# Association of Federal Enterprise Risk Management Annual Summit

Risk Allocation, Risk Deployment: How Federal Protective Service Uses a Risk-Based Approach to Optimize Scarce Resources and Protect the Federal Workforce

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### Agenda

- Explosive Detection Canine Program Overview
- Objective, Approach and Actions
- Findings and Recommendations
- Enhanced Deployment Model
- Practical Example
- Implementation Plan

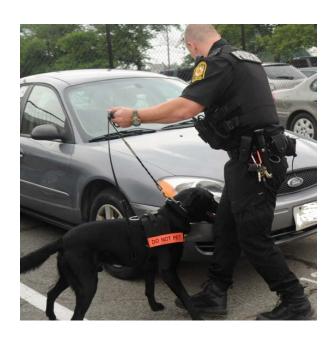


### **EDC Program Overview**

 FPS currently utilizes Explosive Detection Canine Teams (EDCT) to protect more than 9,000 federal properties and over 1 million occupants across 50 states and the US territories

#### EDCTs are

- a valuable asset, and provide the most effective method for preventing the introduction of explosives into federal space
- expected to spend 90% of their time performing canine related duties
- are an inherently unique resource that operates differently from other FPS resources



# Risk-Informed Deployment Model Objective and Approach

# Objective: to prepare for the threats of today and the oversight of tomorrow

#### Approach:

- Review current deployment process
- Identify and assess risk factors
- Develop a data-driven, risk-informed deployment model
- Document deployment process improvement recommendations
- Refine allocation approach

# Evaluation Approach Step 1 – Assess Current Model

### Interviews / Fact-finding

- Reviewed the current allocation and deployment processes
- Identified and assessed risk factors currently used
- Conducted facilitated sessions with subject matter experts and K-9 field staff to evaluate risk factors and relative importance/weights
- Mapped and validated current process
- Documented observations and recommendations

## Step 1 – Assess Current Model Examples of Documentation Reviewed

- Federal Protective Service Explosive Detector Dog Program Strategic Assessment
- Regional Canine Coordinator and Canine Commander Roles and Responsibilities
- Federal Protective Service Policy Directive FPS-05-004 "Explosive Detection Dog Canine Program"
- National Protection and Programs Directorate, Federal Protective Service, FPS Activity Report Canine Sweep Option, Functional Requirements Document
- Canine Sweeps Requirements
- Explosive Detector Dog Utilization Record
- Offense/Incident Activity Codes
- Activity Data
- Bomb Threat Stand-Off Distances

# Step 1 – Assess Current Model Other Deployment Methods

Agency	Centralized	Decentralized	Hybrid
FPS		х	
TSA			Х
USSS	Х		
US Capitol Police	Х		
Department of Defense	Х		

### Findings and Recommendations

EDCTs are a scarce and valuable asset, and their allocation and deployment can be enhanced to align to the *residual* risk associated with customer facilities.

The current allocation and deployment process utilizes inherent risk as the primary factor. However, inherent risk does not adequately reflect current threat, particularly explosive threat; it does not account for the effect of countermeasures, nature of the tenant, nor current activity.

Utilization of historic incident data, coupled with data about the nature and number of facility occupants, provides a more accurate depiction of residual risk. This data can be used to form a *Priority Portfolio* which can enhance day-to-day deployment activities.

### Findings and Recommendations

#### **Current Approach**

Includes factors such as specific and credible explosive threat, general threat information relating to techniques, tactics and procedures (including general information about targets or a class of targets), special events, facility risk and random activity.

Lacked a methodology for capturing explosives specific risk (residual risk).

# Evaluation Approach Step 2 – Develop Deployment Process

### Fact-finding / Gap analysis

- Identified and defined the key risk factors in the deployment process
- Reviewed data (e.g. inherent risk score, time of day, calls for service) to validate risk factors
- Conducted facilitated discussions with EDC subject matter experts and leadership to determine risk factors
- Identified and engaged with peer agencies
- Determined if the deployment factors could be modeled into a decision tree or process flow

## Step 2 – Develop Deployment Process Enhanced Deployment Model Criteria

- EDC Related Incidents The risk team used the subset of incidents most relevant to the EDC program, as defined by subject matter experts, to identify the average relevant incidents per facility.
- High Risk Tenants The number of relevant incidents in the buildings each customer occupies were examined against the number of buildings. Each customer has an overall concentration of EDC incident activity, and the customers with both the highest concentration of EDC work per facility and the highest EDC work overall were identified as high risk tenants.

