

BusinessConnect 2014

A New Era of Smart



IBM Smart Cities Agenda: The Solutions for More Competitive, Effective and Efficient Cities

Michael Small

Smarter Cities Solution Leader, IBM Middle East & Africa



Agenda

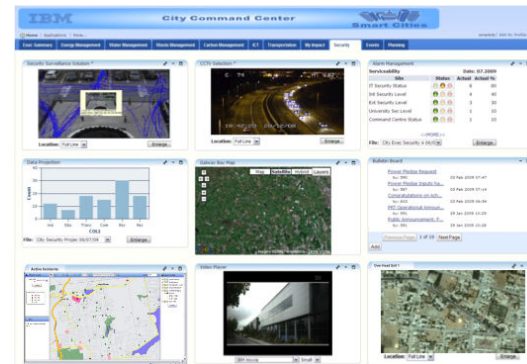
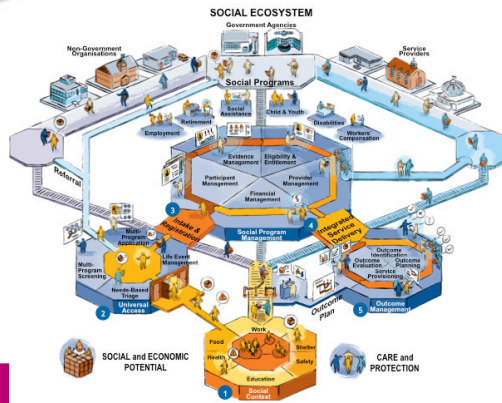


Where do I start and how do I get there?



What is a Smarter City?

What does it look like Public Safety and Security, Water, Transport, City Planning and Operations, Smarter Citizen Services



Intelligent

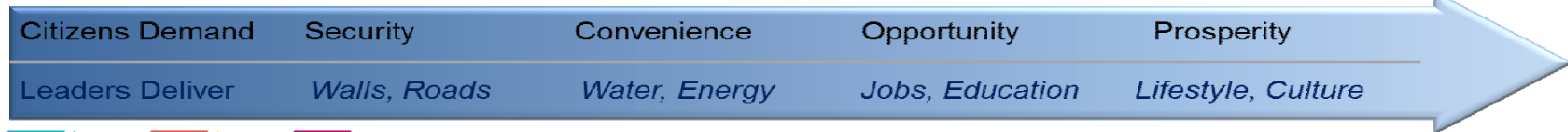
Interconnected

Instrumented



Smarter Cities: a response to global demand

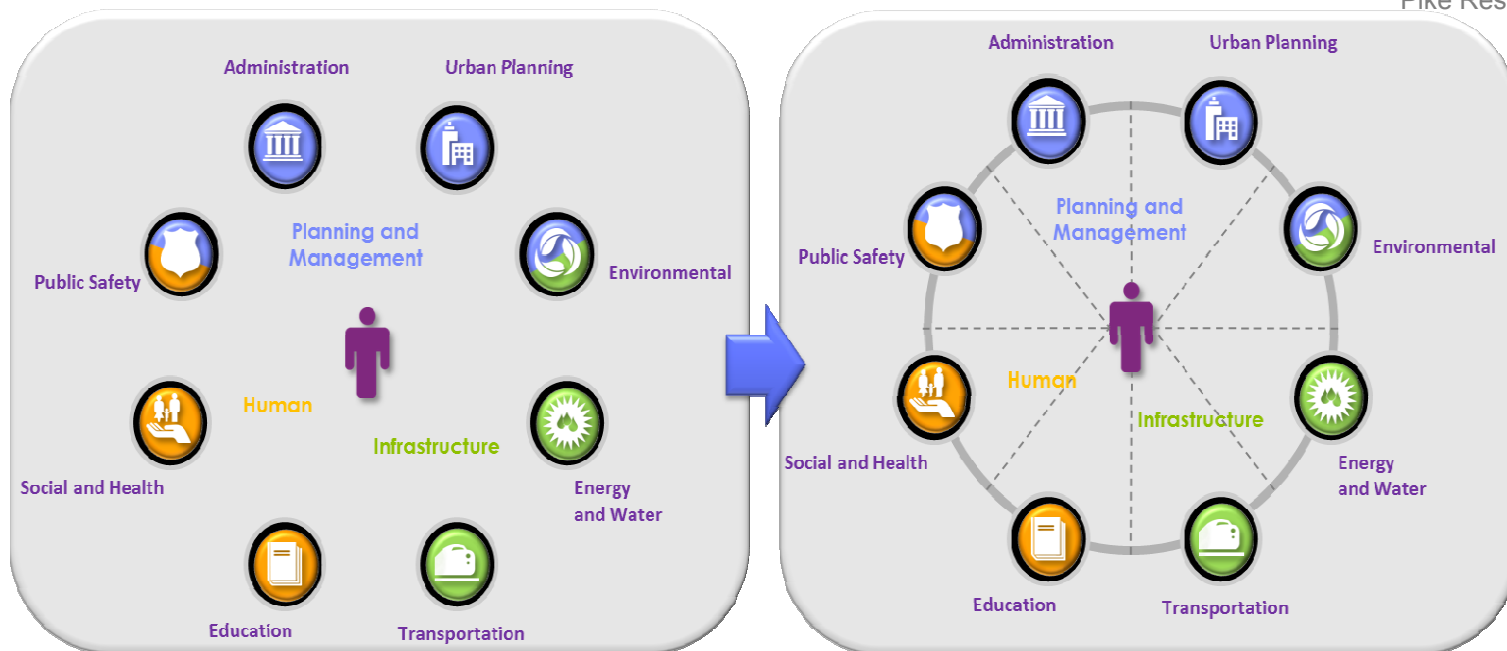
	<p>ACCELERATING GLOBALIZATION</p> <p>Countries and societies are becoming more economically interdependent across social, political and cultural boundaries, as illustrated by current economic conditions.</p>		<p>CHANGING DEMOGRAPHICS</p> <p>Median ages are rising in the developed countries of Italy, Germany and Japan, but dropping in developing ones such as India.</p>
	<p>EVOLVING SOCIETAL RELATIONSHIPS</p> <p>Today, governments are expected to deliver results and value through secure, private services that are available anywhere at any time.</p>		<p>RISING ENVIRONMENTAL CONCERNS</p> <p>Societies and governments are becoming more attuned to what the earth can provide and what it can tolerate.</p>
	<p>EXPANDING IMPACT OF TECHNOLOGY</p> <p>The adoption of the Internet is remaking the landscapes of business, healthcare and government.</p>		<p>GROWING THREATS TO SOCIAL STABILITY AND ORDER</p> <p>From terrorism to armed conflict to pandemics to natural disasters, the character of threats is changing.</p>



