Applying Dynamic GIS to make Smarter Decisions

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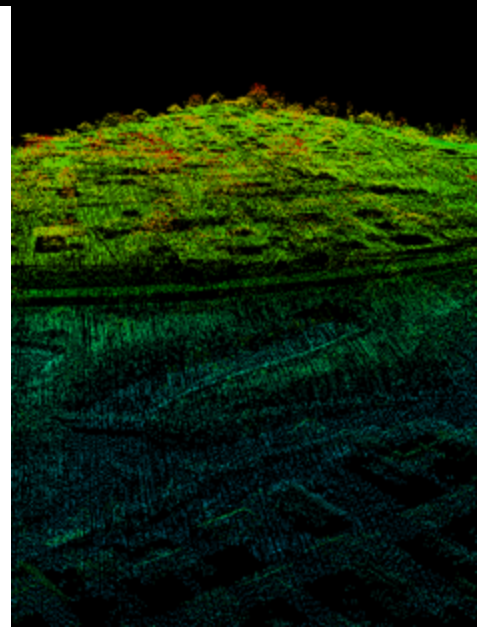


THE WORLD IS ALWAYS CHANGING

The World is Always Changing

Rikuzentakata, Japan – March 11 2011
Magnitude 9.0 earthquake. 15341 dead. 8298 missing.
$300 Billion in damages. 125,000 buildings destroyed

The World is Always Changing

Tuscaloosa, Alabama – April 27 2011
Tornados - 190 mph winds. 1.5 mile wide path of destruction. Path of 80.3 miles.
61 dead.

