“People come to New York City when they find out it is safe. They come as tourists, they come to start businesses, they come to work, they come to get an education, and they come to use our hospitals. It all starts with low crime.”

New York City Mayor Michael Bloomberg at the US Conference of Mayors
January, 2013
Washington DC

• Since 1970, a 10% increase in crime rate corresponds to a full 1% decline in population
• Each 5% increase in the crime rate, doubles the rate of decrease in population

University of Michigan,
Public Safety and Cities, 2010
Your Challenges:
Resources, Equipment, Mandates

Resource Constraints
- Capital Budget Constraints
- Operating Budget Reductions
- Staff Reductions

Aging Infrastructure
- Aging Equipment
- Equipment Failures
- Higher Energy and Repair Costs

Sustainability Goals / Mandates
- Unfunded Mandates to Reduce Energy & CO₂
- LEED and Energy Star Certifications
- Voters' Green Expectations
Guaranteed Performance-based Solutions – Address Your Challenges

- Make facility & infrastructure improvements
- Reduce energy use and associated expenses
- Your energy savings finance your improvements
- Siemens guarantees savings

Build Real Time Situational Awareness

Success Guarantee

Finance

Improvements
Modernization
Optimization
Energy Management

Savings
Energy Usage
Operation
Energy Supply
Statistics

- City of Atlanta – Total Crime has decreased 23% from 2008
- Yet the Police force has increased less than 12%
- Total GDP has grown (slightly) during the same period, while population has increased
- Key is use of force multiplier technologies and community policing
Police Operations: Video as a force multiplier...Public and Private
Police Operations: Dashboards and Analytics

- Map events with impact on geo-spatial display
- View crime fighting trends
- View officer situation on calls for service
- Essential for predictive policing model
Police Operations: Predictive Policing

- Derived from Walmart experience among others...
- Uses crime fighting analytics with seasonal influences to target areas of likely crime
- Results are impressive in accuracy and realization of a ROI
- Techniques applied to a 500x500 sq ft block

Start of micropolicing test

Crimes/day

2010-2011

2011-2012

Courtesy: LAPD
Police Operations: License Plate Recognition

- Automatic notification for stolen vehicles, hit and run, criminal pursuit
- Allows coordination with other state/federal agencies
- Real Time centers combine plate information with open warrants, past history, etc. to determine best response
Police Operations: Use “Smart” Video for Force Multiplier

- Track individuals, vehicles between multiple cameras
- “Smart Software” Surveillance
  - Allows events to be “pushed” to operators automatically

Detect Objects Left Behind
Police Operations: Gun Shot Detection

Intelligent, Rapid Response:

Acoustical targeting technology detects gun shots
- Intercepted via head-end onto Event Management system
- Cameras called-up automatically for real-time analysis
- Block cordoned off from traffic via ITM
- Law enforcement dispatched, wounded bystanders evacuated
Police Operations: Mobile Security Assets

- 30 minute installation time average
- Wireless Broadband IP
- Use signage and/or flashing notification of surveillance activities
- Pan-tilt-zoom for improved situational awareness
- Use megapixel cameras for improved field of view (fewer cameras)
- Use initially in construction areas for construction equipment, then repurpose for public areas, or for “hot spot” control
County Services: Facilities Protection

ELEMENTS OF THE THIRD LAYER OF DEFENSE

- Architectural
- Structural System
- Building Envelope
- Mechanical Systems
- Plumbing and Gas
- Electrical Systems
- Fire Alarm Systems
- Communications and IT
County Services: Enhanced Public Safety with Savings

Combined Efficiencies:

IP Enabled "Smart Lighting"
- On-demand lighting for public safety purposes
- Integrated with IP cameras for Public Safety applications (surveillance)
- Integrated with License Plate Recognition (LPR) system for law enforcement applications
- LED system saves City over 80% in annual energy and maintenance savings
County Services: Enhanced Public Safety with smart technology

Combined Efficiencies:

• “Smart Software” Surveillance
  • CCTV used for monitoring public gathering locations
  • CCTV equipped with analytics software to monitor for monitoring track safety (man down)
  • Prioritized when train enters public zone, or for underground surveillance
  • Integrated with train control software
County Services: Optimal Solution: Total Campus Approach

Technology Enablers and Trends:

1. Convergence of IT – PSIM+
2. Hosted Solutions – Leveraging the cloud
3. Smart Buildings – Intelligent Network Assets
4. Centralized Operations – Campus Fusion Center
76% Organizations say that rules governing physical access are being enforced manually today.

