

# Public Area Security Enhancements

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# Two Points

1. Publication of PARAS 0014: *Blast Mitigation Strategies for Non-Secure Areas at Airports* (National Safe Skies Alliance, Inc.)
2. Collaboration between Airports and Consultants for Landside Security



## Blast Mitigation Strategies for Non-Secure Areas at Airports

Guidebook

National Safe Skies Alliance, Inc.

Sponsored by the Federal Aviation Administration

Thank You:

- Boise Airport
- Dallas/Fort Worth International Airport
- Fresno Yosemite International Airport
- General Mitchell International Airport
- Jacksonville International Airport
- Oakland International Airport
- San Antonio International Airport
- San Francisco International Airport
- San Jose International Airport
- Wichita Dwight D. Eisenhower National Airport



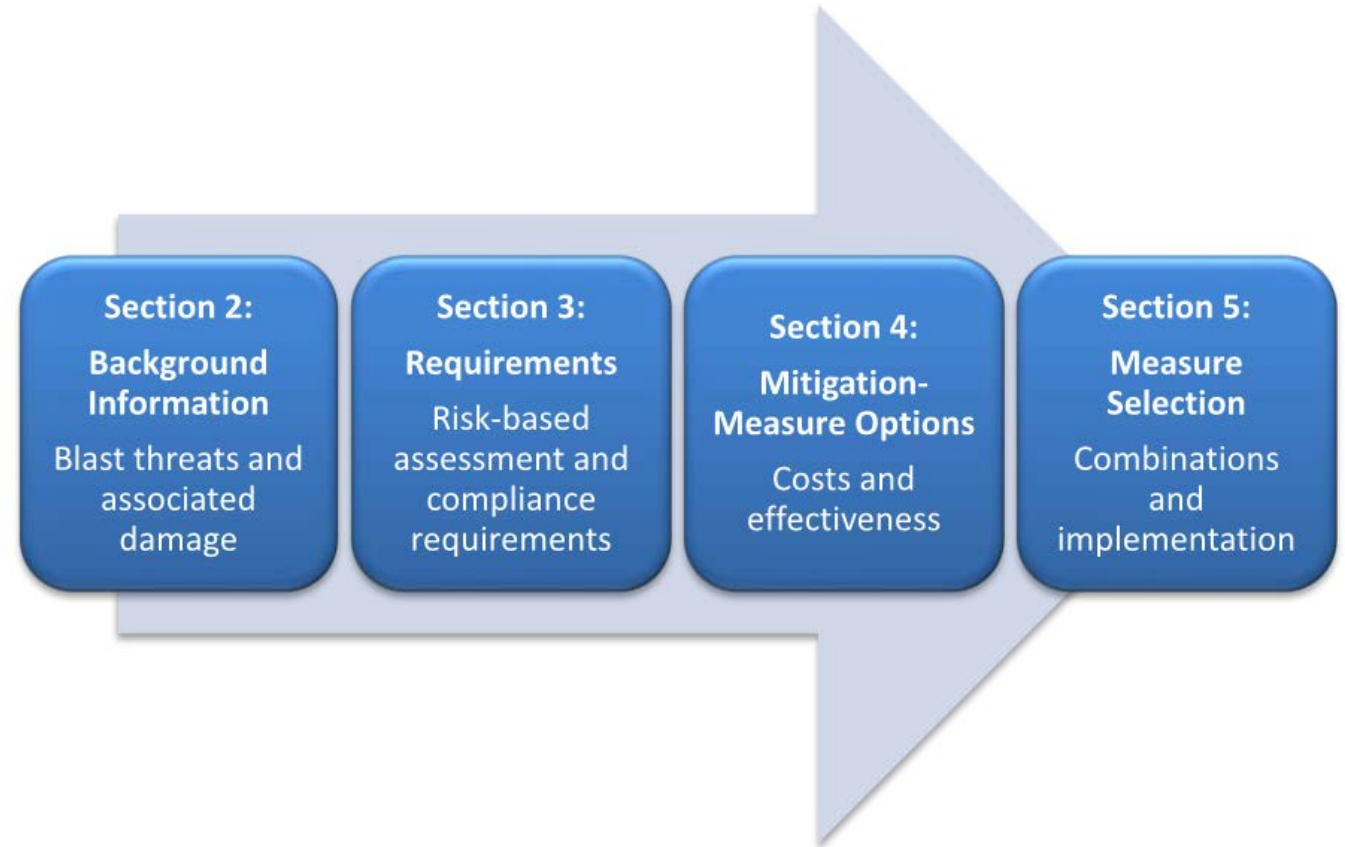
- Main challenges noted by airports regarding blast enhancements on the landside:
  - Buy-in by decision makers
  - Costs of the enhancements
  - Lack of clarity in determining what enhancements should be implemented

