

Smarter cities: Inovatívne riešenie pre dennú operatívu miest



Inovatívni lídri vytvárajú príležitosti zo súčasných reálnych situácií



Pracovať viac nie je udržateľné



Mestá potrebujú inovatívne riešenia

Zber informácií pre
kvalitnejšie rozhodovanie

Predvídanie problémov, aby
boli riešené proaktívne



Koordinácia zdrojov a
procesov, aby fungovali
efektívne

Inšpirácia



Bezpečnosť

- Zrýchlenie riešenia kriminálnych činov, prevencia a identifikácia
- Koordinácia činnosti viacerých oddelení / agentúr
- Minimalizácia dopadov havarijných situácií



Doprava

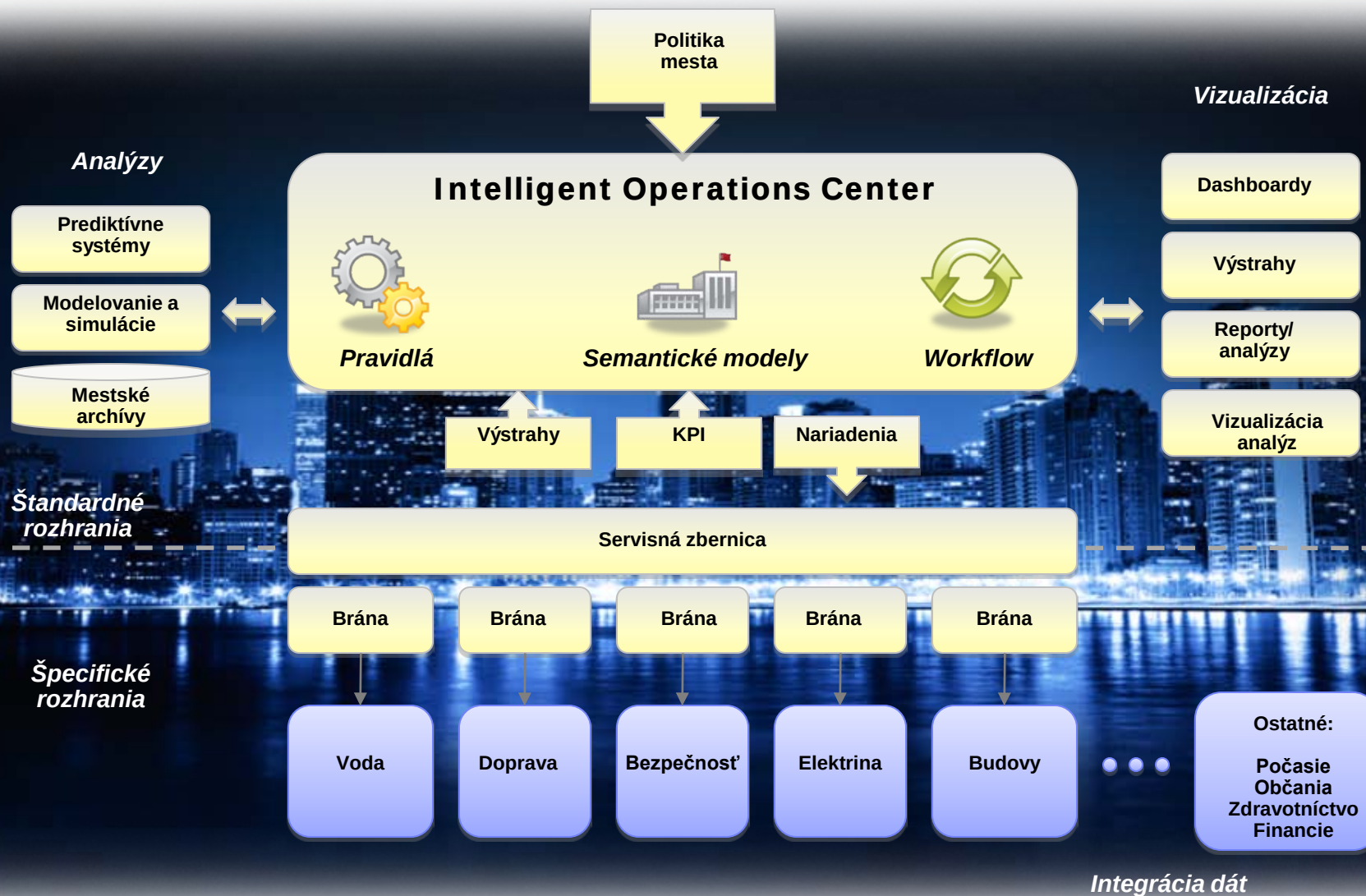
- Zvyšovanie kvality riadenia dopravy
- Optimalizácia kapacity ciest
- Minimalizácia dopadov havarijných situácií