The World is Always Changing

Johnsons Landing, BC Canada – July 12 2012
Landslide 4 Dead

The World is Always Changing

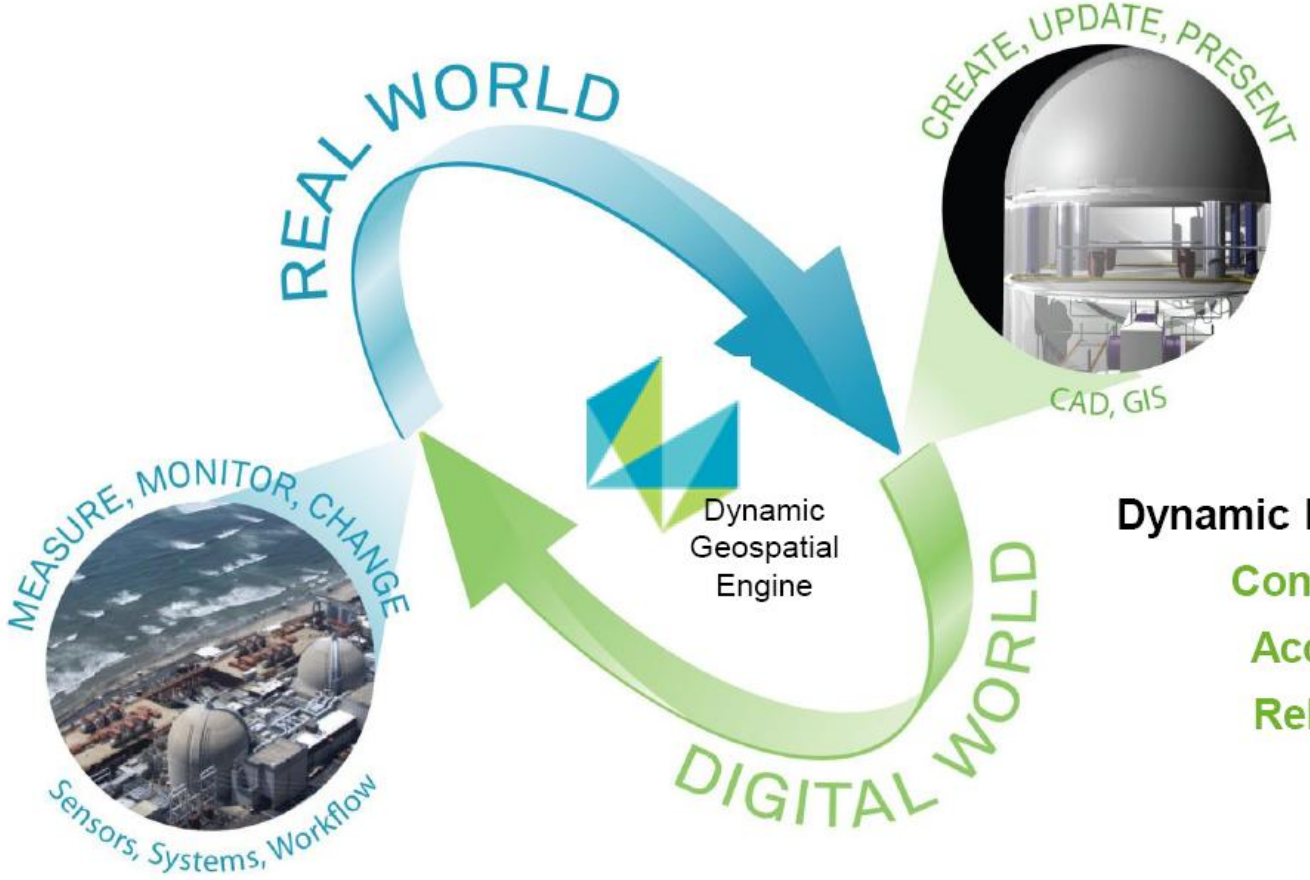
Crop Monitoring – US Drought 2012

The World is Always Changing

The pothole or damaged sign in my Neighborhood – 2012

WHAT IS DYNAMIC GIS?