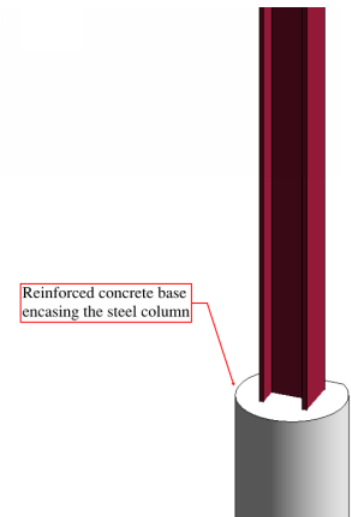


- Document industry best practices
- Include cost estimates
- Develop a framework to support decision-making

## Objective:

Guide airports in their development of a blast-mitigation strategy using a holistic approach to reducing risks.

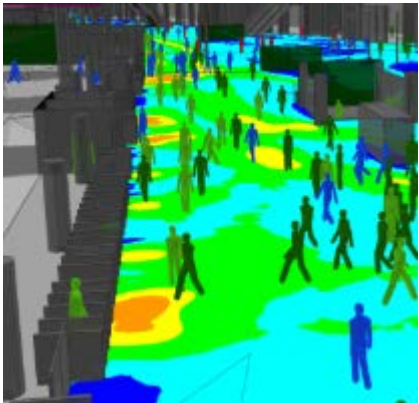




Source: Arup



Source: Arup



Measure Type	Low Cost	Impact on Passenger Experience	Quick to Implement	Can be Easily Modified Later	Not subject to human error	Ability to Deter	Ability to Detect	Ability to Disarm	Ability to Defend
Physical	X				X	X			X
Technological			X	X		X	X		
Operational		X	X	X		X	X	X	
Architecture	X	X			X	X			X