Vodné hospodárstvo

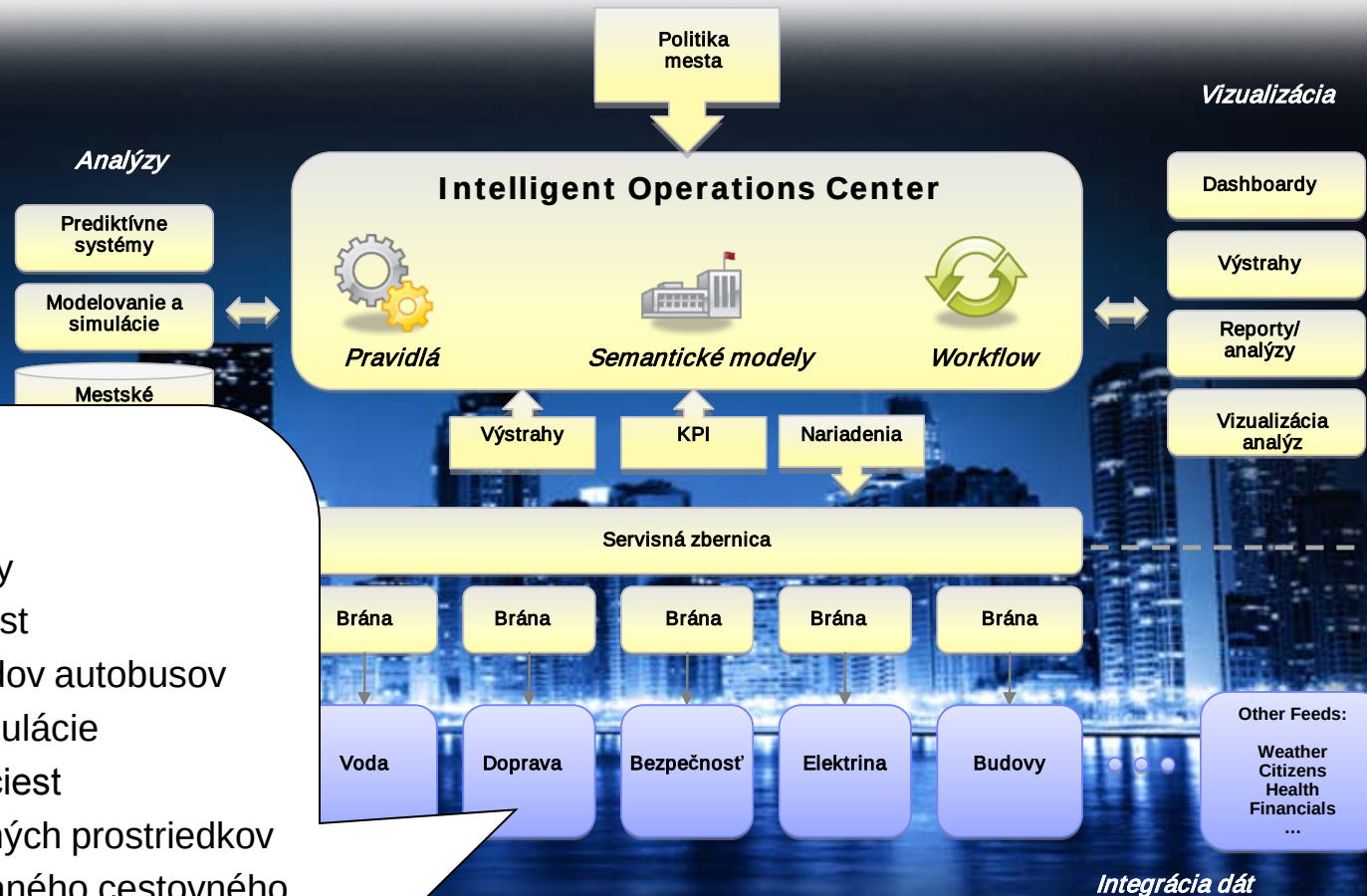
- Optimalizácia a skvalitňovanie poskytovaných služieb
- Analýza používania vody a návykov spotrebiteľov
- Predikcia výpadkov zariadení a znižovanie nákladov