A Smarter City ...

.....one that *integrates technology* into a strategic approach to sustainability, citizen well-being, and economic development but also stressing the importance of integration and interaction across multiple domains.

Pike Research



21st Century Government: Integrated across Multiple Domains



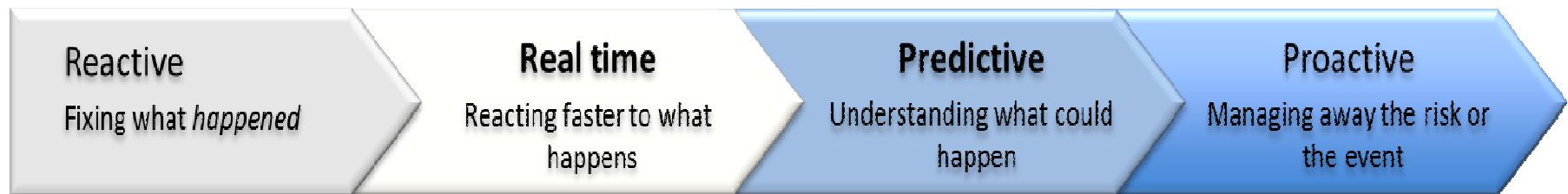
A Smarter City ...

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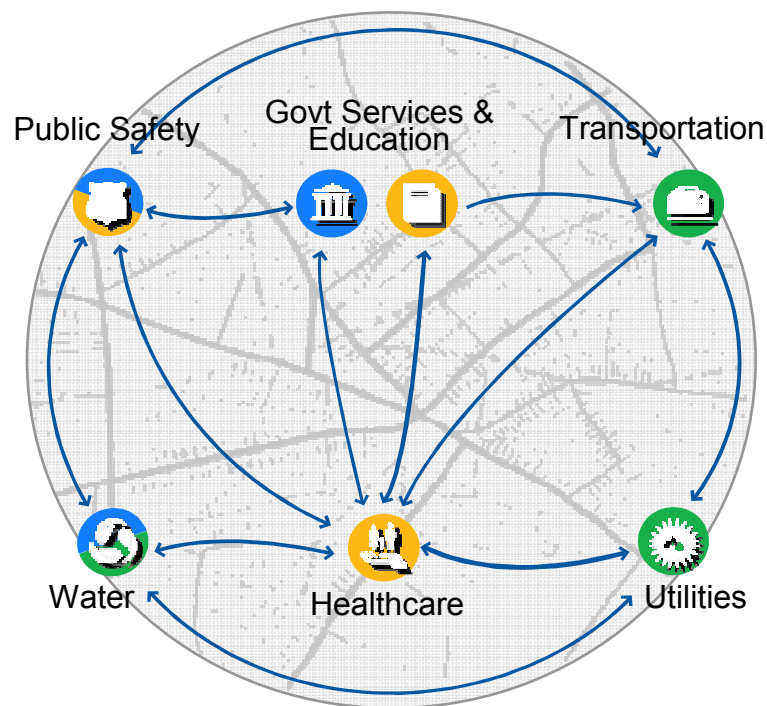
Pike Research



has moved from... Reactive to Predictive to Proactive: Applying advanced analytics and industry expertise at all levels of the organization to more precisely predict - and continuously act on - risks and *opportunities*.



