

# Trends Impacting the Geo-Community

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# Trends Impacting Geo-Community

- Accelerated Construction
- Innovative Contracting
- Expectations of the Engineer
- Life Cycle Cost
- Risk Management

# Expectations of the Engineers

- Better
- Faster
- Cheaper

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**PROJECT DELIVERY**

# Risk Management

$$\text{Risk} = \text{Impact} \times \text{Probability}$$

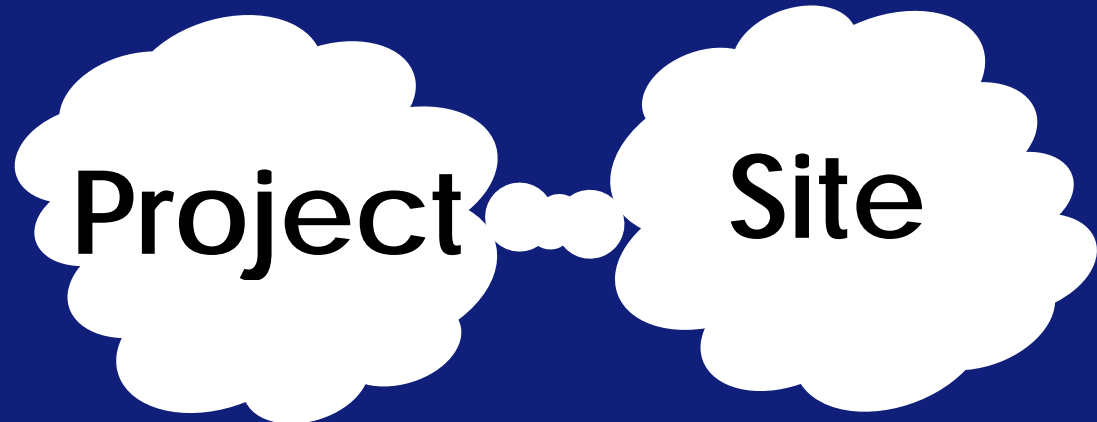
*Impact cited in terms of loss.*

*Probability of the likelihood of occurrence.*

# Risk Management

## Four Parties

1. Owner
2. Designer
3. Builder
4. User





# New Orleans Levee Failure

“Army Corps is Faulted on  
New Orleans Levees”

Washington Post  
March 25, 2006





# I-85 Overpass in South Carolina

- Was this bridge designed for the impact or to withstand the fire?
- What is the probability that this could happen?
- Can you adequately design for this?



## Influence of Social Media

“It’s tragic that I-40 was placed in the wrong geological area. A better, safer route was planned but changed. It was a political decision and now another rock slide? How many millions have been spent clearing up rock because of someone's greedy idea?”

# The Future is Happening Now

Group 1

Engineering  
Analysts

Group 2

Risk  
Management  
Advisors

