

Memphis International Airport Seismic Risk Analysis

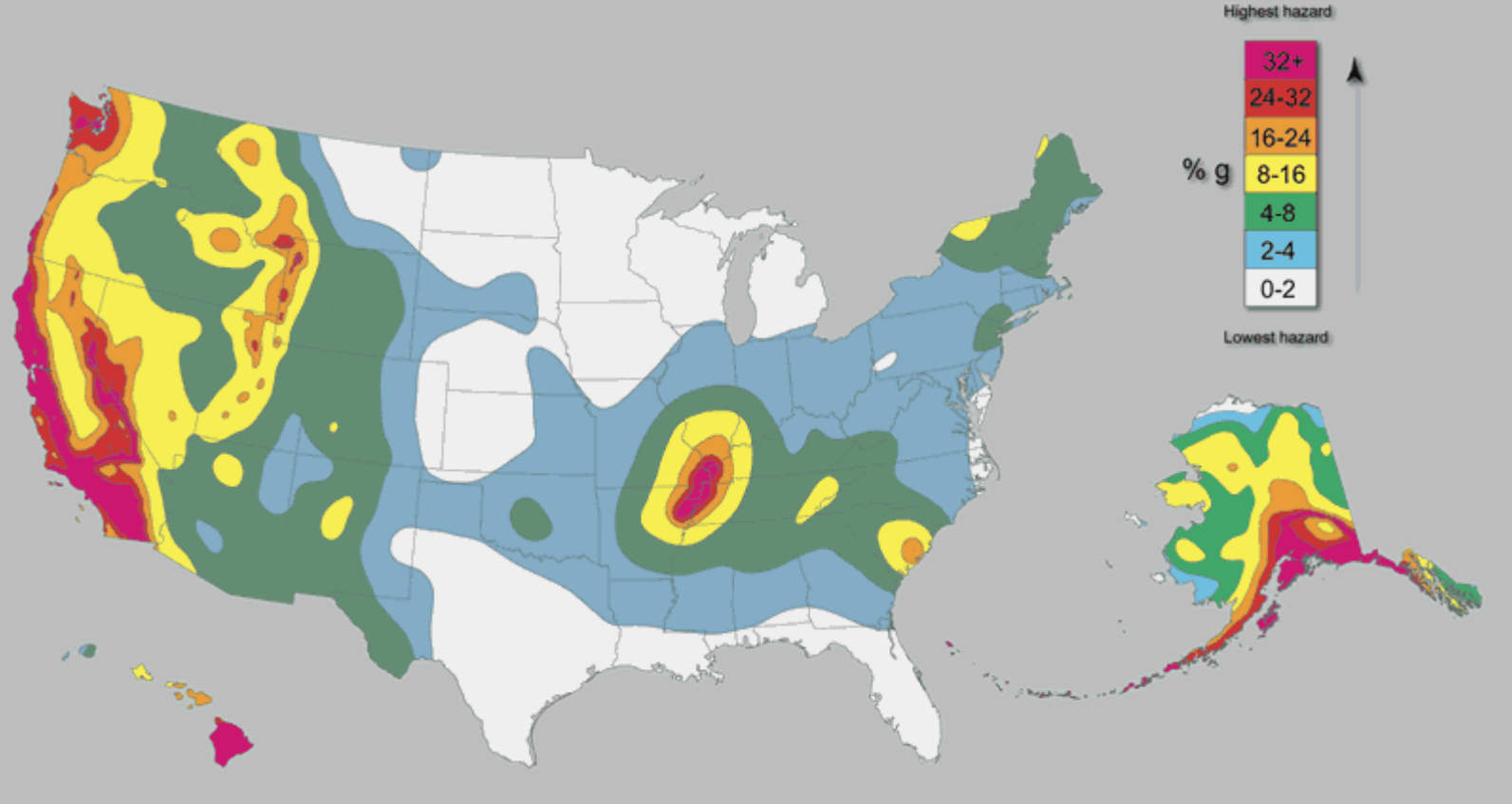
Building Performance

Caitlin Kevins
Engineer
New York



Designed by Architect Roy Harrover, 1963

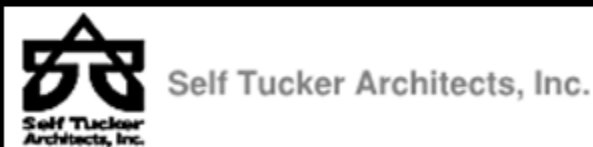
The Hazard





**Memphis
Int'l Airport**

Our Team



Performance

Estimated Downtime Landside				
Legend				
Earthquake Hazard Level	Moderate 225 year M6.2 @ H1	Large 475 year M7.0 @ H1	Major 975 year M7.7 @ H1	Severe 2475 year
Tunnel Level Structure				
Tunnel Level Non-Structural				
Main Terminal Structure				
Baggage Handling & Secure Conn. Structure				
Terminal Non-Structural				
Concourse A, C & Original B Structure				
"Y" Renovation & Regional Jet Structure				
Concourse Non-Structural				

Est. Downtime After Basic Performance Retrofit Landside				
Legend				
Earthquake Hazard Level	Moderate 225 year M6.2 @ MT	Large 475 year M7.0 @ MT	Major 975 year M7.7 @ MT	Severe 2475 year
Tunnel Level Structure				
Tunnel Level Non-Structural				
Main Terminal Structure				
Baggage Handling & Secure Conn. Structure				
Terminal Non-Structural				
Concourse A, C & Original B Structure				
"Y" Renovation & Regional Jet Structure				
Concourse Non-Structural				

Est. Downtime After Enhanced Performance Retrofit Landside				
Legend				
Earthquake Hazard Level	Moderate 225 year M6.2 @ N1	Large 475 year M7.0 @ N1	Major 975 year M7.7 @ N1	Severe 2475 year
Tunnel Level Structure				
Tunnel Level Non-Structural				
Main Terminal Structure				
Baggage Handling & Secure Conn. Structure				
Terminal Non-Structural				
Concourse A, C & Original B Structure				
"Y" Renovation & Regional Jet Structure				
Concourse Non-Structural				

Existing Structure Response

Basic Retrofit Response

Enhanced Retrofit Response

Solutions