Smarter: leveraging the information advantage



Leveraging information to make better decisions

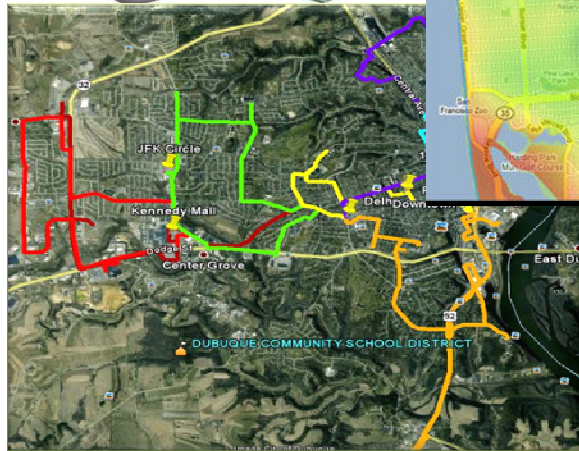
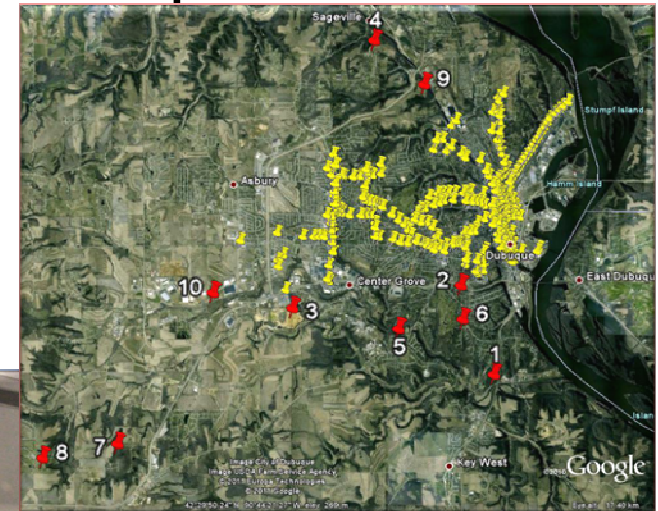
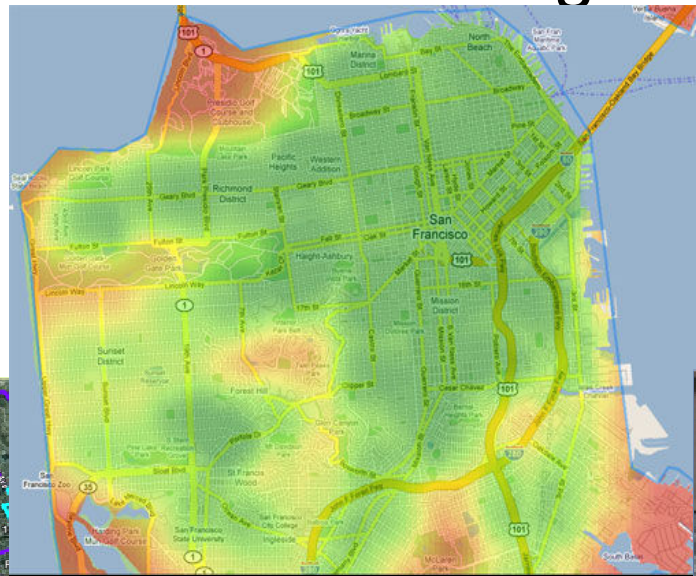
Engaging People to co-define (even co-produce) “what’s important”

Coordinating resources and processes to operate effectively

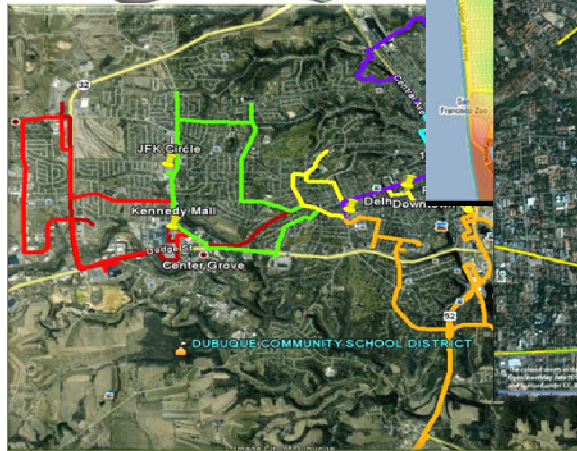
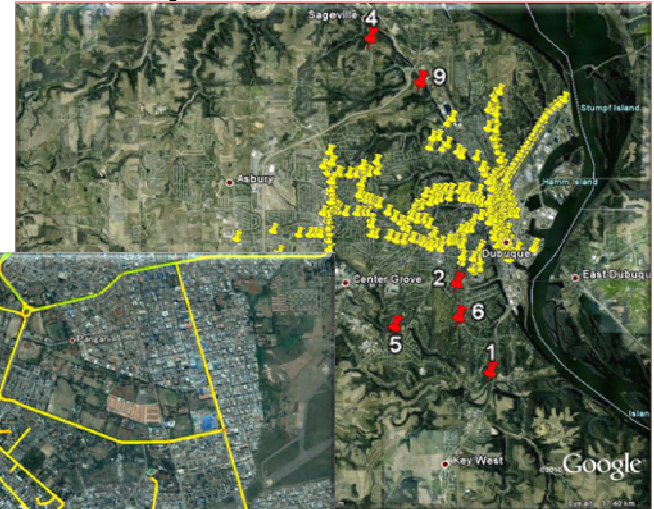
Anticipating problems to resolve them proactively and manage risk



