

### Building a Modern SOC: Best Practices From UKPD

Nathan Brown, Deputy Chief, University of Kentucky Police Department

Logan Steele, Major, University of Kentucky Police Department





### **About Us**

Nathan Brown, MPA, CPP, PMP, CPD

**Deputy Chief** 

University of Kentucky Police Dept

(859)218.2305

Nathan.brown@uky.edu

FBINAA Session #243

linkedin.com/in/nathan-brown-510b1278

Logan Steele

Major

University of Kentucky Police Dept

(859)218.2377

Logan.steele@uky.edu

FBINAA Session #288

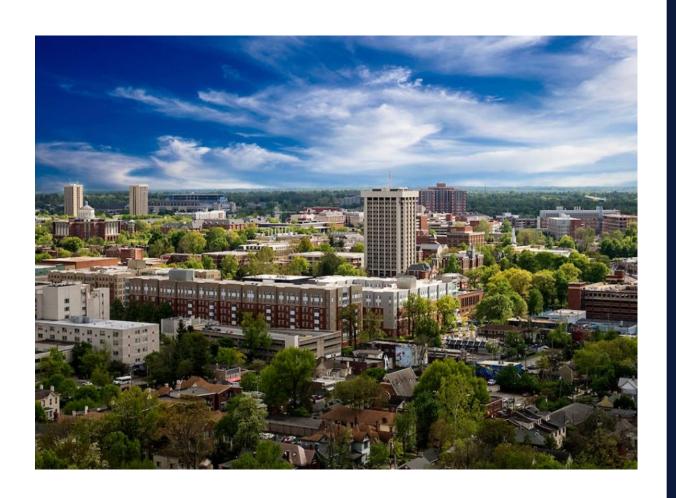
www.linkedin.com/in/steele-logan





### University of Kentucky

- Founded in 1865
- President Eli Capilouto
- 34,000 enrollment
- 26,000 employees
- 325,000 Lexington
- 75,000 campus population
- 900 acres
- 3 major medical centers\*







### Learning Objectives

- Participants will be able to articulate a compelling case to explore the need for a security operations center (SOC) through University of Kentucky's case study.
- Participants will understand the understand stakeholder engagement and how to survey needs to plan for a SOC.
- Participants will understand the design considerations for constructing a new soc.
- Participants will learn the elements that comprise UK's new soc.





### Campus Adjacent Shooting (Nov. 3)







### **Community Expectations**

- Expectations from our community:
  - Quicker response times
  - Quickly share information
  - Accurate situational awareness
  - Hollywood artificial intelligence
  - Quicker investigations







### Community Stakeholders

#### City Within a City:

- Internal stakeholders
  - Facilities (Utilities and Works)
  - Information Technology
  - Public Safety (Police, Security)
  - Students, Faculty, Staff, Visitors
  - Media
- External (Lexington)
  - Non-UK First Responder Agencies
  - Emergency Management
  - Lexington Residents
  - City Leaders
  - Media
  - Opportunists

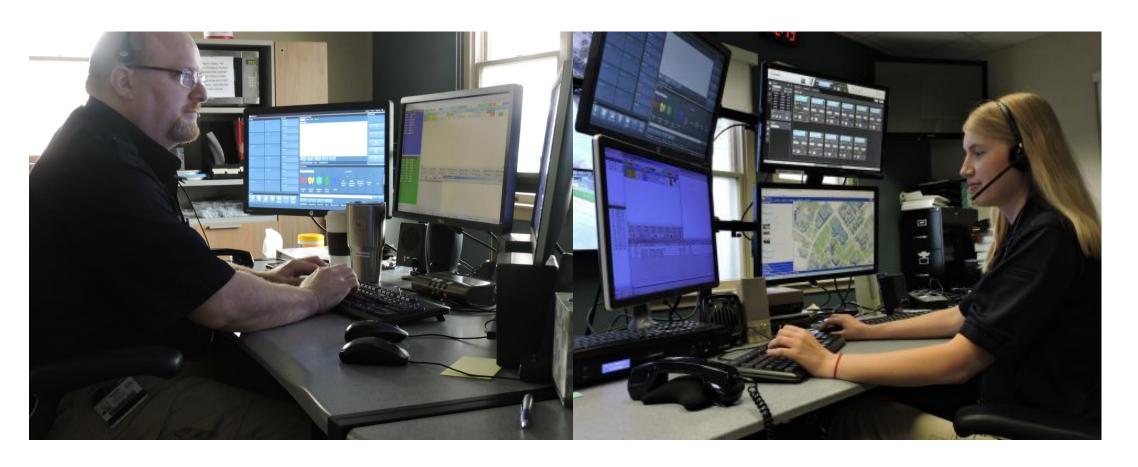
#### State and Beyond:

- 120 Counties of UK
- UK HealthCare Services
- State Leaders
- Parents
- Fans
- Media





# Police Dispatch (Legacy)







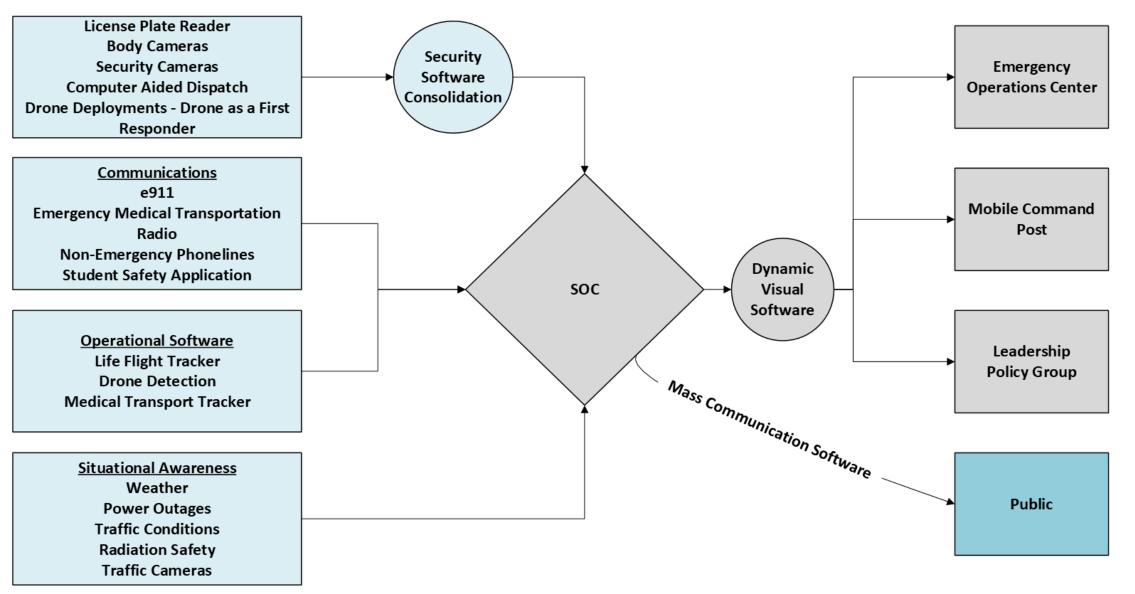
### Scope of Security Operations Center

- What is your purpose of the SOC?
  - UK "To protect public safety: anticipate, respond, inform, restore."
- Who (disciplines) needs to be in the SOC?
  - UK Police Communications, Police Operations, Intelligence, Physical Security, Emergency Medical Dispatch
- Who (disciplines) doesn't need to be in the SOC?
  - UK Fire Department, Emergency Management/EOC, Physical Plant, Cyber
- What functions is the security operations center responsible for? ...

