

# The Schreifer Group

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## Tier 1 Risk-Based Explosives Safety Siting (RBESS)

We strive to keep everyone safe from explosives operations, either as a worker, casual, visitor, or are unrelated.



# THE SCHREIFER GROUP

- WOSB/VOSB
- Founded in 2016
- Core services:
  - Federal Planning
  - Explosives Safety
  - Facilitation
  - Training



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## EXPLOSIVES SAFETY TEAM

Our team of highly talented explosives safety planners has **over 100 years in explosive safety site planning experience**. Our team has provided explosives site planning expertise to every US DoD agency at sites around the world. Together, we lead the industry in planning for DoD and Host Nation criteria with the newly-launched Siter software.

# Agenda

1 DIFFERENCES  
BETWEEN A TIER 1  
AND A TIER 2A

2 WHAT IS A TIER 1  
RISK ANALYSIS?

3 HAZARD ZONES

4 DATA REQUIRED  
TO RUN A TIER 1 RA

5 COMMON  
MISCONCEPTIONS  
AND CLARIFICATIONS

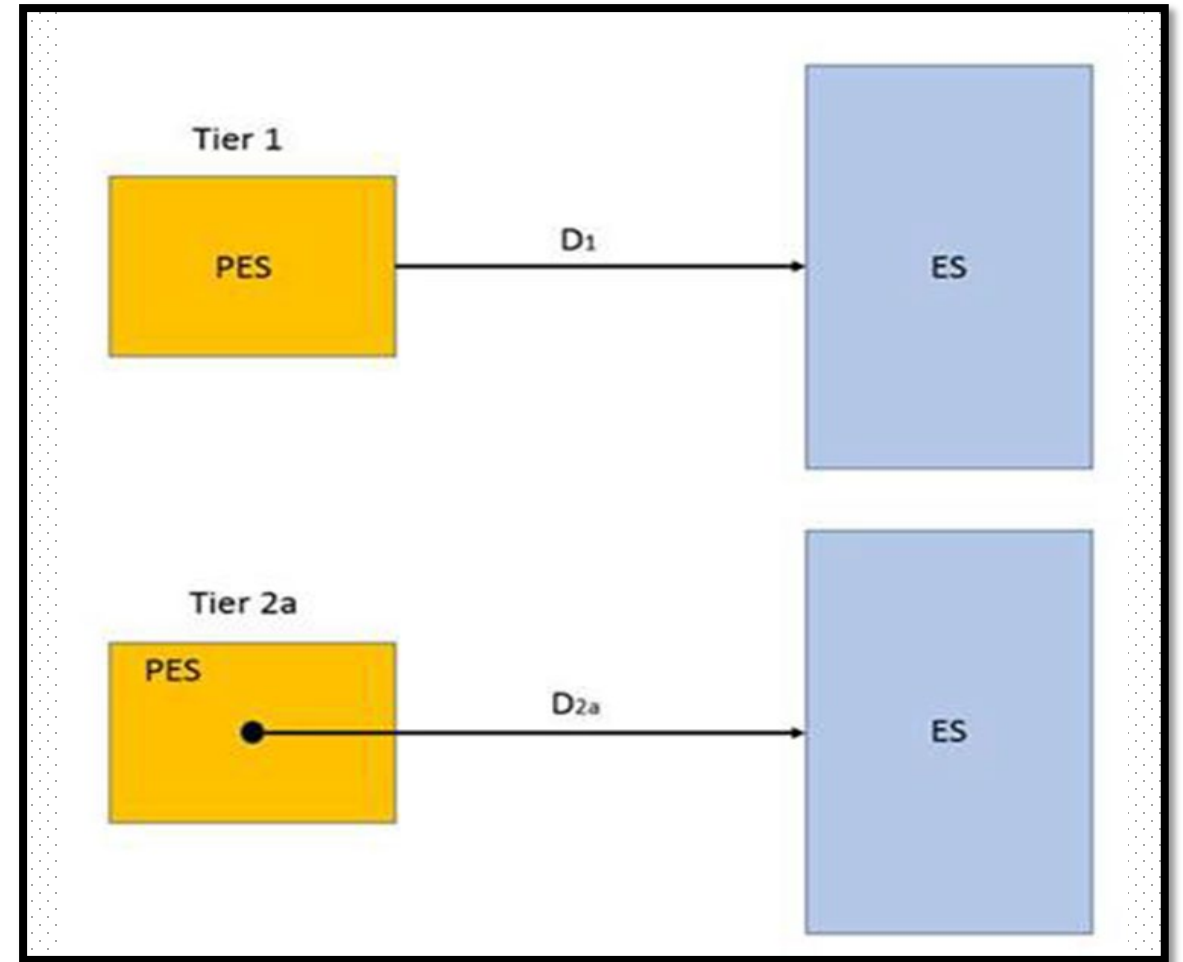
6 TAKEAWAYS & CLOSING

# DIFFERENCE BETWEEN A TIER 1 AND A TIER 2A

Tier 1 – Quick Analysis

Tier 2a – Commander's risk acceptance or  
waiver request

Tier 2b – Formal Quantitative Risk  
Assessment (QRA) via DDESB TP-14



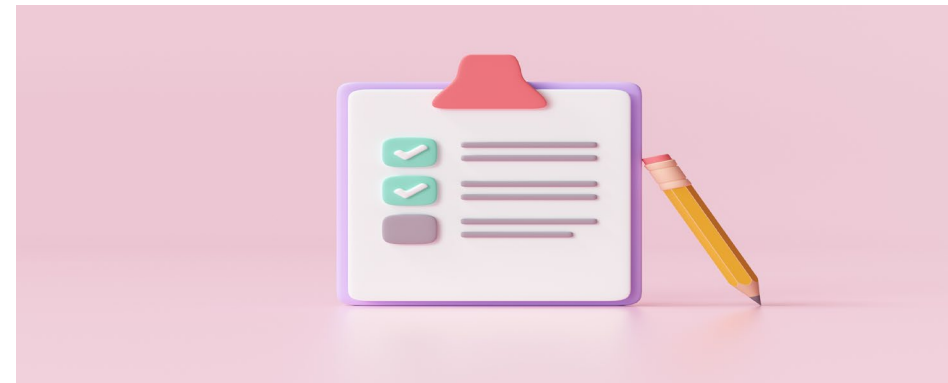
Visual courtesy of ESS Software V6.1.4 Training Guide



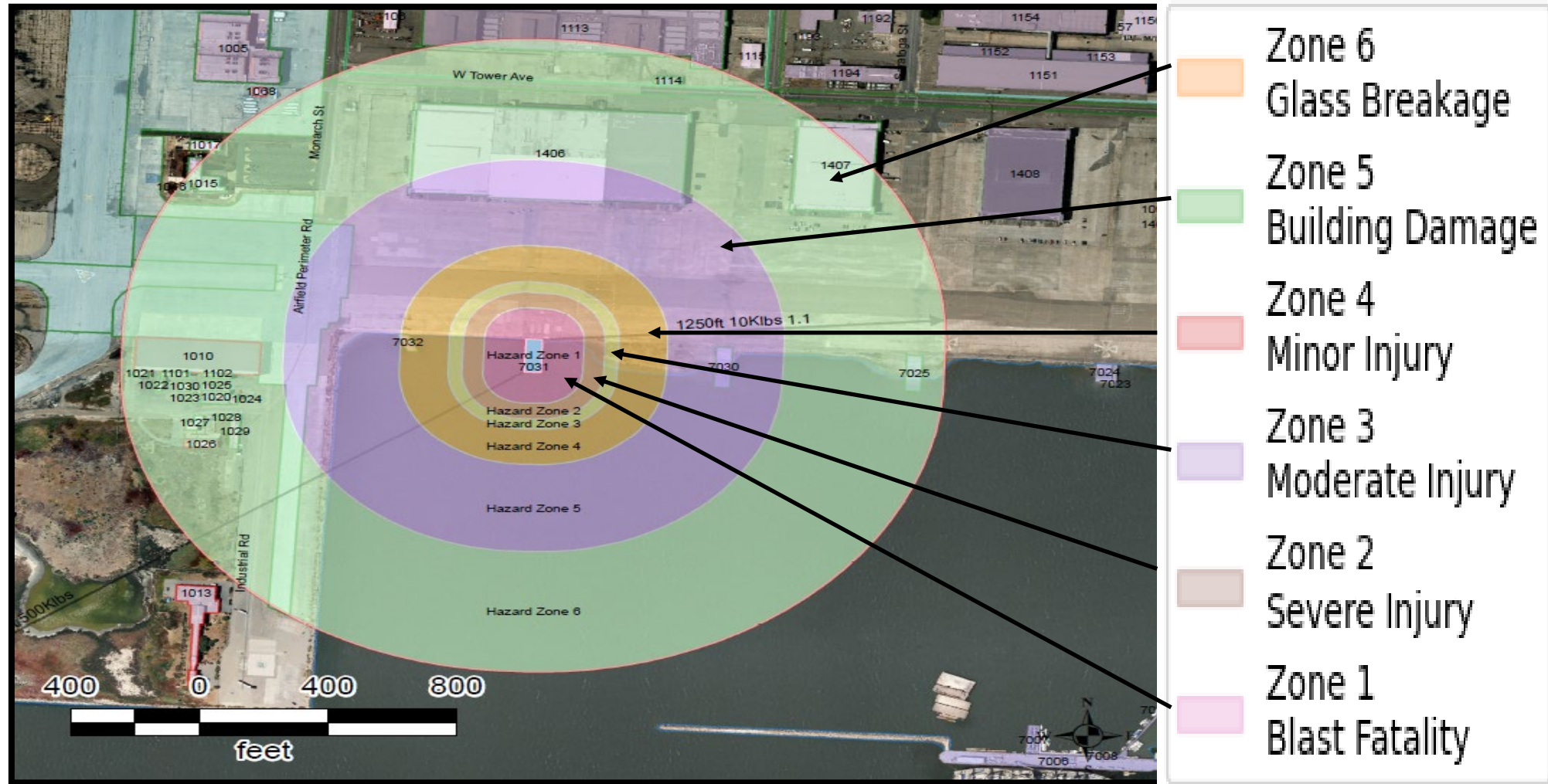
# WHAT IS A TIER 1 RISK ANALYSIS?

