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



PARAS 0014

August 2018

Blast Mitigation Strategies for Non-Secure Areas at Airports

Guidebook

National Safe Skies Alliance, Inc.

Sponsored by the Federal Aviation Administration



- 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

Thank You: Boise Airport o Dallas/Fort Worth International Airport Fresno Yosemite International Airport 0 General Mitchell International Airport 0 Jacksonville International Airport 0 Oakland International Airport 0 San Antonio International Airport 0 San Francisco International Airport San Jose International Airport Wichita Dwight D. Eisenhower National Airport



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





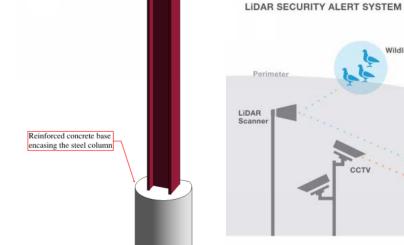
Objective:

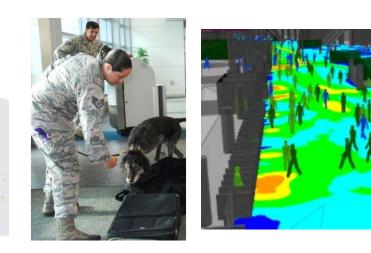
Guide airports in their development of a blast-mitigation strategy using a holistic approach to reducing risks.













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	х				х	Х			х
Technological			Х	х		х	х		
Operational		Х	Х	Х		х	х	х	
Architecture	х	х			х	х			х

Wildlife = Safe

CCTV





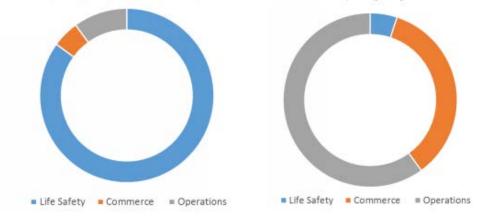
Table 5-3. Definitions for the Various HVM Tiers of Performance

	Hostile Vehicle Mitigation		
Tier	Description		
Bronze	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.	Tier	ROM Cost
	Provides visual deterrent with moderate level of vehicle physical impairment. Following a collision,	Bronze	\$390,000
Silver	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.	Silver	\$520,000
	Provides visual deterrent with high level of physical impairment. Barriers have been assessed using	Gold	\$1,001,000
Gold	engineering calculations and analysis. Does not have the impact and penetration assurance compared to a barrier that has been impact tested.	Platinum	\$1,300,000
Platinum	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.		



Vulnerability Weighting: Arrival and Departure Hall

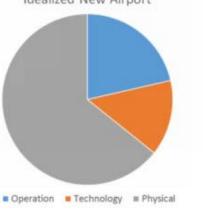
Vulnerability Weighting: Fuel Farm

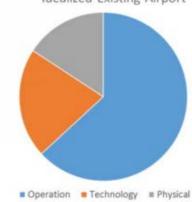


Tier / Score	Detect	Detect Deter		Inform	Crowd Reduction	Protect People	Protect Property		
Bronze	0	5	0	0	0	5	10		
Silver	0	10	5	0	0	10	15		
Gold	0	15	10	0	0	15	20		
Platinum	0	15	15	0	0	15	30		

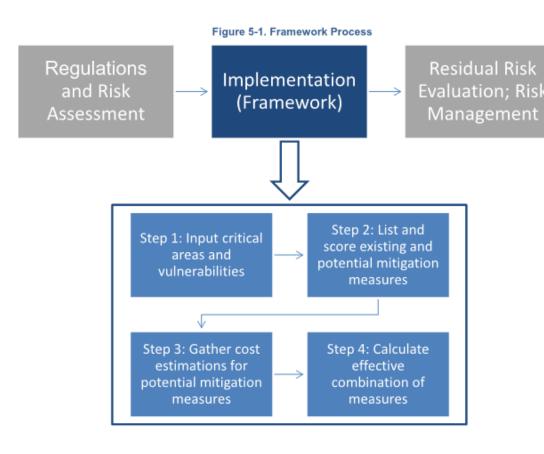


Idealized Existing Airport





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1		Operational	Crowd and Que		\$ 632,000.00	Bronze	0.7	0	0	0	3.5	0	0	0	3.5	50.20				
1		Operational	Vehicle S		\$ 150,000.00 \$ 750,000.00	Gold	1	20	25	15	0	0	0	0	60	\$0.00				
1		Technology Technology	Behavioral Changes to Passenge		\$ 750,000.00	Bronze Gold	0.6	3	3	0	3	6 0	0	0	12		1 1	2 3	4 5	i e
		Operational	Evacuation and Eme	rgency Procedures	\$ -	Platinum	0	0	0	0	0	0	0	0	0					
		Operational	Security Manage	ement Systems	\$ -	Bronze	0	0	0	0	0	0	0	0	0					
	Functional Security Score	1 1 2.9 2.8 2.7 2.6 2.5 2.4				measures : Functional S					Instructions 1. Select airport a	Run Clear								
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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!

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