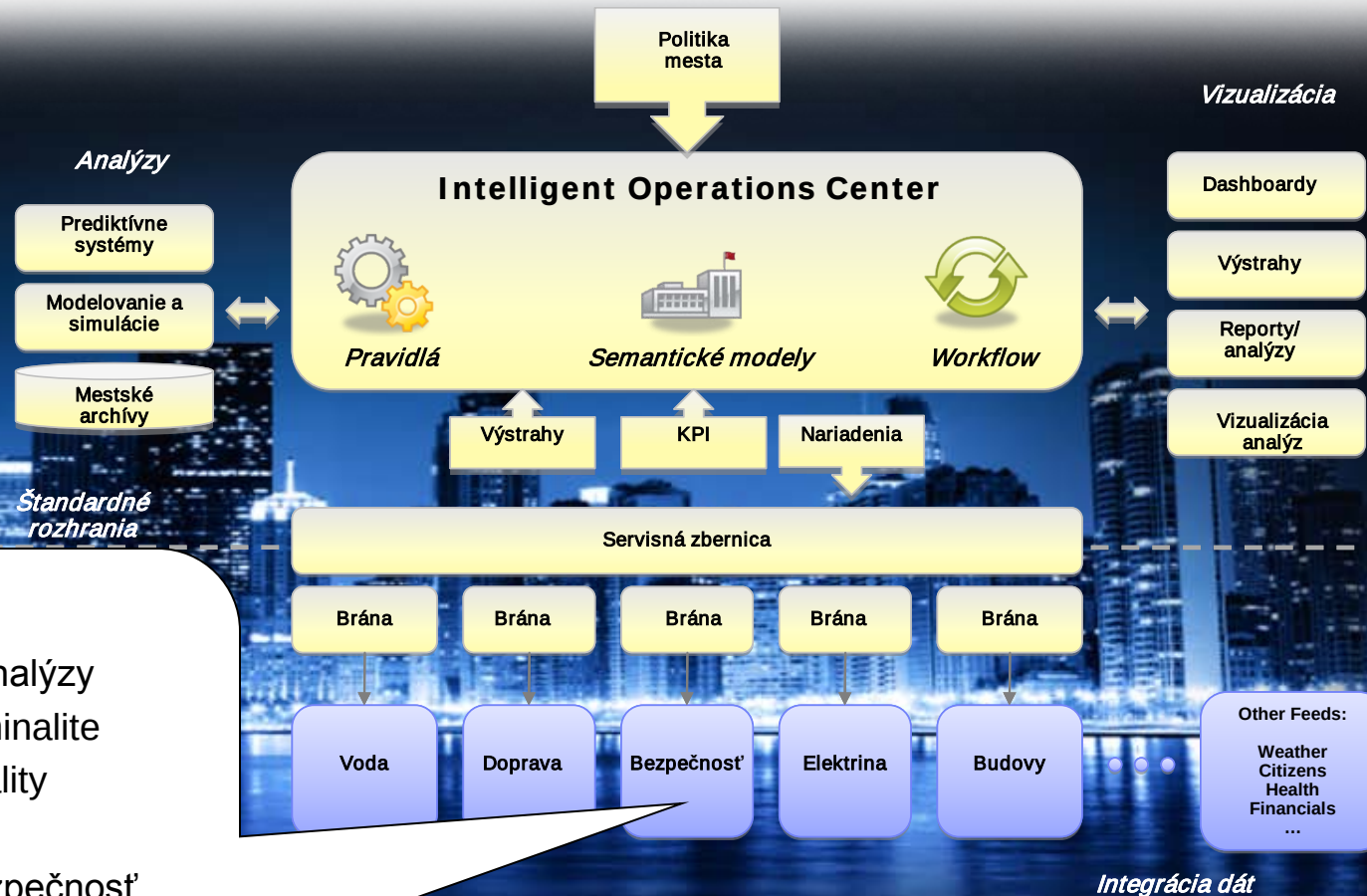




Doprava

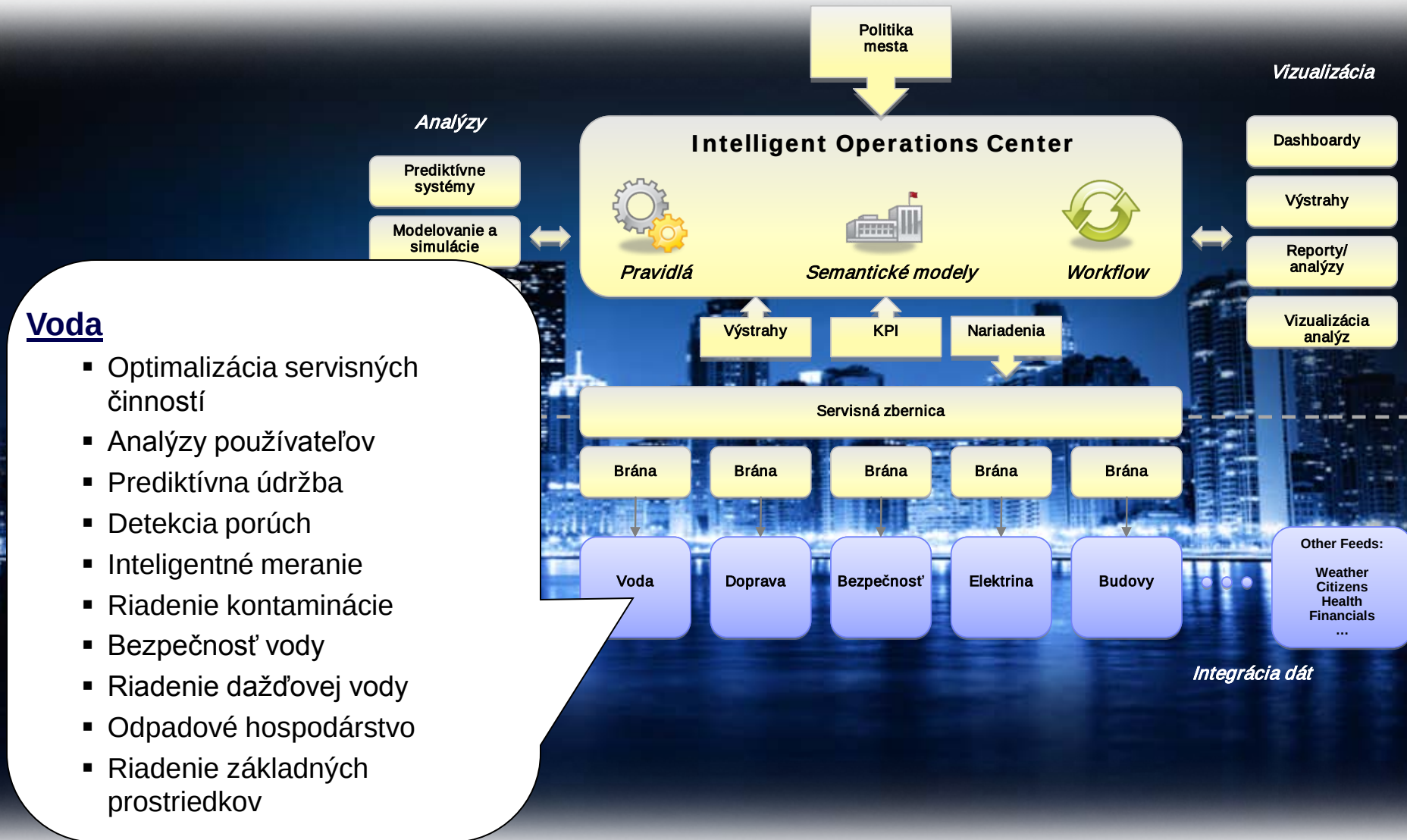
- Integrácia dát
- Predikcia dopravy
- Optimalizácia ciest
- Predikcia príchodov autobusov
- Plánovanie a simulácie
- Spoplatňovanie ciest
- Riadenie základných prostriedkov
- Systém integrovaného cestovného
- Riadenie multimodálnej dopravy
- Riadenie príjmov z dopravy
- Optimalizácia dopravnej flotily