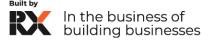




### **Information Overload - Sources**







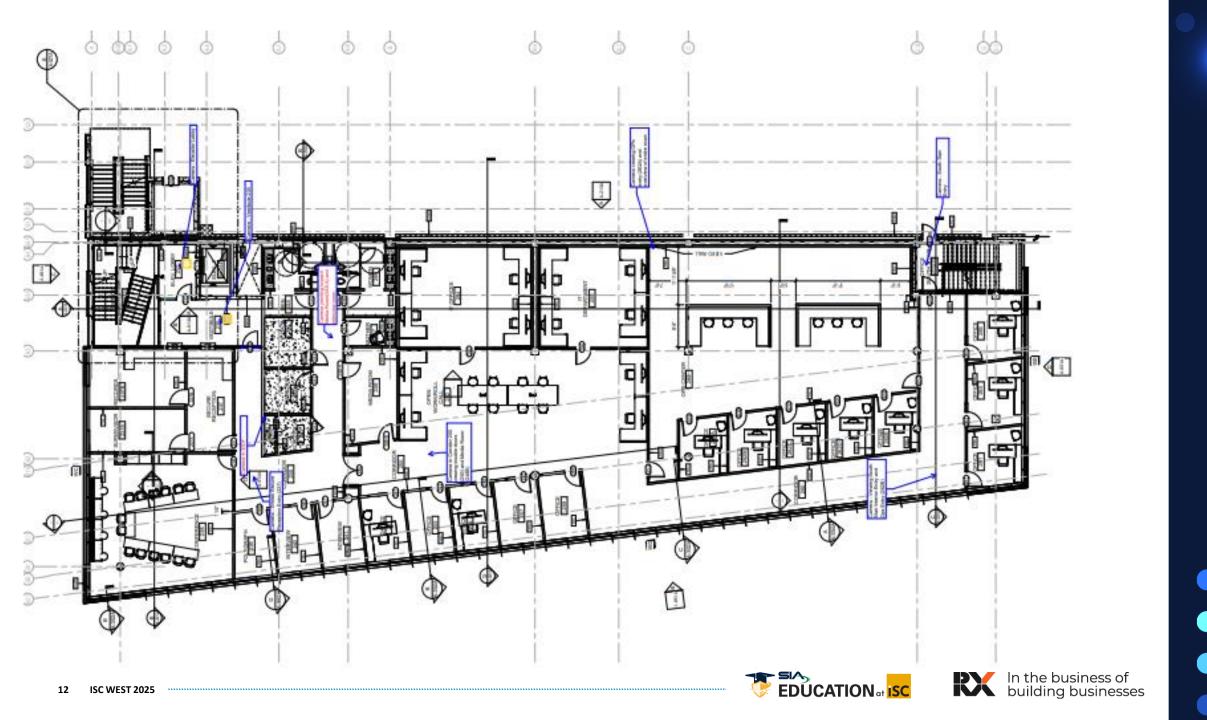
### **Room Considerations**

- Room Layout
  - Outlet Availability and Locations
    - Power
      - Emergency Power
    - Ethernet
  - Screen Use and Locations
    - Which screens will be used for camera monitoring, dashboard monitoring?
    - Will screens be dedicated for Satellite/Cable monitoring?
- Environment
  - Ambient Lighting vs. Natural Lighting
  - Temperature Control
  - Noise levels

- Communication methods
  - Video Conferencing cameras
  - Team station layout
  - Supervisor location
- Server Location
  - What in that room is connected to emergency power?
  - Does it have the correct amount of HVAC to control the temperature?