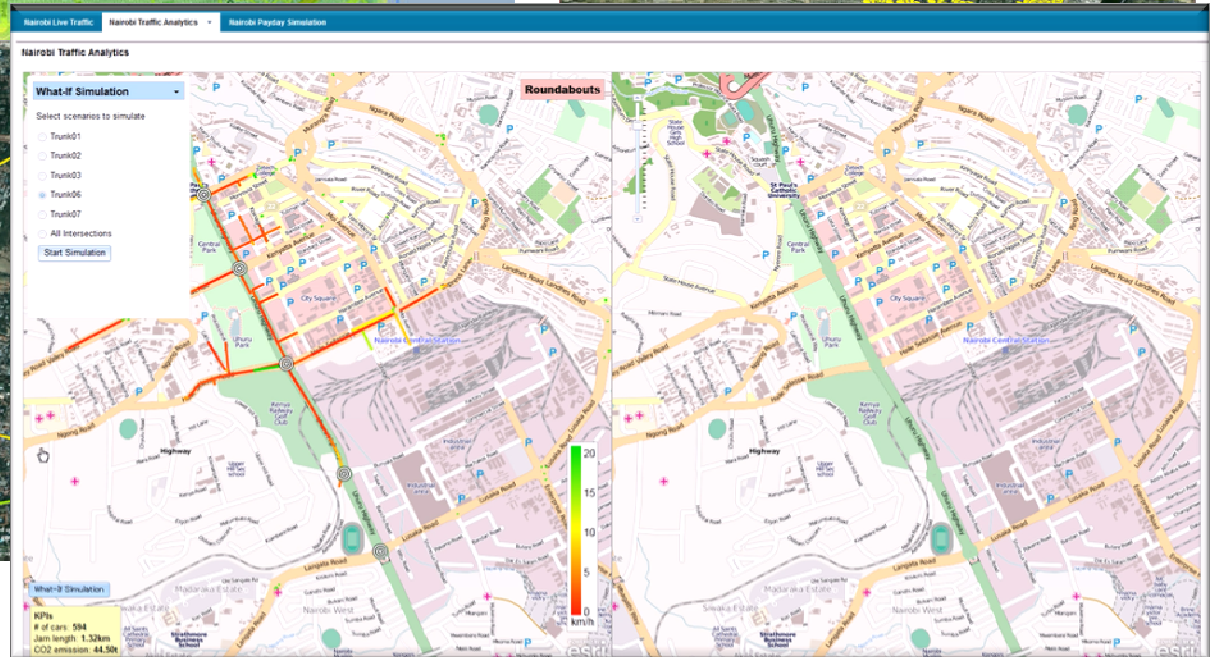
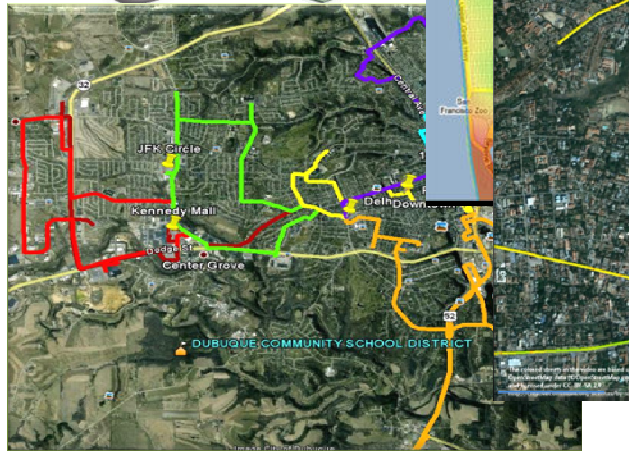
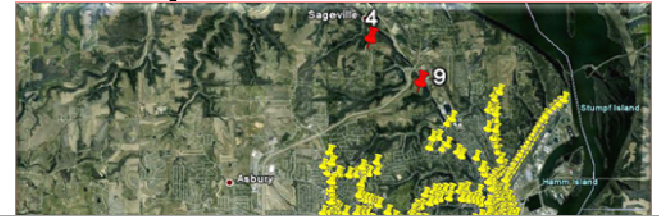
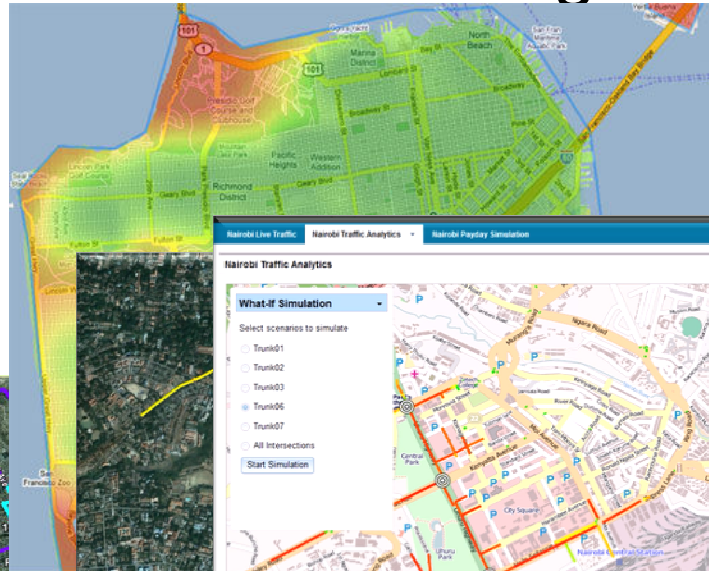
Leveraging Information: Intelligent Transport



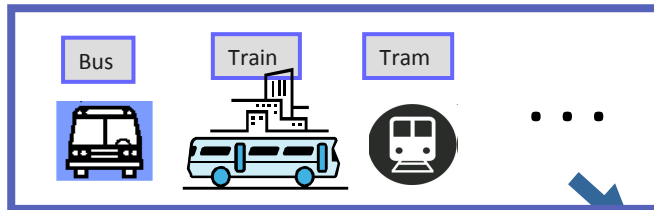
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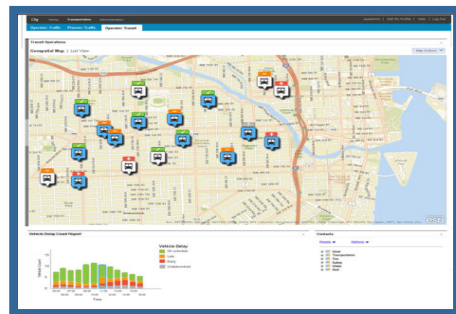
Leveraging Information: Intelligent Transport