Bezpečnosť

- Videodohľad a analýzy
- Informácie o kriminalite
- Predikcia kriminality
- Dispečing
- Kybernetická bezpečnosť
- Komunikácie
- Riešenie havarijných stavov



Voda

- Optimalizácia servisných činností
- Analýzy používateľov
- Prediktívna údržba
- Detekcia porúch
- Inteligentné meranie
- Riadenie kontaminácie
- Bezpečnosť vody
- Riadenie dažďovej vody
- Odpadové hospodárstvo
- Riadenie základných prostriedkov



CENTRO DE OPERAÇÕES PREFEITURA DO RIO

Demonstrácia funkcií riešenia
Intelligent Operations Center



Vizuálna pracovná plocha

City Name
Citywide

Sue Collins | Edit My Profile | Help | Log Out

Supervisor: Status
Supervisor: Operations
Supervisor: Reports
Location Map

Map

Select Content

Reset the Map

Notifications

☐	Headline	Sender	2	Sent	1
☐	KPI changed: Delayed Flights	KPI System		2012-07-11 10:00:49	
☐	KPI changed: Airports	KPI System		2012-07-11 10:00:49	
☒	KPI changed: Delayed Flights	KPI System		2012-07-11 10:00:49	
☐	KPI changed: Water Quality	KPI System		2012-07-11 09:19:17	
☐	KPI changed: pH	KPI System		2012-07-11 09:19:17	

1 - 5 of 18 items
5 | 10 | 25 | 50 |

My Activities

Past Due 2
Today 0
Future 4

Prepare for severe weather evacuation (Prepare) 2

Started: 2012-07-11 10:16:26

Prepare for severe weather evacuation (Prepare)

Started: 2012-07-11 14:03:31

Details

Events and Incidents
Resources

☐	Headline	Class	Category	Severity	Certainty	Urgency
☒	Hurricane Approaching	Event	Meteorological	Extreme	Observed	Imme
☐	Hurricane Approaching	Event	Meteorological	Extreme	Observed	Imme
☐	Hurricane Approaching	Event	Meteorological	Extreme	Observed	Imme
☐	Large Wildfire moving Rapidly West	Event	Fire	Severe	Observed	Imme
☐	Large Wildfire moving Rapidly West	Event	Fire	Severe	Observed	Imme