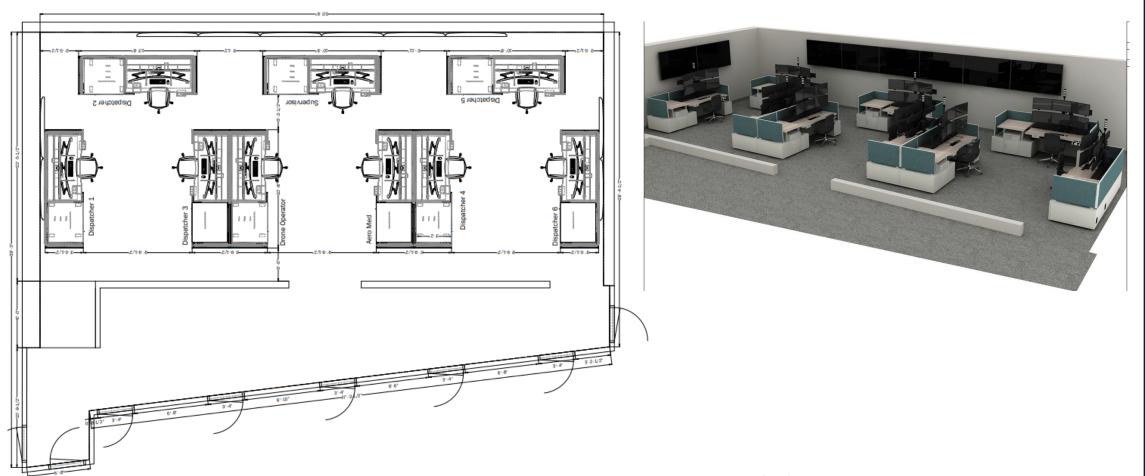
### **SOC Power**





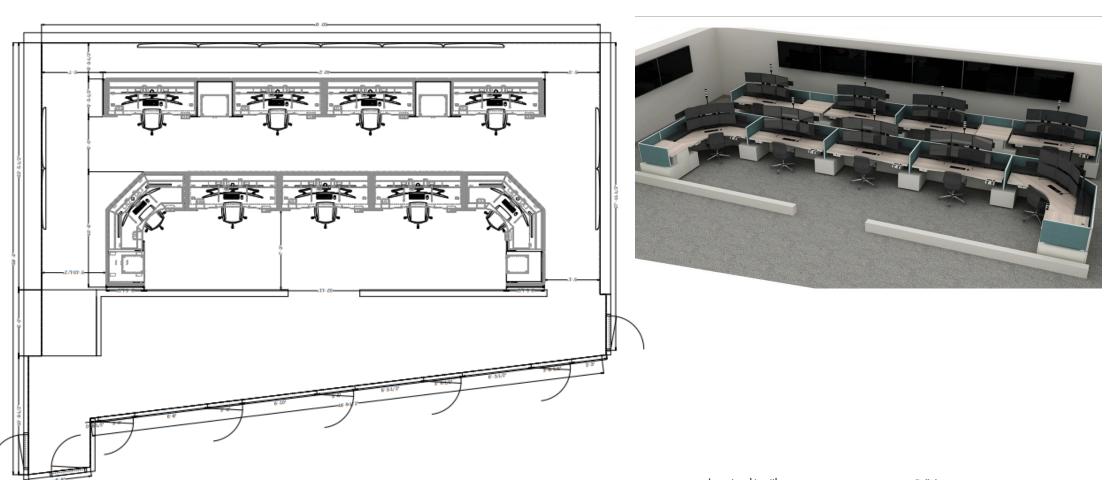


# Layout 1



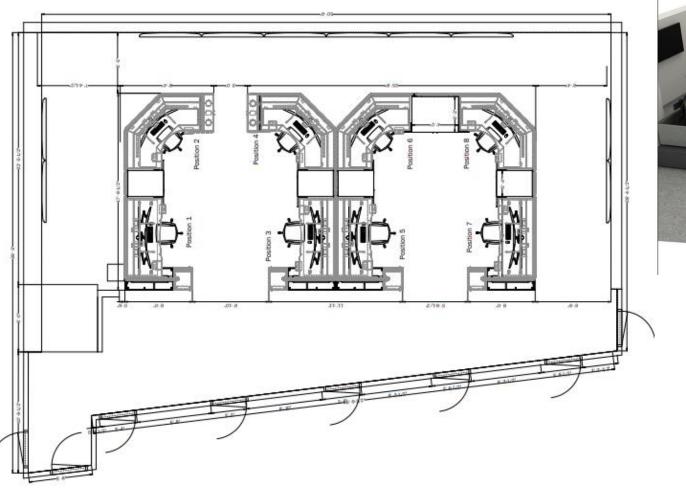


# Layout 2





# Layout 3







### **Operational Considerations**

- Personnel
  - Generalist vs specialists
  - Chain of command
  - Specialty support
- Security requirements
  - Screening/background
  - CJIS awareness
  - Access control (dual)
  - Terminal dual authentication
  - Security cameras
  - Data security

- Radio/Phone Operations
  - Headsets
  - Backup operations
  - Channel support
  - Redundancy
  - Encryption
  - Instant playback
  - Station assistance lights





### **Advanced Operations**

- Drone as a First Responder
- Situational awareness monitoring
- Real-time video aggregation
- License Plate Recognition alerts
