

Sensor Overload! – Impacts of NG9-1-1 on System Design, Workforce Training, and Cyber Security for the Emergency Responder Community



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Topics to be covered



- NG9-1-1
- Internet of Things
- Cyber
- Risk Management Framework
- Training

Legacy 9-1-1 Operational Architecture

(10 years ago)

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Information Sources

*Mostly analog communication of information;
very little standards-based infrastructure*



Telephone/E911 Infrastructure



Municipality GEO Files



National/State/Local Databases



RMS & MIS Systems



Legacy & 3rd Party Systems

Processing & Information Transfer

*(Core functional and data service components, & foundation framework
service components, including enterprise services)*



Core CAD
Functional
Services

- Enter calls for service
- Determine event response
- Route event
- Recommend units & resources
- Monitor & control events and units
- Close events



Core CAD
Data
Services

- Store and manage CAD data
- Service CAD queries
- Support required CAD database, reporting, and audit operations



Foundation
Framework
Services

- Core Enterprise Services (e.g., Security, Portal, Messaging, Alerts & Notifications, Collaboration, Discovery, Enterprise Management, System /Disaster Recovery)
- GIS Support
- Interface Management
- Reporting & Printing
- System Training & Testing
- System Administration & Control

Custom Interfaces

User Experience

*Call Takers; Dispatchers; Supervisors;
Responders; Decision Makers; Administrators*



Thick Clients

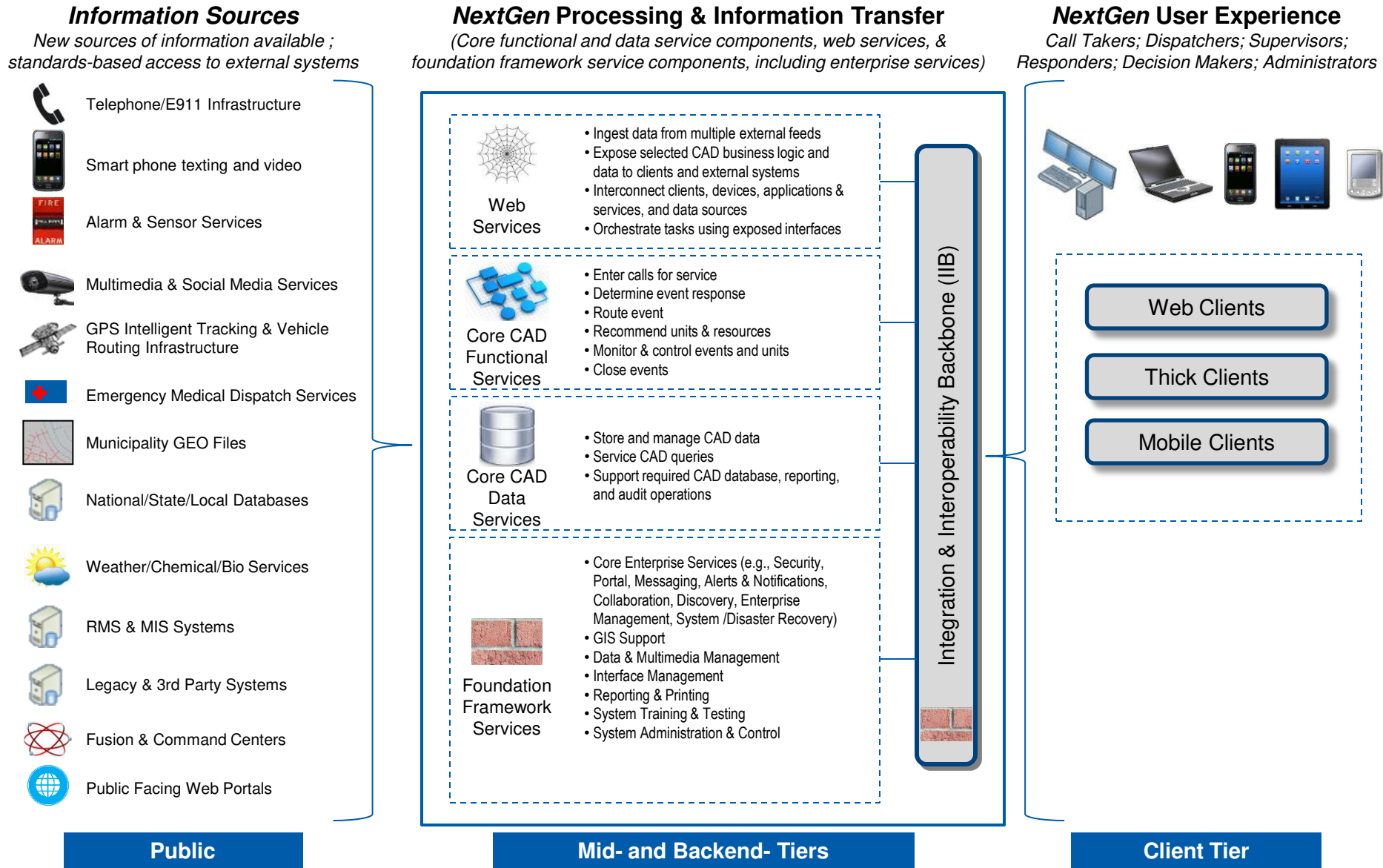
Mobile Clients

Public

Mid- and Backend- Tiers

Client Tier

NG9-1-1 Operational Architecture



Internet of Things



Orthogonal Sensors



Cameras / Visual Data



Cellular traffic / 911 Usage
/ Beacons, etc..