Contacts

File
Tools
Help

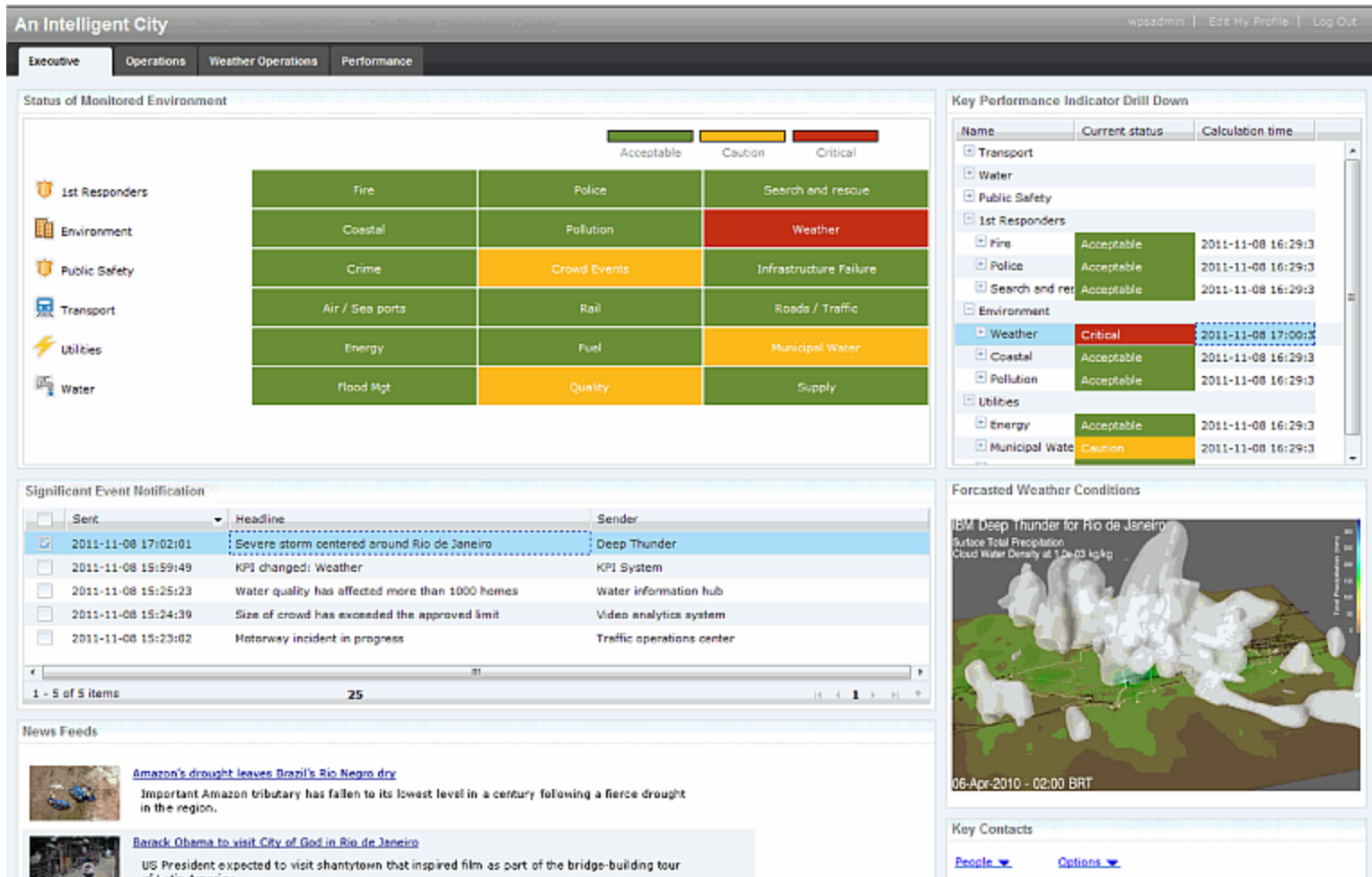
Type to find name

Available

Work

scollins

Vizuálna pracovná plocha



Significant Event Notification

☐ Sent	Headline	Sender
☒	2011-11-08 17:02:01 Severe storm centered around Rio de Janeiro	Deep Thunder
☐	2011-11-08 15:59:49 KPI changed: Weather	KPI System
☐	2011-11-08 15:25:23 Water quality has affected more than 1000 homes	Water information hub
☐	2011-11-08 15:24:39 Size of crowd has exceeded the approved limit	Video analytics system
☐	2011-11-08 15:23:02 Motorway incident in progress	Traffic operations center

1 - 5 of 5 items 25

News Feeds

Amazon's drought leaves Brazil's Rio Negro dry
Important Amazon tributary has fallen to its lowest level in a century following a fierce drought in the region.

Barack Obama to visit City of God in Rio de Janeiro
US President expected to visit shantytown that inspired film as part of the bridge-building tour of Latin America.

Forecasted Weather Conditions

IBM Deep Thunder for Rio de Janeiro
Surface Total Precipitation
Cloud Water Density at 1.0e-03 kg/kg
06-Apr-2010 - 02:00 BRT

Key Contacts

[People](#) [Options](#)

Správa udalostí a incidentov

An Intelligent City

wsadmin | Edit My Profile | Log Out

Executive Operations Weather Operations Performance

Location Map

Select content on map and event list

Incident Management Charts

Severe Event Open Status Since Incident Start

