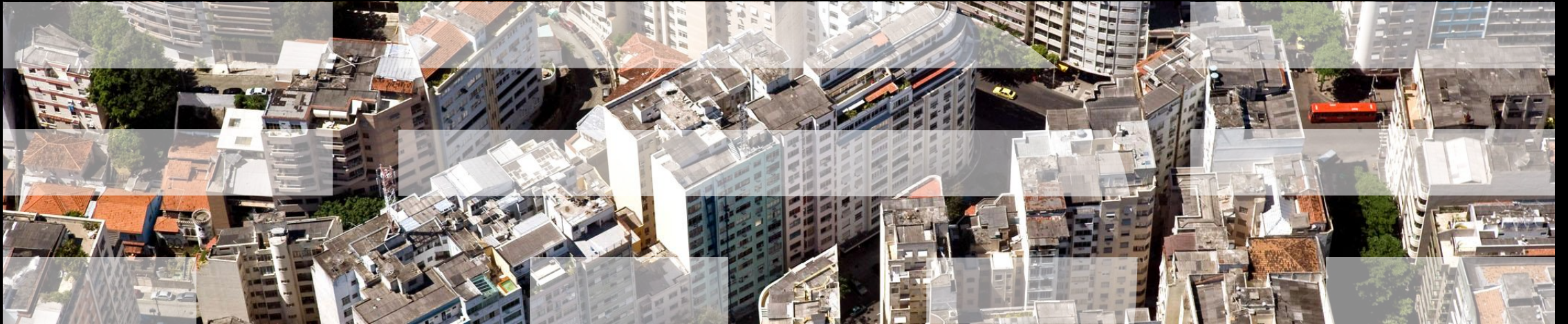# SmarterCities

Rio de Janeiro

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Making Public Safety Systems Smarter –
A Global View

Pressures on Law Enforcement Continue…

TRANSPARENCY & ACCOUNTABILITY

DELIVER EFFECTIVE PUBLIC SAFETY

DECISION-QUALITY INFORMATION

ONGOING BUDGET PRESSURES

GLOBAL SECURITY CHALLENGES

NEED FOR HIGH PERFORMANCE

And the Need for Progress Is Clear

66% of people

According to the British Crime Survey 66% of adults believe crime has risen nationally in the past few years

18,000 Homicides

In the US, using Iowa State University's methodology, the 18,000 plus homicides recorded in 2007 would cost roughly $300 billion

$943 per person

In Canada the tangible social and economic cost of crime in was $31.4 billion, or $943 for each man, woman and child in the country.

$3 Million

What a male teenager heading towards a life of crime will cost society

$3.4 Billion

In New Zealand, government spending on police, corrections and justice has roughly doubled to $3.4 billion in the past 14 years, adjusted for inflation - with little overall effect on crime

$778 Billion

The American Academy of Actuaries disclosed that a future large terrorist attack in New York City could result in $778 billion in insured losses.

Requiring Answers to Critical Questions Everyday...

Are response times keeping pace with citizen expectations?

Does information on criminals move seamlessly through the system?

Do officers on the street receive the information they need quickly?

Do citizens FEEL safe?

What impact will new demand have on public safety resources?

Are budgets keeping pace with increased demand?

What citizen satisfaction indices are important?

How have changing patterns impacted resources?

Has faster access to services helped citizens?

Have prevention initiatives been effective?

Technology Can Help Deliver a More Holistic City Approach

Urban Crime
- Predictive strategies
- Crime information
- Dispatch
- Investigative analytics
- Arrest
- Mobile information

Emergency Preparedness and Response
- Emergency Operations Center
- Dispatch
- In-car or on-person systems
- Planning and simulations

Terrorism
- Cyber Security Solutions
- Fusion Centers
- Border Security Solutions
- Critical Infrastructure Security Solutions

Transportation Safety
- Traffic Management Systems
- Asset Management for Safety Maintenance
- Weather
- 511

Cross-issue Solutions: Data Manipulation, Communication and Identification
- Data analytics
- Data management
- Shared services
- Geospatial information
- Interoperable communications
- Cross agency collaboration
- Biometrics
- Digital video

A "Smarter" View Is Emerging

Public safety is essential to the health and vibrancy of a city. It is among the most important factors influencing an individual's or a company's decision to choose a particular city in which to locate, to live or to visit

The smart city is able to transform data into actionable insight to build a safer, more efficient, more accountable and more desirable place

Securing public safety in the 21st century requires a concerted, collaborative effort between businesses, governments and individual citizens. And that carries implications for many policy and operational areas

The City's Public Safety Landscape: Complex, Fragmented

Call centres

Public health

Transportation

Firefighting

Buildings

Emergency medical services

Regional, national, international links

Policing

Scattered information, difficult interoperability, many potential linkages

Cyber security

Justice

Corrections

Critical infrastructure

Welfare, social services

Borders

Education

IBM Has Partnered with Clients Around the World to Implement Innovative Solutions for Crime Prevention

New York Police Department: Based on a Crime Information Warehouse, the Real Time Crime Center gives analysts and officers mobile access to more than 120 million criminal complaints, arrests and 911 records, as well as 5 million criminal records, parole files and photographs

Mecklenburg Vorpommern Police: Beginning to eliminate manual processes and improve the accuracy of information gathered from multiple sources

Edmonton Police Services: Deployed an innovative solution that provides officers with near real-time information that allows them to respond to crimes more effectively

Memphis Police Department: Used predictive analytics to improve its overall operations, enabling it to reduce crime without a proportional increase in staff while expanding its coverage area