- Inter-agency cooperation
- Lockdown
- Utility outages
- Traffic and engineering







### Considerations

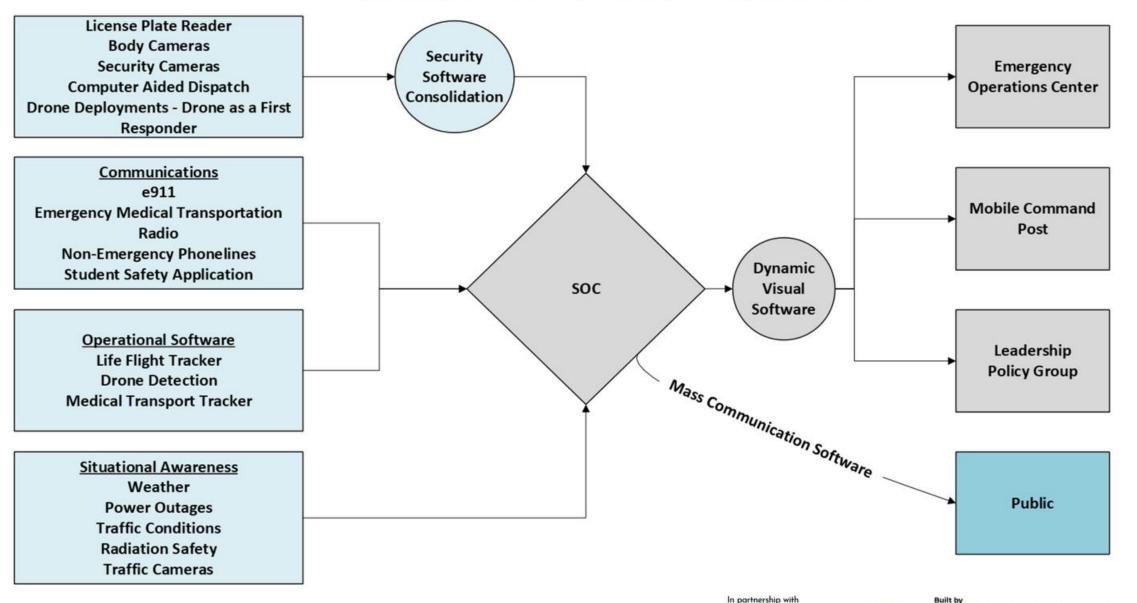
- Budget
  - Seek partnerships
  - Expect recurring costs
  - Storage is expensive but coming down
  - Software is expensive and not coming down
  - Capital refresh planning
- Training
  - Cross-train
  - Table-top and full-scale exercise
  - Spot tests
  - Awareness training for community
  - Patrol commander training

- Information Technology
  - CIO support crucial
  - Ports
  - Wifi
  - Communications redundancies
- Full systems failure
- Call center rollover





### Information Overload - Sources









# Questions? Thank you!

Have thoughts about SIA Education@ISC?

Scan the QR Code on the left to provide your feedback on SIA Education@ISC Sessions at ISC West