1 - 5 of 5 items 25

Automatic Triggered Operations

Activity	For	Launch	Role
Step 1: Prepare evacuation shelters	Severe Storm	Y	OPER
Step 2: Communicate to first responders	Severe Storm	Y	OPER
Step 3: Ensure resources are ready	Severe Storm	Y	OPER
Step 1: Validate severity of mudslide	Mudslide	Y	OPER
Step 3: Send hazardous materials inspector	Motorway Incident	Y	OPER

Key Contacts

People Options

- Transportation
- Public Safety
- Water
- Utilities
- Environment
- 1st Responders
- Air Support

Event List

Sent	Code	Type	Headline	Category	Severity
2011-11-08 04:07:10	Event	Update	Severe Traffic Accident involving multiple vehicles	Transportation	Severe
2011-11-08 04:07:00	Event	Alert	Water quality has affected over 1000 homes	Infrastructure	Severe
2011-11-08 04:07:00	Event	Alert	Size of the crowd gathering has exceeded capacity	Security	Severe
2011-11-07 17:51:42	Incident	Update	Storm Coverage on Rio de Janeiro	Geophysical	Severe
2011-10-28 20:16:33	Event	Alert	Water quality plant in North sector has been closed	Infrastructure	Moderate
2011-10-28 20:15:21	Event	Alert	Congestion predicted on main ring road	Transportation	Moderate
2011-10-28 20:14:28	Event	Alert	Congestion has reached cautionary level	Transportation	Minor
2011-10-28 20:14:21	Event	Alert	Congestion has reached cautionary level	Transportation	Minor
2011-10-28 20:14:07	Event	Alert	Congestion has reached cautionary level	Transportation	Minor