79% Organizations say that compliance drives a significant portion of their security spend.

41% Organizations admitted they had some or no control over their physical identity population.

Source: IDG Research, Physical Identity and Access Management, June 2012
Services: Identity Management driven by Regulatory compliance

- Telecom
  - TL-9000

- Petrochem
  - CFATS

- Finance
  - GLBA

- Government
  - FIPS 201, HSPD-12
  - ICAM

- All Organizations
  - Sarbanes-Oxley
  - SAS 70, ISO-2700

- Energy
  - NERC/FERC

- Healthcare
  - HIPAA Title II

- Airports
  - TSA, SIDA
  - AAAE

- Banking
  - Basel II,
  - OCC,
  - CEWA

Courtesy; Quantum Secure

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Jan. 2013

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Command Center

- Central Point for all Security Coordination, Surveillance, Command and Control

- Use GIS maps to visualize critical areas

- Protected environment for security servers, routers, and personnel

- Web-based access to applications for mobility

- Mass notification for intelligent response to critical situations (“easy” button)
Advanced Solution Design: Intelligent Response™

Mitigate
- Risk Analysis
- Scenario Planning
- Simulation Services
- Public Awareness

Prepare
- Intrusion Detection
- CCTV
- Access Control
- Fire Detection
- Video Analytics
- Emergency Call Stations

Respond
- CAD
- GIS
- Two Way Comm.
- Mass Notification
- Evacuation Mgmt.
- Crisis Mgmt
- Resource Mgmt

Recover
- "Post Event Analysis" as input for prevention
- Electronic Policy Enforcement of SOPs
- Fail over & redundancy

Intelligent Devices · Critical Communications · Enterprise Level Control
Advanced Solution Design: Building Situational Awareness
Current Public Safety Systems Management

Inefficient, Limited Situational Awareness

Security Systems

- CCTV
- Traffic Management
- Shot Spotter
- Alarm Monitoring
- Building Management
- Dispatch Systems
- Smart Grid

Critical Services, Need for Public Safety
Future (now!)

Integrating day-to-day monitoring and control

TCP/IP

Two-way communication

Security Systems

CCTV

Traffic Management

Shot Spotter

Alarm Monitoring

Building Management

Dispatch Systems

Smart Grid

Operator Workstation(s) and video Walls

Field Responders
Integrated Building and Infrastructure Management Vision

Public Safety Operations

- Power Management
- Fire Safety
- Mass Notification
- Access Management
- Video Management
- Intrusion Detection
- Mobile Video

Integrated Local Management

- TCP/IP
- BAS (Comfort)
- Energy Efficiency
- Panic Alarms

Enterprise Interfaces

- Smart lighting
- Building Management
- Asset & maintenance
- Energy management
- Identity Management
- Sustainability and COOP
Summary

• To remain competitive, Counties must adapt;
  • Critical infrastructure improvements; transportation systems, energy grid, water management, access to facilities and services
  • Public Safety is a key element to attracting and maintaining industry and people
  • With dwindling federal government support, Cities must be creative in finding a budget solution

• Situational Awareness Requires an Integrated Approach;
  • Law Enforcement: CCTV access of City and Privately owned cameras (PPP) with integration of crime fighting databases
  • City Services: CCTV management with personnel identity management and intrusion detection

• The Integrated County is Safer and Smarter
  • Building management tied to office occupancy (real-time energy management)
  • Information systems can be dynamically re-purposed as emergency notification
Questions?

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