INTERGRAPH



Dynamic Digital World

Connected

Accurate

Relevant

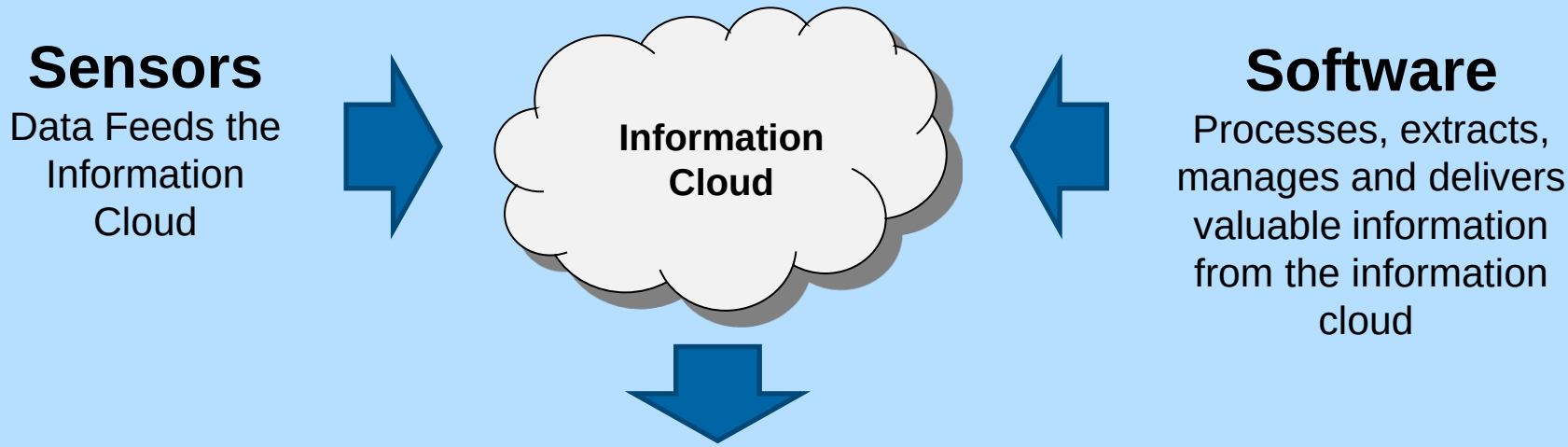
Transforming the Real World

A Dynamic Earth

of Constant Change

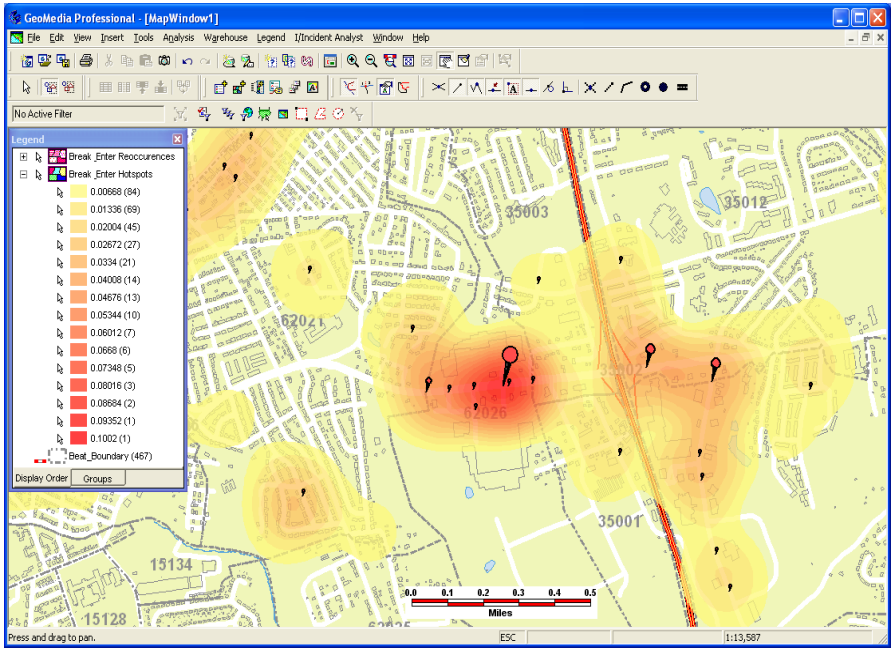
HEXAGON

Dynamic GIS = Sensors + Software + Workflow Solutions



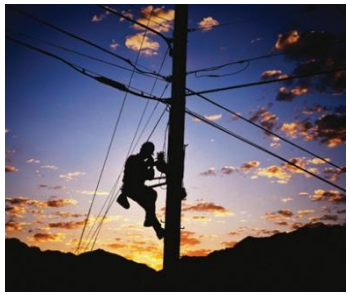
Key Elements of Dynamic GIS

- Streamlining of existing workflows and data flows
- New combinations of data
- Integration of real time data: Sensors, Video
- Geo-processing of real-time data
- Effective Visualization

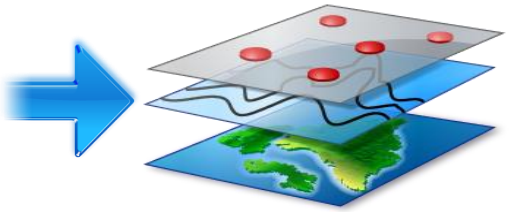


Measuring and Understanding Our Dynamic Earth





Geospatial Information Value Chain

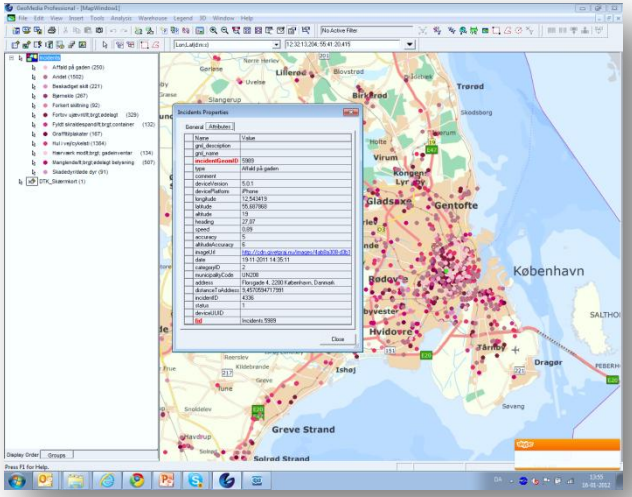
Capture **Process** **Share** **Deliver**