1 - 16 of 16 items 25

Add Event

Zdroje, reakcie a správa aktivít

Details

Events and Incidents

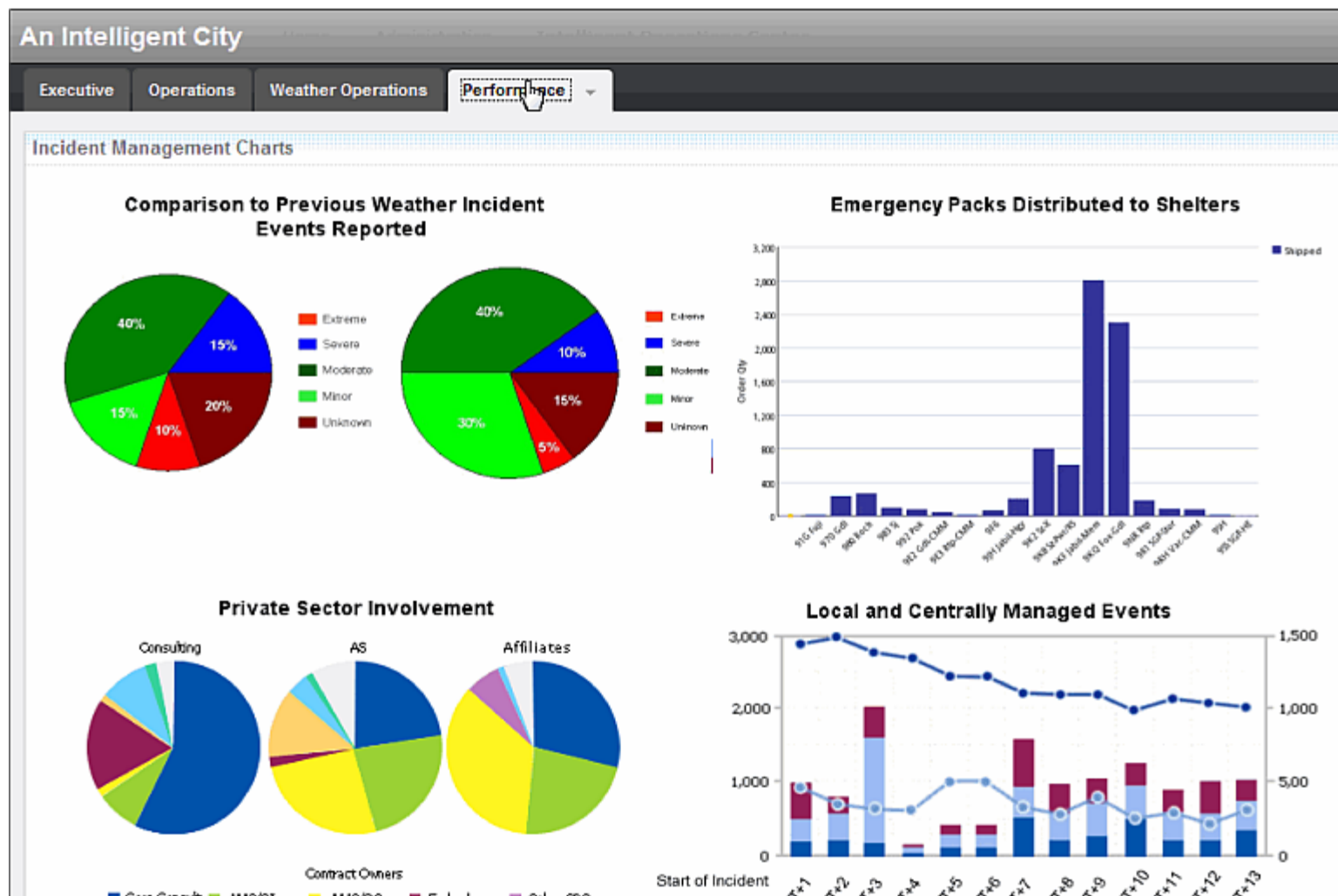
Resources

☐	Headline	Class	Category	Severity	Certainty	Urgen
☐	Summary of firefighter injuries	Event	Fire	Severe	Observed	Past
☐	Hurricane Approaching	Event	Meteorological	Extreme	Observed	Imme
☒	Large Wildfire moving Rapidly West - Te	Event	Fire	Severe	Observed	Imme
☐	Chemical spill near residential area	Event				Imme

Update Event...
Escalate to Incident...
Cancel Event...
View Standard Operating Procedure Details...
View Nearby Resources
Properties...

100 miles
75 miles
50 miles
25 miles
5 miles

Reportovanie



Ďakujeme za pozornosť