Smarter Transit Operations



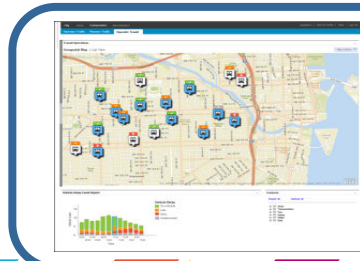
Current vehicle locations are captured using one or more vendor options that use GPS/GPRS technologies



IBM Intelligent Transportation collects location & time table data, analyzes it and real-time visibility and vehicle arrival prediction inferences

Transdev Multimodal Predictive Journey Planner

Journey planner consumes traffic and transit prediction from IIT and generates commuter journey plans



Service 101a	08:01	08:16	08:31	08:46	09:01	09:16
Monday	08:01	08:16	08:31	08:46	09:01	09:16
Service 101b	08:01	08:17	08:33	08:49	09:05	09:21
Monday	08:01	08:17	08:33	08:49	09:05	09:21



Crowd Sourcing – WaterWatchers

News room > News releases >
IBM Taps Big Data to Help Solve Water Challenges Across South Africa
 "WaterWatchers," a new mobile app, harnesses the power of crowdsourcing

- News release
- Contact(s) information
- Related XML feeds
- Related resources

Johannesburg, South Africa - 22 Mar 2013: IBM (NYSE: [IBM](#)) marks World Water Day with the launch of a crowdsourcing project to help capture, share and analyze information about the water distribution system in South Africa. The project, called "WaterWatchers," is a new mobile phone application and SMS capability that will enable South African citizens to report water leaks, faulty water pipes and general conditions of water canals. These reports provide vital data points to an aggregated "WaterWatchers" report to create a comprehensive picture of issues challenging South Africa's water distribution system.



Map displays various assets and their associated metrics across stakeholders

Operators can drill down into values and trends of each sensor

Historical asset information and trends can be shown and investigated.

OPERATIONAL PERFORMANCE INDICATORS

DATE BACK TO CALL HOME	TECHNOLOGY	INDICATOR	VALUE	UNIT
A CITY THAT WORKS	TECHNOLOGY	TECHNOLOGY	100%	CITY WORKING
JOB AND ECONOMIC GROWTH	TECHNOLOGY	TECHNOLOGY	100%	CITY WORKING
ENVIRONMENTAL	TECHNOLOGY	TECHNOLOGY	100%	CITY WORKING
COMMUNITY	TECHNOLOGY	TECHNOLOGY	100%	CITY WORKING

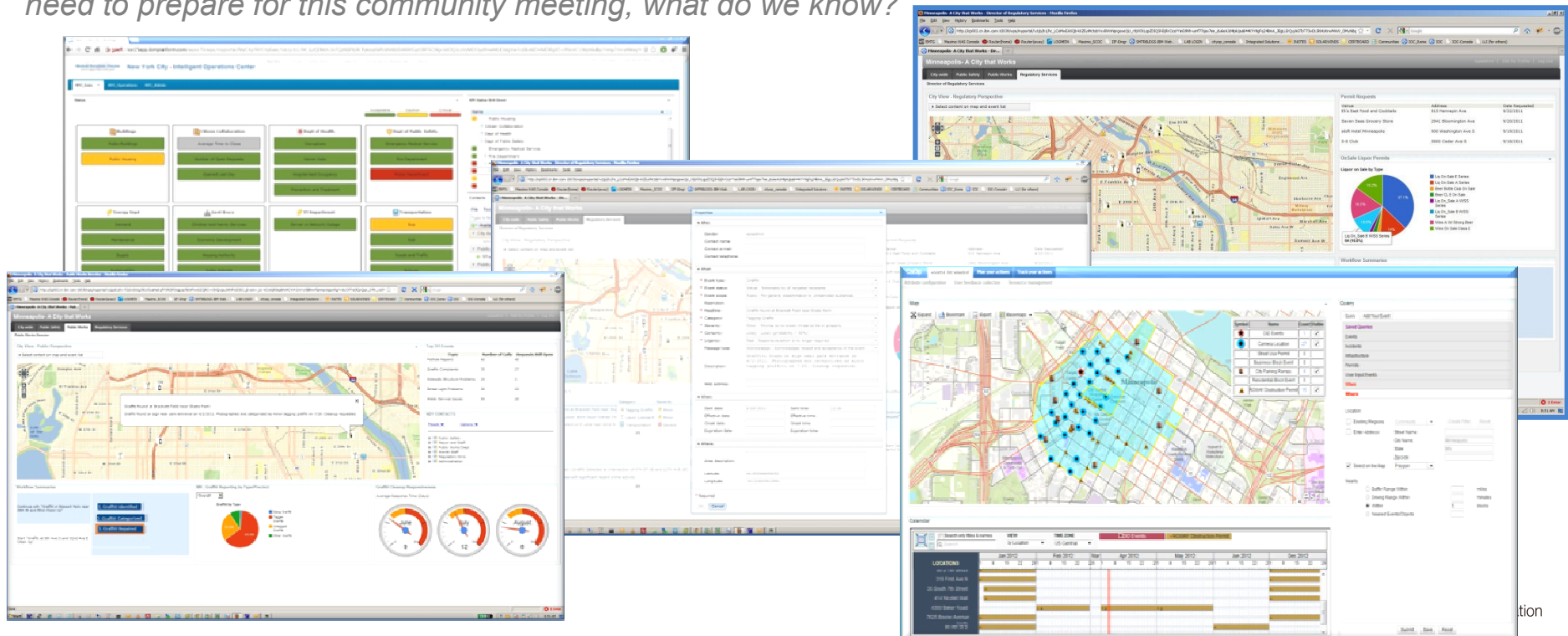
Map View: 2013-11-18 09:30:00 AM

System models show how assets are connected to each other and their state



City Planning and Operations: Driving Delivery to meet SLAs

What: Provide the information all staff in the city use to manage to City KPIs and deliver the commitments in the City IDP. For example: What are we always failing our Traffic Management KPIs? I need to prepare for this community meeting, what do we know?