Early Actionable Insights Can Reduce Threats and Fraud

German Police Praesidium: With the help of IBM's OmniFind and Entity Analytics solutions, significantly reduced the person-hours for relational searching of multiple data sources and increased accuracy of results

US Federal Government Agency: Successfully fulfilled first stages of the Homeland Security Presidential Directive 12 (HSPD-12) requirements and security improvements

Navy Pier Chicago: Improves security at a major tourist destination when it implements one of the world's most advanced, integrated video monitoring systems
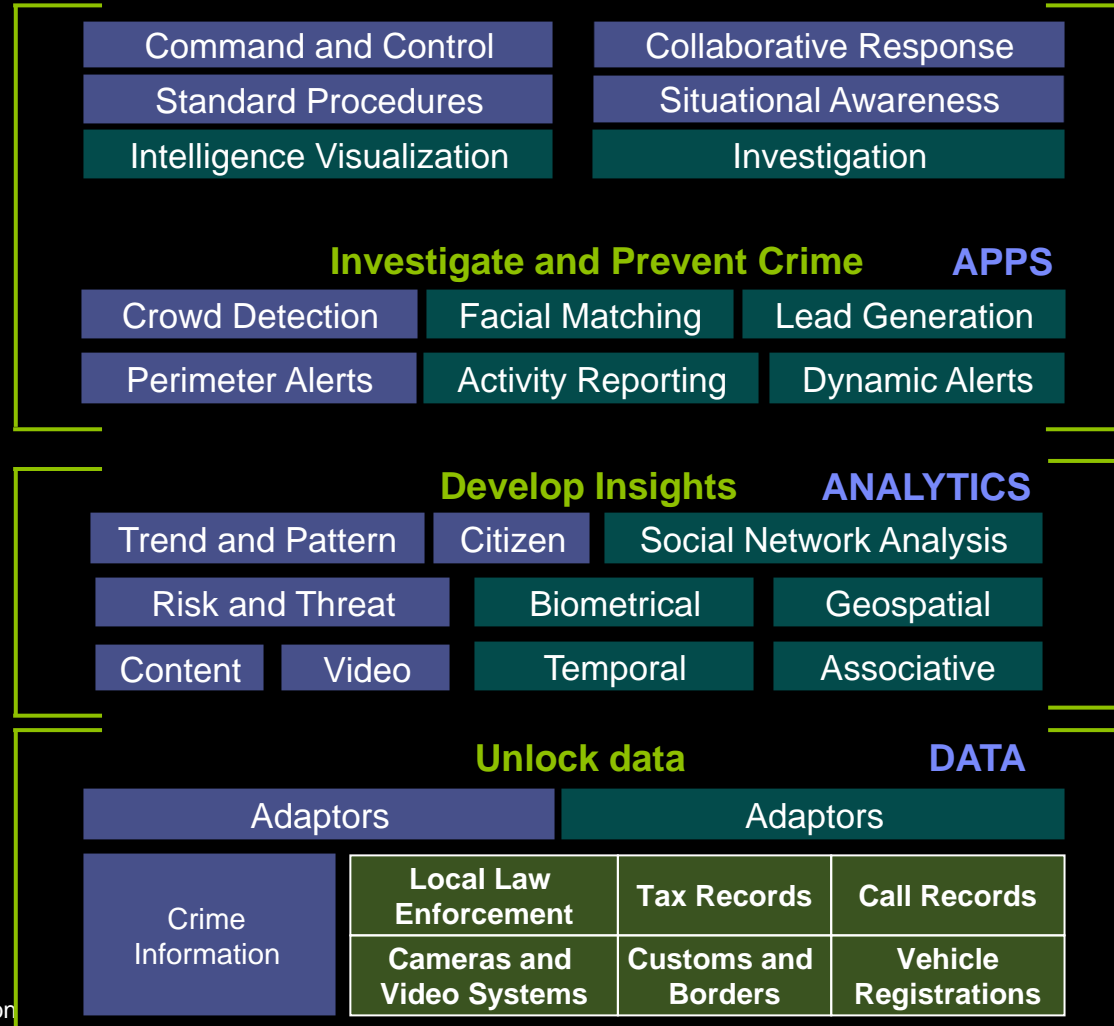

Poland's National Police: Use a mobile access solution connecting Schengen and other databases to improve field police operation, reduce errors and omissions and simplify user interfaces to documents

We Continue to Build a Broad Set of Capabilities

IBM

- Unified view across agencies
- Minimize disruptions due to threats from public safety
- Improve response time and minimize life-threatening issues
- Predict crime occurrences and optimize resource deployment

- Content analytics to unlock unstructured information
- Predictive analytics to anticipate change
- Predictive analytics for actionable insight on risk and threats
- Analysis of social media data
- Determine baselines then detect anomalies and threats

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- User interfaces designed for tactical and investigative roles
- Respond to threats in real time
- Present critical information in the field
- Allows for optimization of data capture and entry
- Initiate coordinate response
- Present relationships and aliases
- Associate physical descriptors across all available information
- Visualize incidents over time with mapping and charting

Command and Control	Collaborative Response
Standard Procedures	Situational Awareness
Intelligence Visualization	Investigation

Investigate and Prevent Crime   APPS

| Crowd Detection | Facial Matching | Lead Generation |
| Perimeter Alerts | Activity Reporting | Dynamic Alerts |

Develop Insights   ANALYTICS

Trend and Pattern	Citizen	Social Network Analysis
Risk and Threat	Biometrical	Geospatial
Content	Video	Temporal	Associative

Unlock data   DATA

| Adaptors | Adaptors |

| Crime Information | Local Law Enforcement | Tax Records | Call Records |
| | Cameras and Video Systems | Customs and Borders | Vehicle Registrations |