HOW IS DYNAMIC GIS BEING USED TO MAKE SMARTER DECISIONS

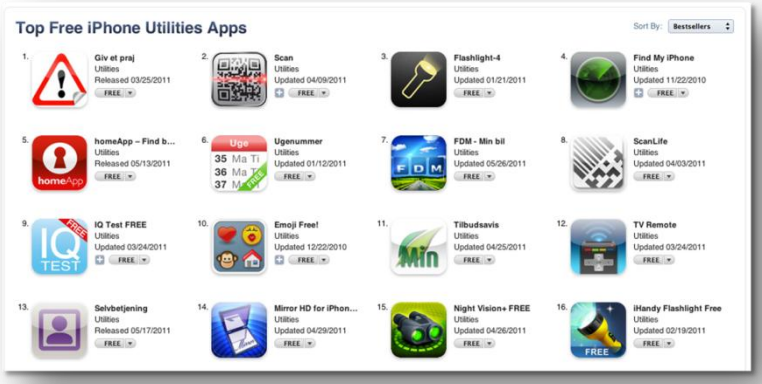
Mapping Potholes in Copenhagen

MOBILE ALERT APPLICATION

Identify & Report Pot Holes on the Road with an iPhone



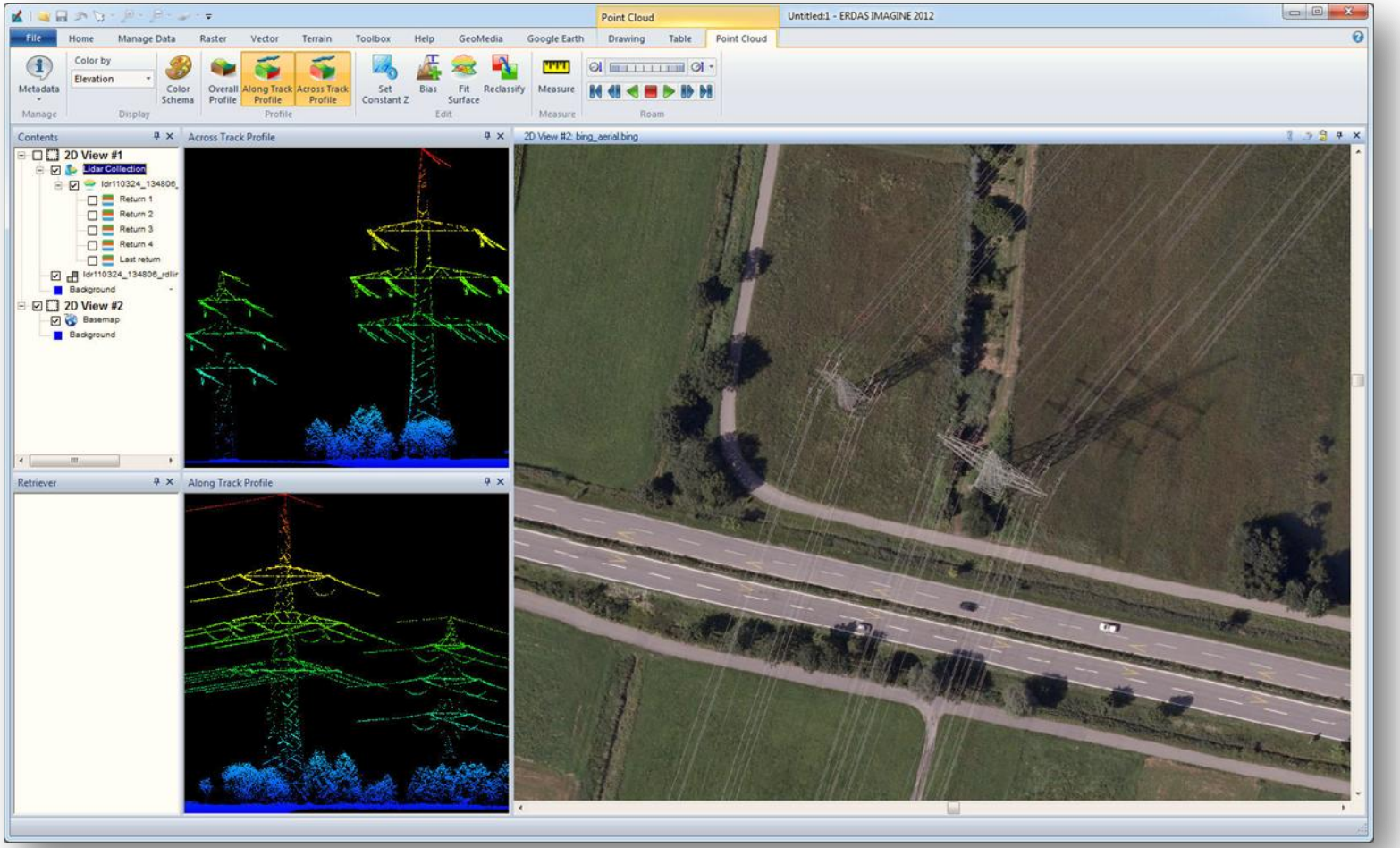
Create and Display Dynamically in a GIS Map