Intelligent Law Enforcement



Smarter Law Enforcement

Apply advanced technologies and analytics to provide a force multiplier, reducing system and operations costs and enhancing the citizen experience.

COMMAND & OPERATIONS

Common Operational Picture
Crime Trend Analysis & Decision Support
Predictive Analytics, Operational Performance



TACTICAL LEAD GENERATION

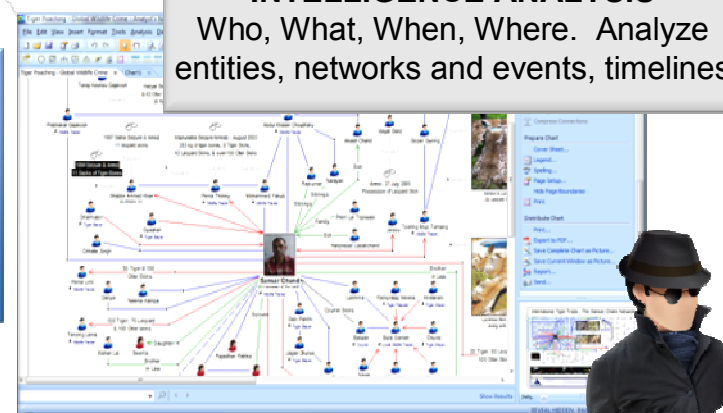
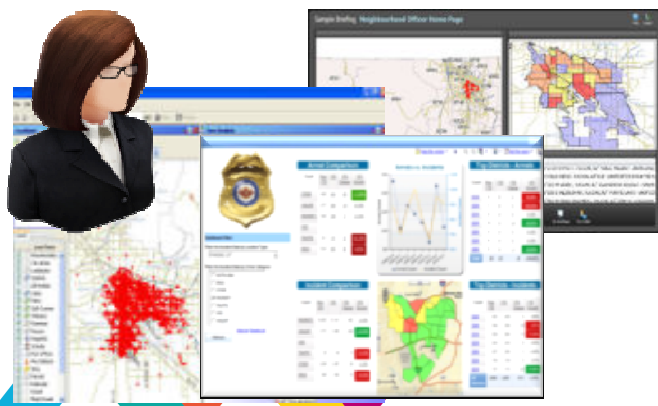
Solve crimes quicker by putting the right information, in the right hands, at the right time, in the right form

INTELLIGENCE ANALYSIS

Who, What, When, Where. Analyze entities, networks and events, timelines

CROSS ORGANIZATIONAL SYNERGIES

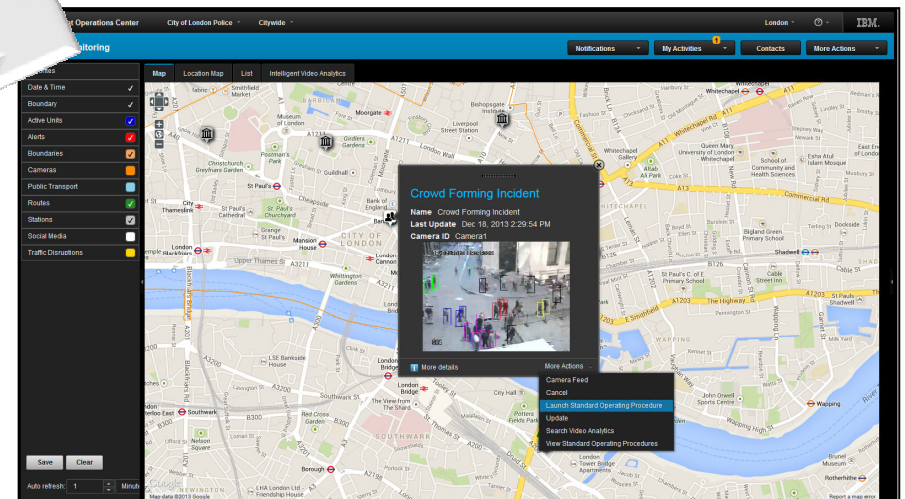
Emergency Management,
Social Programs
Urban Planning,
Mayor's Dashboard



