a rigorous statistical approach to damage and loss analysis, developed in a 10-year and \$12M study by the Applied Technology Council and FEMA, leveraging decades of research and test data. FEMA P-58 quantifies building performance in three important dimensions: financial losses, building repair time, and safety (fatalities & injuries). The methodology takes a modular approach to characterizing seismic hazards, structural responses, building components, and consequences of damage

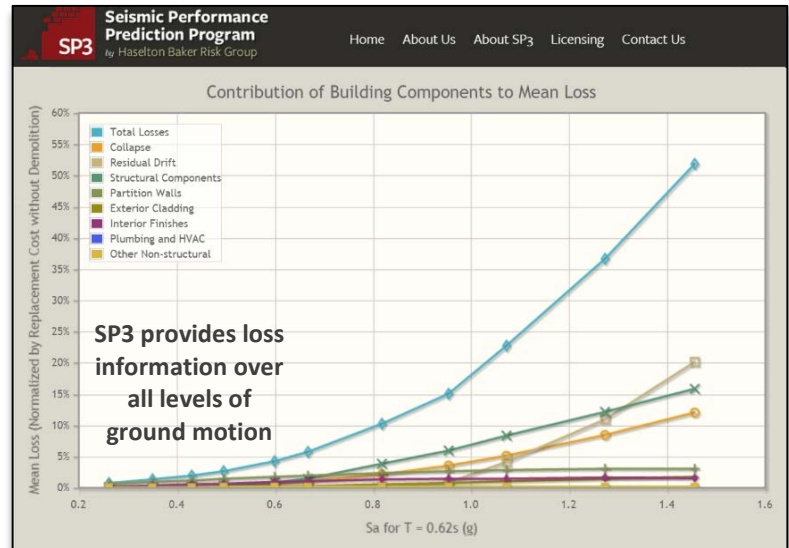


SP3 provides automated maps for hazard and fault zones

to components. With this approach, you can perform a quick analysis of a building based on general properties, or can customize the calculation to take into account additional knowledge about a building's unique features. With this building-specific analysis capability, you no longer need to rely on generic or judgment-based loss estimates for general building classes.

## Key Features of SP3

- **Automated Hazard.** Automatically look up soil and hazard data based on project address.
- **Estimated Structural Responses.** Use the integrated simplified structural analysis method to get near-instant estimates of structural response based on general building properties, or provide your own structural analysis results.
- **Pre-Populated Building Components.** Pre-populate building components using a special SP3 algorithm, enabling initial loss estimates with little or no manual input of building components.
- **Powerful Analysis Engine.** Use the cloud-based and numerically optimized computational engine to obtain hundreds of thousands of damage simulations in minutes.
- **Learning About Building Performance.** Aggregate and filter results to quickly identify the building features that most contribute to earthquake damage.
- **Automated Reporting.** Automatically obtain a customized professional report summarizing project analysis results.
- **Graphics for Communication.** Use the many SP3 maps, charts, and graphics to communicate seismic performance to your clients.



## How Can I Learn More?

To learn more about whether SP3 is the right fit for your team, visit us at [www.hbrisk.com](http://www.hbrisk.com). There you will find information about the company and software, as well as instructional videos. Also feel free to give us a call at the office at (530) 531-0295.

We look forward to hearing from you soon!

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