Crowd Sourced / Social Media
(aggregated and anonymized)



Other: Acoustical, RF, Chem,
Smoke, Water, etc..

Dedicated Bio-detection Sensors



Standoff Sensor



Bio-discriminator



General Particle
Counter



Presumptive
Confirmer

Existing Environmental Monitors



Automated Weather
Station



Air Quality Monitor



Local Chemical
Monitor

The Cyber Threat Is Real

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Public · Hosted by Operation Police State- Shut Down The Cops

★ Interested

+ Going

📧 Invite

🕒 25 July - 8 August
25 July at 10:00 to 8 August at 10:00 in UTC+02

📍 Everywhere and Online

About

Discussion

Details

#OpPoliceState #ShutDownTheCops #FuckThePolice #FuckTheNWO

Greetings citizens of the world. It has come to our attention that various different police departments around America have been getting away with coldblooded and unpunished murder. For too long have we sat around and watched police brutality comfort its way into society while a police state has been forming its cement blocks around our very existence. We, the innocent people, have been harassed, assaulted, kidnapped and imprisoned for exercising our rights in all over the world. Homeless people have been targeted by the police and shot dead in many occasions, in San Francisco, Utah and New Mexico.

GUESTS

100
interested

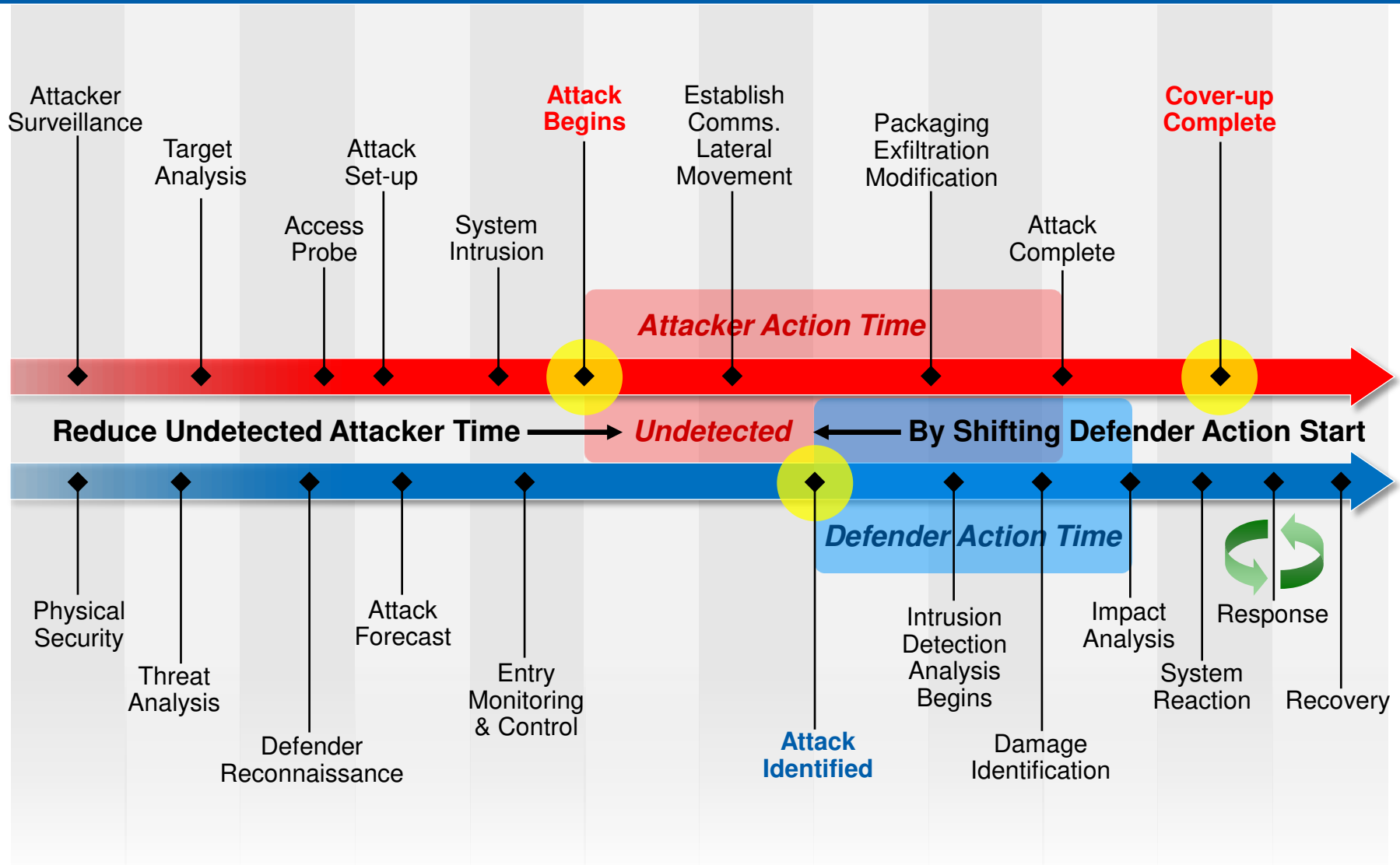
63
going

1k
shared with

INVITE FRIENDS

➦ Add friends to this event

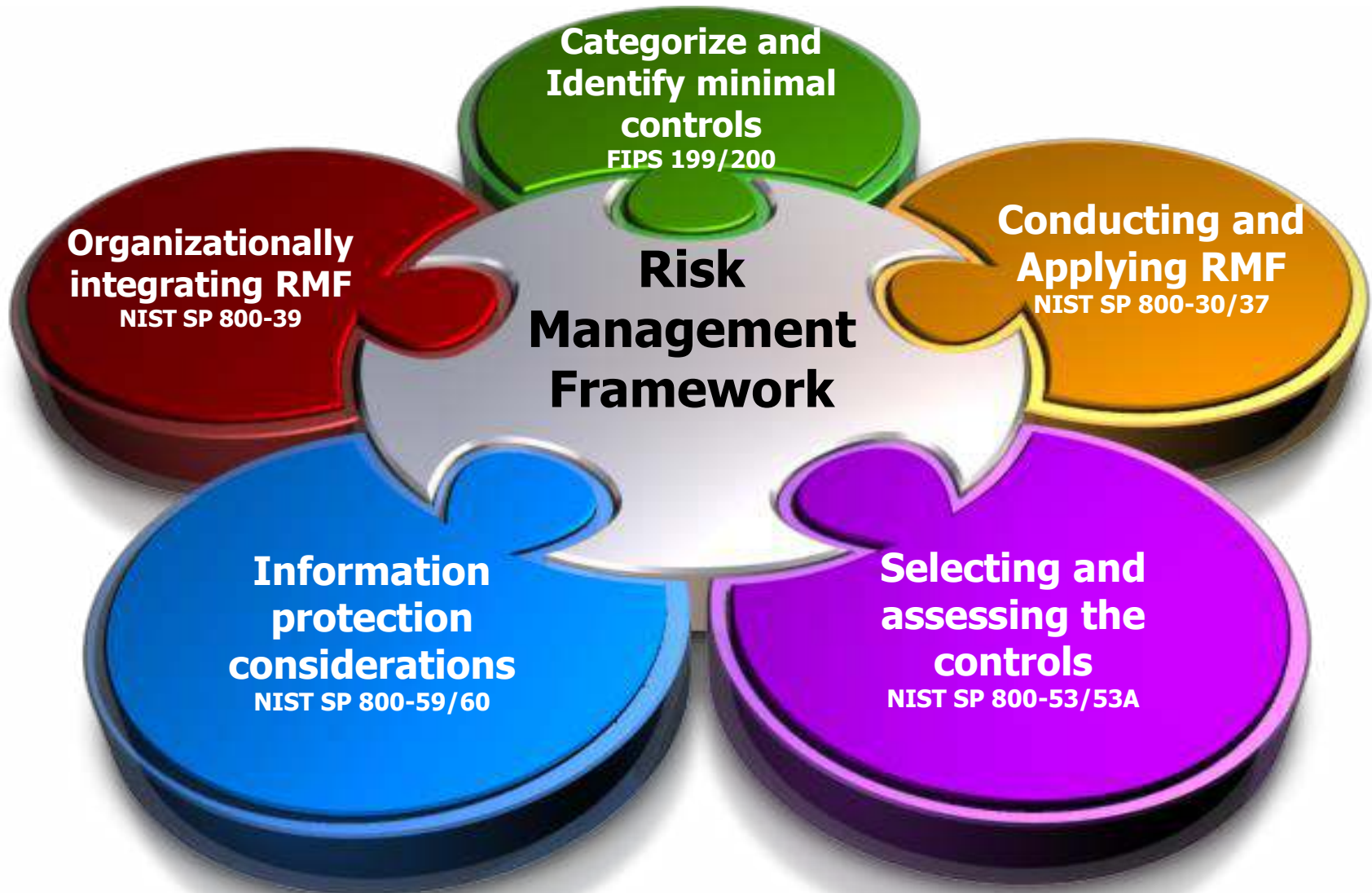
Fundamental Cyber issue is Temporal



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Executive Order 13556, Controlled Unclassified Information (CJIS) NIST SP 800-171

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- Call Taker
- Dispatcher
- Supervisor
- System Administrator

Chief Information Security Officer:

- Cybersecurity
- Computer emergency response team/computer security incident response team
- Disaster recovery and business continuity management
- Identity and access management
- Information privacy
- Information regulatory compliance (e.g., CJIS, HIPAA, etc)
- Information risk management
- Information security and information assurance
- IT investigations, digital forensics, eDiscovery
- Security architecture

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THE VALUE OF PERFORMANCE.

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