Making Sense of information - Video Analytics









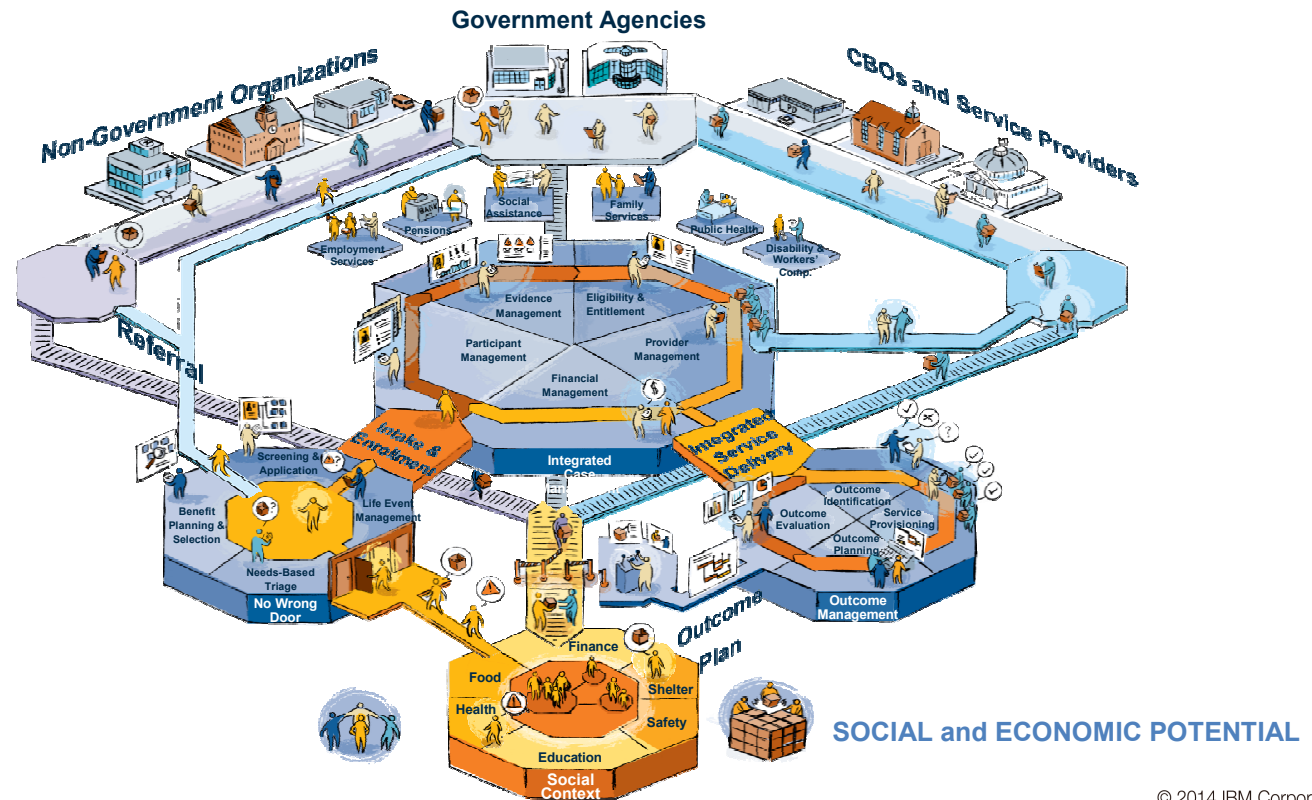
Define areas in a field of view to monitor and for which specific events, alerts (loitering, object removed, deposited and analytics for attribute capture. Store Metadata for later search (find all Blue cars in this period)



Needs to Outcomes: Smarter Citizen Services

Maximizing the social & economic return on investment

-  Non-Government Organizations (NGO)
-  Government Agencies
-  Providers
-  Client
-  Life Events
-  Needs



Smarter Citizen Services

IBM Cùram Social Program Management

A Smarter Social Program Management approach:

Improve service delivery:

Break down silos and coordinate resources and services across agencies and departments

Increase effectiveness:

Cross program service delivery to meet the unique needs of each citizen and improve outcomes

Be prepared for the future:

Dynamic, configurable platform enables organizations to adopt new social programs and service delivery models.

Use Cases

- Public Health Insurance e.g. US Health Care Reform
- Family Services
 - Child Welfare
 - Child Support Enforcement
 - Youth Services
 - Adult Care Services
- Social Assistance
 - Food & Nutrition Support
 - Income Assistance
 - Medical Assistance
- Disabilities/Workers Comp
- Employment
- Pensions

Integrated eligibility and benefit determination across 60 social programs



"Client interactions are critical to the success and long-term outcomes of families and children."

Steve Cuthbert, Assistant Director, Department of Workforce Services, State of Utah



Smarter Citizen Services

IBM Cúram Social Program Management

A Smarter Social Program Management Use Cases

IBM Cúram Outcome Management

A Smarter approach to managing outcomes:


Manage the full client lifecycle:
Assess needs, establish goals, plan for attainment, and track progress using evidence-based models.

Focus on results:
Organizations can adopt a client-centric approach to service delivery and focus results rather than focusing on the services available


Gain new insight:
A comprehensive view of client information enables new insights into client developments and progress

Use Cases

- Parole Management
- Child Welfare
- Disability & Workers Compensation
- Social & Health Care Coordination



WorkCoverSA is a provider of disability insurance for 50,000 employers in South Australia. WorkCoverSA



"The WorkCover team is excited about the potential of the Cúram solution to help the organization achieve a high standard of service and deliver on the promise of 'the best possible recovery and faster return to work,' while achieving new levels of efficiency and transparency."

Yvonne Deally, Chief Information Officer, WorkCoverSA



Cúram Citizen Self-Service

HOME PRINT LOG IN

Community Services and Government Programs
 Community Services include any services that address your needs ranging for your basic living needs through to life improvement services. Contact information on resources that match your needs is provided and you will be able to search for those resources that are closest to you.
 To start a new session of 'I Need Help!', please click here.