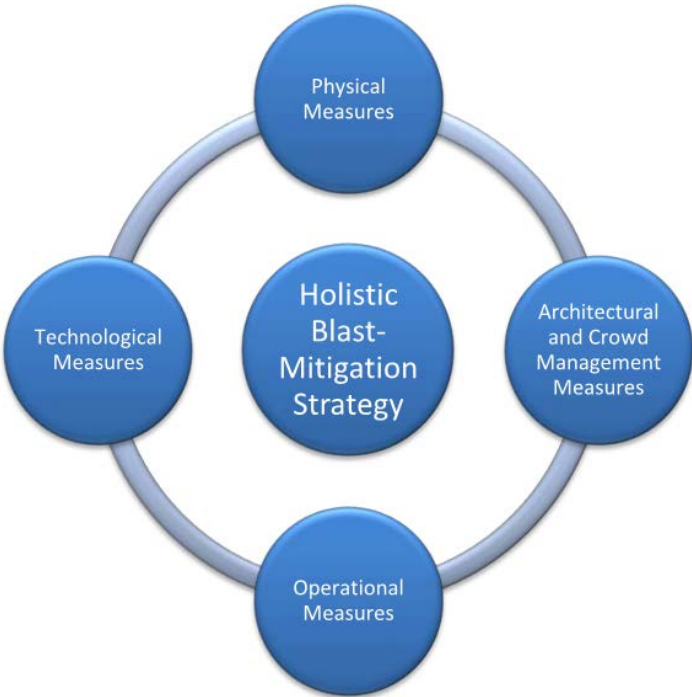




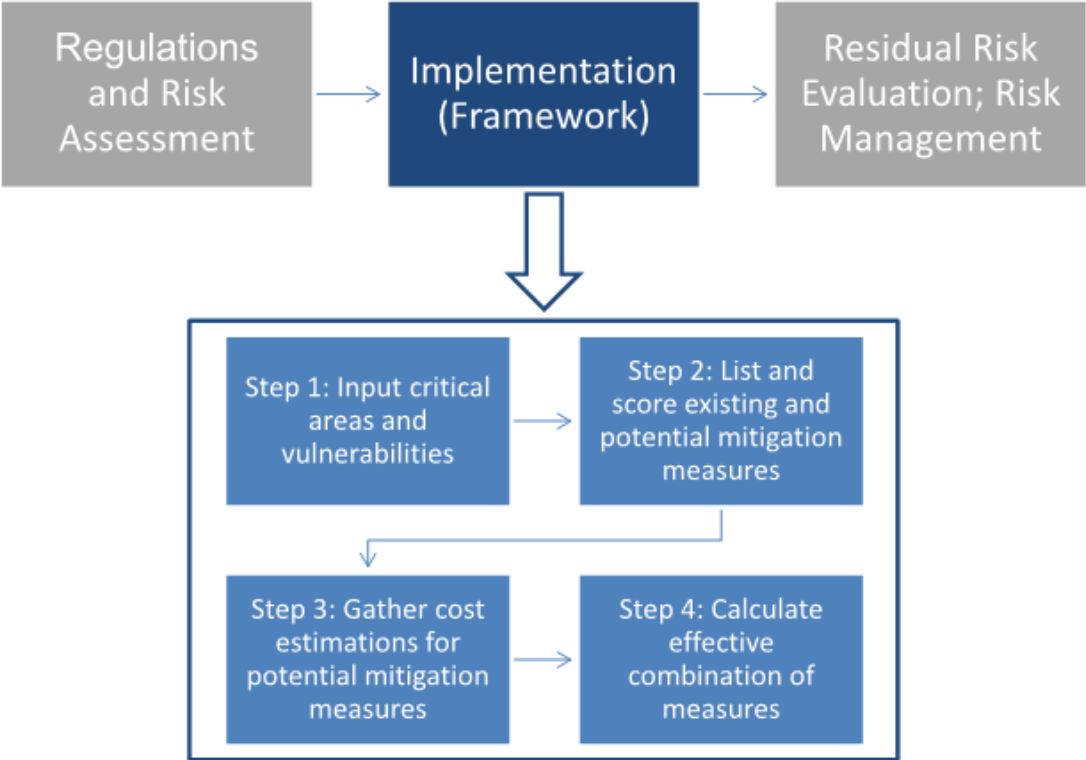
Table 5-3. Definitions for the Various HVM Tiers of Performance

Hostile Vehicle Mitigation	
Tier	Description
<b>Bronze</b>	Provides visual deterrent with limited vehicle physical impairment. Following impact with hostile vehicle, vehicle speed largely consistent, leaving the vehicle drivable. Examples include architectural bollards and raised curbs.
<b>Silver</b>	Provides visual deterrent with moderate level of vehicle physical impairment. Following a collision, a vehicle will sustain heavy damage but may still be drivable. Barriers are generally untested for hostile vehicle impact. Examples include jersey barriers, trees, street poles, and street furniture.
<b>Gold</b>	Provides visual deterrent with high level of physical impairment. Barriers have been assessed using engineering calculations and analysis. Does not have the impact and penetration assurance compared to a barrier that has been impact tested.
<b>Platinum</b>	Provides visual deterrent and significant physical impairment. Barrier is impact rated to ASTM, DOS, IWA, or any other industry-recognized standard. Barrier has a suitable vehicle penetration performance.

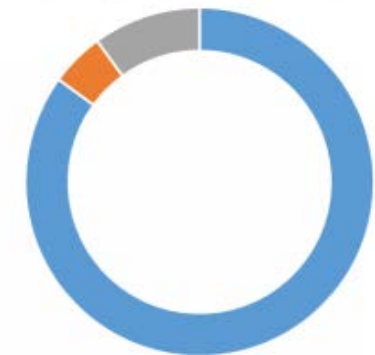
Tier	ROM Cost
<b>Bronze</b>	\$390,000
<b>Silver</b>	\$520,000
<b>Gold</b>	\$1,001,000
<b>Platinum</b>	\$1,300,000



Figure 5-1. Framework Process



Vulnerability Weighting: Arrival and Departure Hall



■ Life Safety ■ Commerce ■ Operations

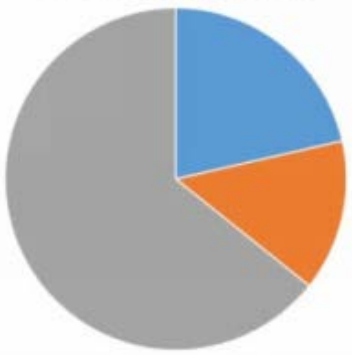
Vulnerability Weighting: Fuel Farm



■ Life Safety ■ Commerce ■ Operations

Tier / Score	Detect	Deter	Disable	Inform	Crowd Reduction	Protect People	Protect Property
Bronze	0	5	0	0	0	5	10
Silver	0	10	5	0	0	10	15
Gold	0	15	10	0	0	15	20
Platinum	0	15	15	0	0	15	30