## Step 2 – Develop Deployment Process Enhanced Deployment Model Criteria (cont.)

- High Occupancy Facilities The risk team measured facility occupancy using two data sets
  - the number of occupants within the facility, and
  - the number of tenant agencies within the facility.

Square footage was not used due to the number of large warehouses and parking lots with only one tenant that would be included and skew the results.

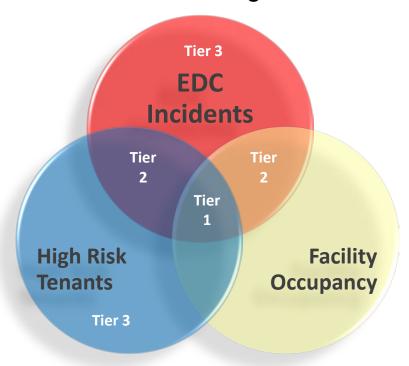
# Evaluation Approach Step 3 – Refine Deployment Process

### Develop model / Test model

- Developed a scoring algorithm and scorecard to assess risk profiles
- Determined risk scale, based on subject matter expert input and risk appetite
- Tested risk-based deployment process to encompass data and feedback
- Formalized model
- Determined communications and roll-out plan

## Step 3 – Refine Deployment Process *Priority Portfolio*

The enhanced deployment model tiers all facilities into a Priority Portfolio based on the following criteria:



- EDC Incidents Average annual EDC recorded incident data
- High Risk Tenants Based on the average frequency of EDC incidents at facilities occupied by the customer
- Facility Occupancy The number of employees and other personnel listed as occupants

# Step 3 – Refine Deployment Process Enhanced Deployment Model – Prioritization

#### Tier 1 facilities met all of the following three criteria:

- more than one EDC incident per year on average (FY12 FY14),
- high risk tenants onsite and
- a high occupancy facility (more than 100 occupants within the facility or more than five tenant agencies)

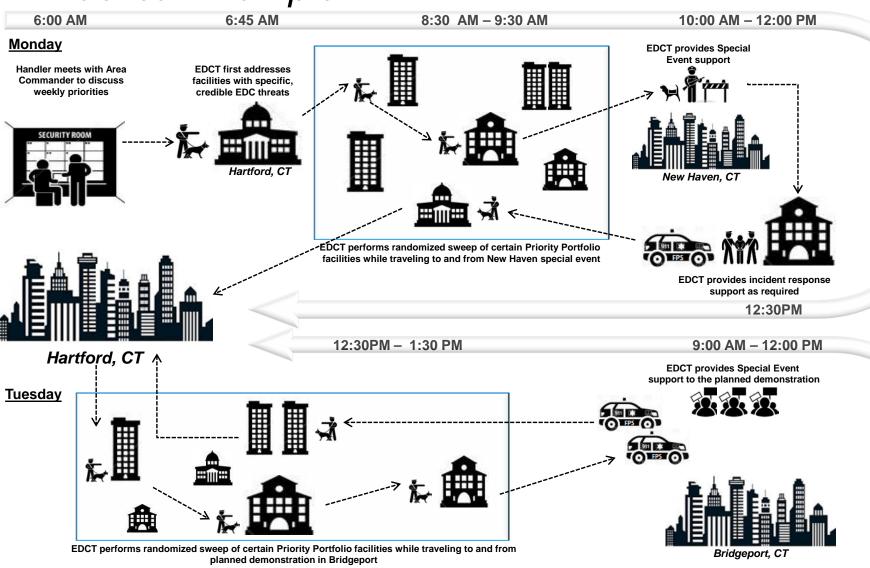
#### Tier 2 facilities were identified based on the following:

- more than one EDC incident per year on average (FY12 FY14) onsite and either
  - high risk tenants onsite or
  - a high occupancy facility (more than 100 occupants within the facility or more than five tenant agencies)

#### Tier 3 facilities met either of the following criteria:

- more than one EDC incident per year on average (FY12–FY14) onsite or
- high risk tenants

## EDC Deployment Model Review Practical Example



7:00 AM - 8:30 AM

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#### Implementation Plan

#### Deployment

- Utilize a consistent, risk-informed Priority Portfolio to deploy resources
- Instruct handlers on revised methodology
- Monitor adherence to new methodology
- Develop feedback loop to continuously validate assumptions
- Refresh data periodically with new incident data

#### Allocation

- Through development of deployment model, validate EDC resource allocation is generally aligned to workload (number of relevant incidents)
- Use workload and emerging threats to inform future allocation decisions

## **Questions?**