Community Services

- Holt Street Stanmore
- Charity Store
- Uniforms for kids
- Money Management Advice
- Mortgage/Rent Assistance
- Utility Assistance
- Emergency Housing
- Individual Counselling
- Family Counselling
- Suicide Hotline

Government Programs

- Check if I'm Eligible for Social Assistance Screening**
 Screening checks your household's potential for Social Services. Once you have completed screening we will give you information about the programs that you are eligible for.
- Apply for Assistance with Social Assistance Application**
 The Social Assistance Application covers all the services that offer financial support to citizens looking for low income. The application also covers programs for...

Map: 45, Kingston Rd, Camperdown, Sydney, 2050

Cúram Citizen Self-Service

HOME PRINT LOG IN

Create Referral
 Creating a referral sends your contact details and message to the provider.

Provider: Community Health Care Centre
Referred For: Individual Counselling
 45, Kingston Rd, Camperdown, Sydney, 2050

Your Contact Details
 Provider may use the contact information you provide to get in contact with you.

Contact Information

required field *

Name *

Address

Home Phone Number

Work Phone Number

Cell Phone Number

Email Address

Your Message

Submit Cancel

Done

Local Intranet | Protected Mode: Off



Smarter Citizen Services

IBM Cúram Social Program Management

A Smarter approach to managing social program management

IBM Cúram Outcome Management

A Smarter approach to managing outcomes

IBM Cúram Universal Access

A Smarter approach to finding the right social program:

Target programs to meet citizen's needs:
Identify all relevant programs and services based on citizen's context

Streamline application process:
Simplify the process for constituents and ensure consistency across programs with a single application for all benefits and services

Manage life events:
As life events change, maintain accuracy across all government programs improving citizen satisfaction and reducing fraud

Use cases

- Departmental or cross-organization
- Social Services
- Youth Services
- Elder Services

Provide a single point of access for 35 federal, state and local government programs across 8 agencies

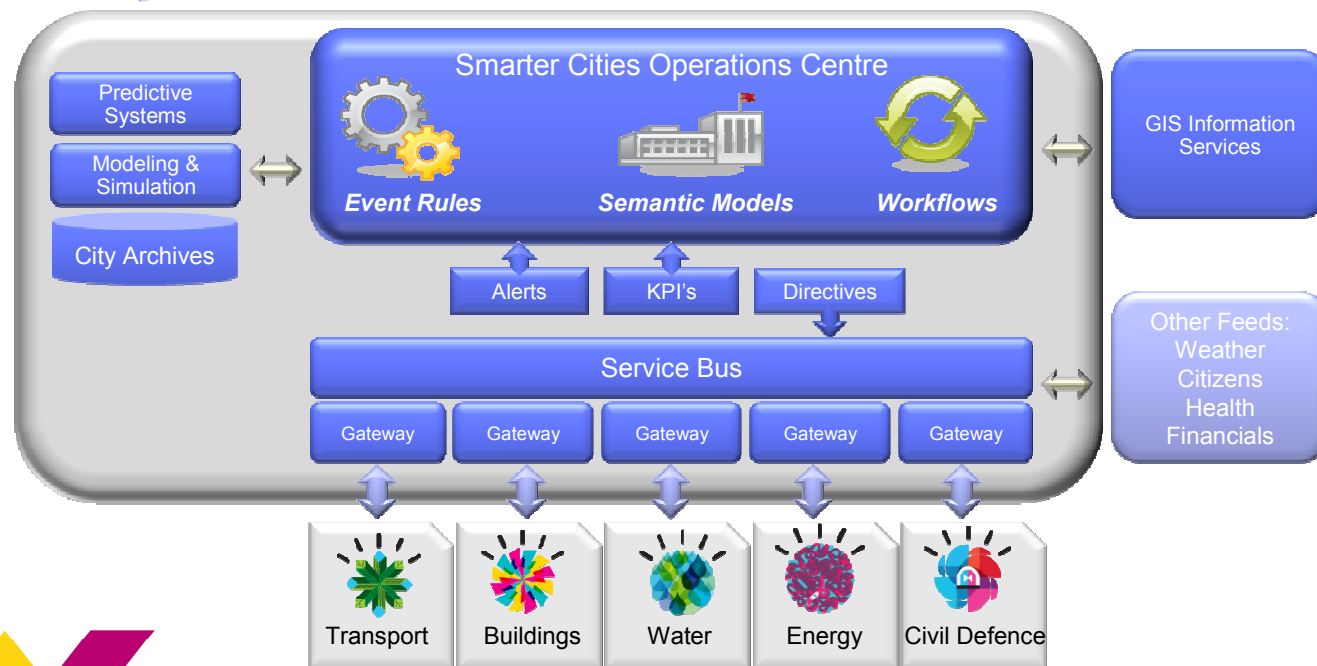
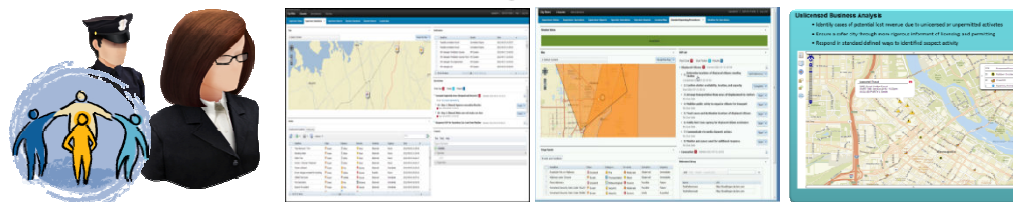



"This innovative website is going to push us forward in our mission to improve self-sufficiency and help more hard working families rise out of poverty for good."

Michael Bloomberg, Mayor, New York City



Intelligent Operations: A single platform for City Operations



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