Idealized New Airport

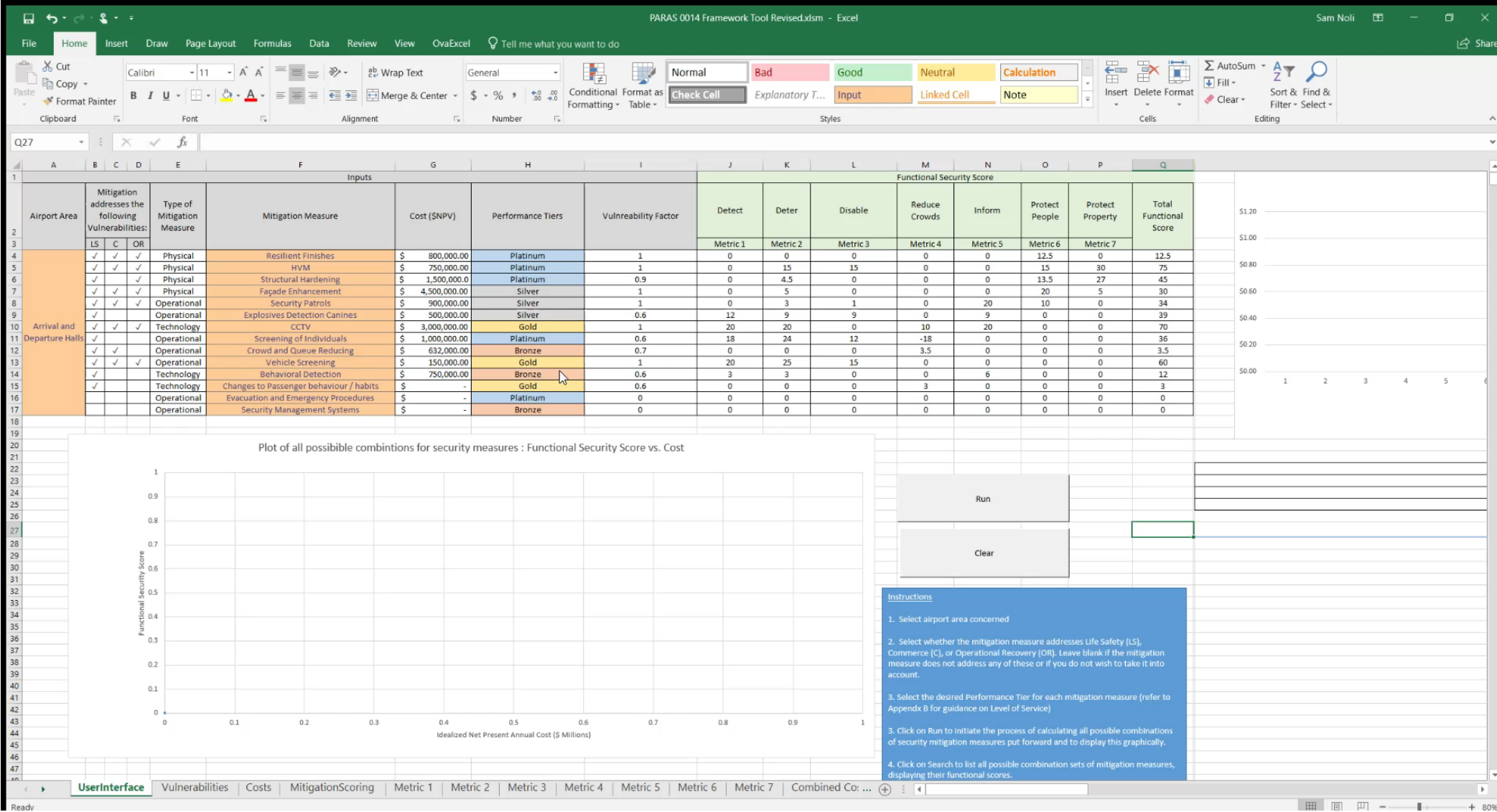


■ Operation ■ Technology ■ Physical

Idealized Existing Airport



■ Operation ■ Technology ■ Physical





# Collaboration

- Because security requirements on the landside are not prescriptive, consultants can facilitate airports in:
  - Identifying vulnerabilities and risks; and prioritizing mitigations
  - Provide knowledge about what other airports are doing around the world, especially from a design perspective
  - Provide expertise from technical subject matter experts
  - Support airport security departments in development of business cases to get buy-in from decision-makers



Thank you!