#1 Free iPhone Utility App in Denmark

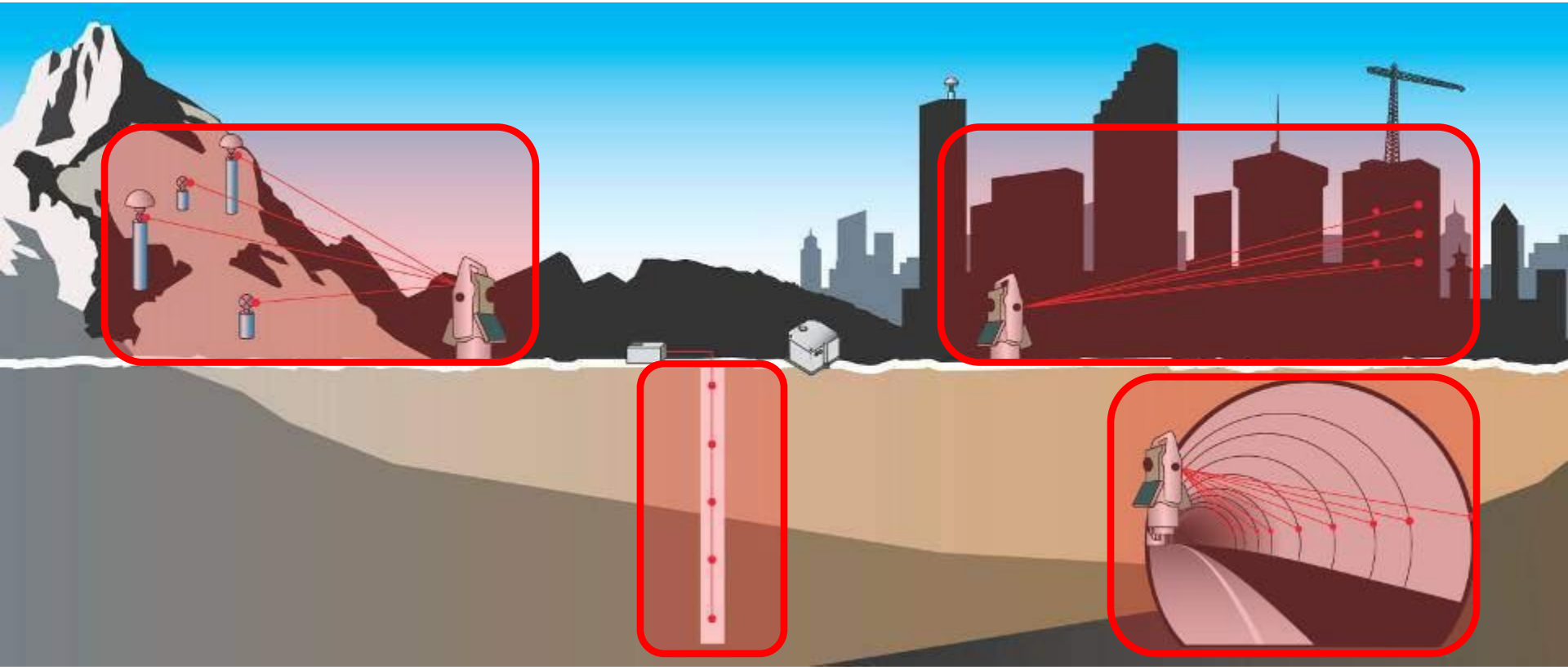
GEOSPATIAL MIXING:

Aerial Imagery + Terrestrial LiDAR = Dynamic Information



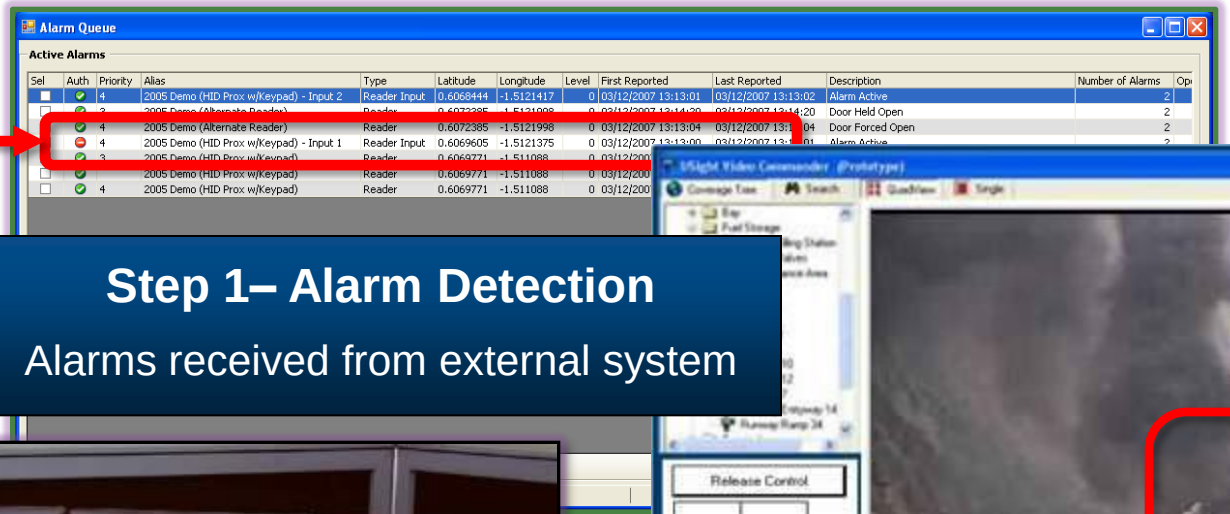
Utility Planning & Management

Leica GeoMoS Integration with Intergraph Security Suite



Systematic monitoring of deformations integrated with visualization, analysis and response.