Identifies explosive consequences using predefined accident scenarios.

- Uses 6 Hazard Zones (Visually) to estimate injury and building damage based on NEW and HD per facility the Tier 1 is ran for.
- Measures distances from the edge of the PES to the edge of the ES.
- Helps support go/no-go decisions for site planners and commanders.



# 6 Hazard Zones



# DATA REQUIRED TO RUN A TIER 1 RISK ANALYSIS

Most of the information is already inputted into ESS  
using your current database.

Additional info needed:

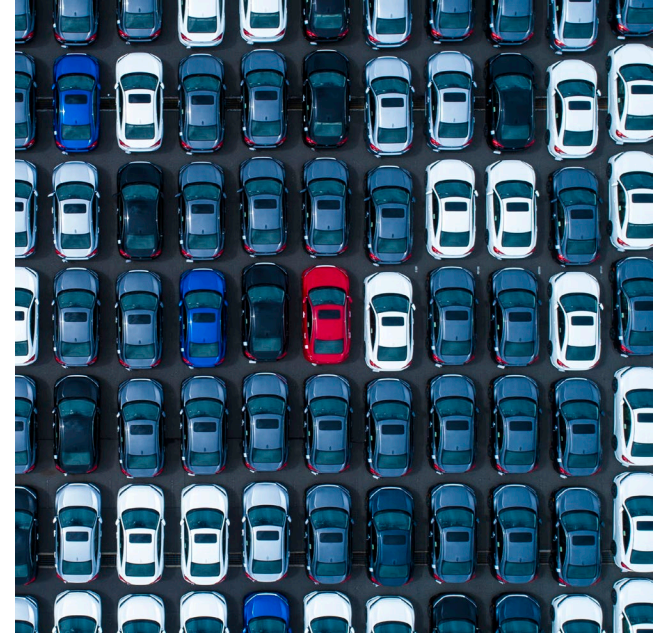
- Max # of people in each facility
- Bldg. height
- Total Cost (or Replacement cost)

Inputting this data will make the Tier 1 process  
more realistic.

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# COMMON MISCONCEPTIONS & CLARIFICATIONS

An issue we encountered was some assets not being picked up during analysis.

They were Utilities - Public Traffic Routes (PTR) – Parking Lots

Coordinated with Navy Ordnance Safety and Security Activity (NOSSA) & Naval Facilities Engineering Systems Command (NAVFAC) to get average price per pier for utilities, roads, and parking lots.



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- Differences Between a Tier 1 and a Tier 2A.
- What is a Tier 1 Risk Analysis?
- Hazard Zones
- Data Required to run a Tier 1 RA
- Common Misconceptions and Clarifications
- Takeaways & Closing



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Questions, comments, and closing discussion

# THANK YOU!