Geo-referenced Sensors & Video Integration



Step 1– Alarm Detection

Alarms received from external system

Step 2— Video Assessment

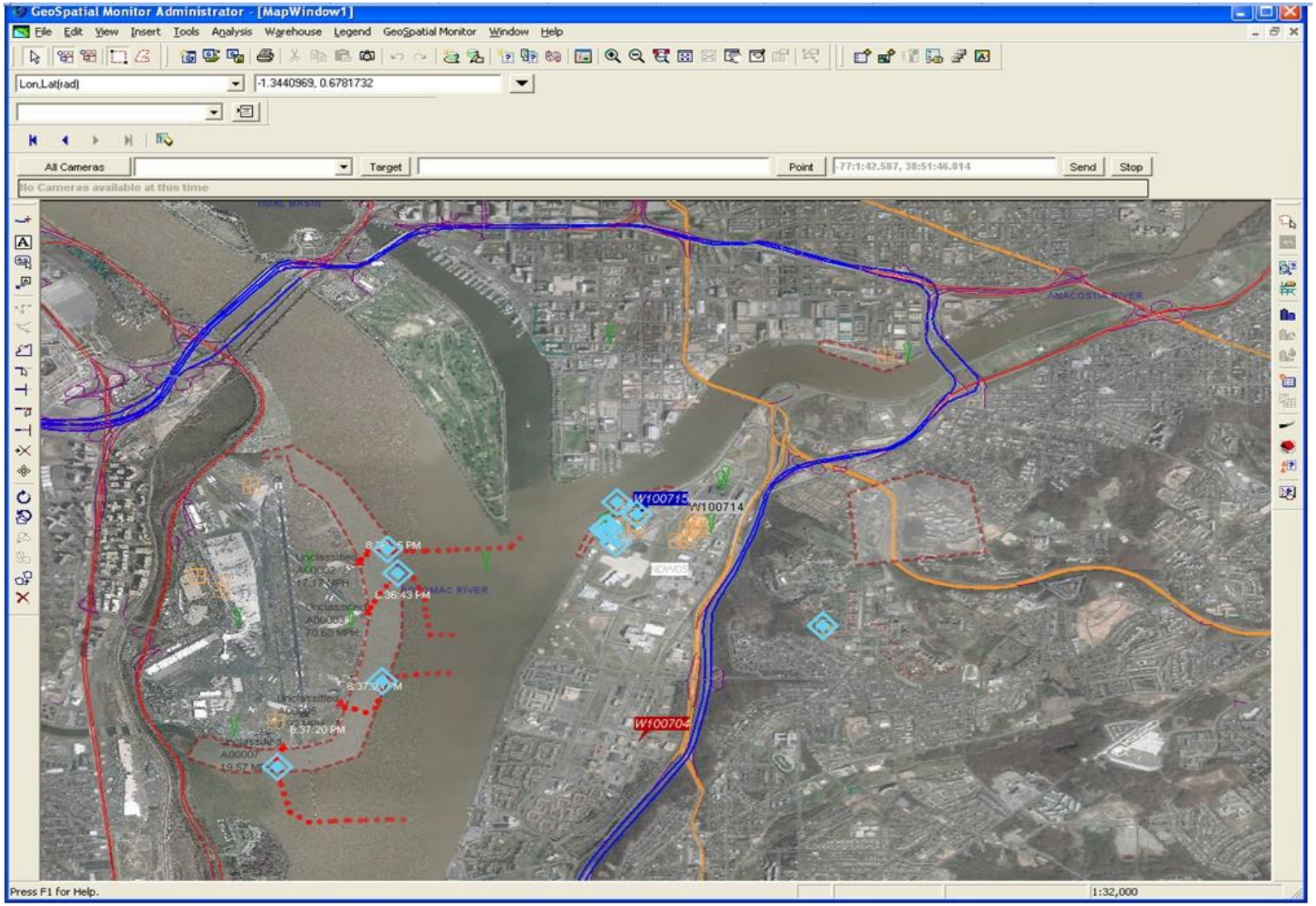
Event and alarm location can be associated with live camera feeds.

Dispatchers, calltakers, and security monitors can quickly view and assess the situation

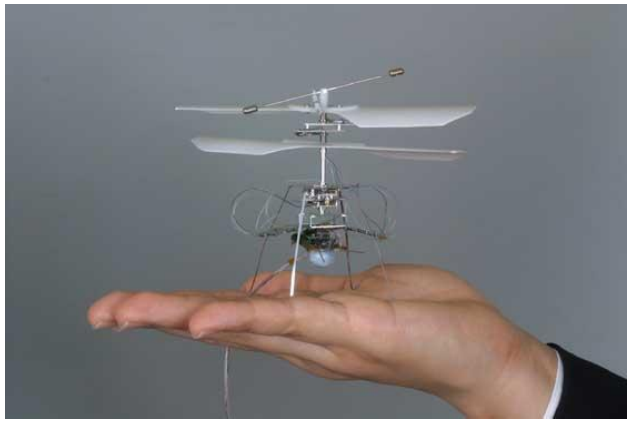
Step 3— Response

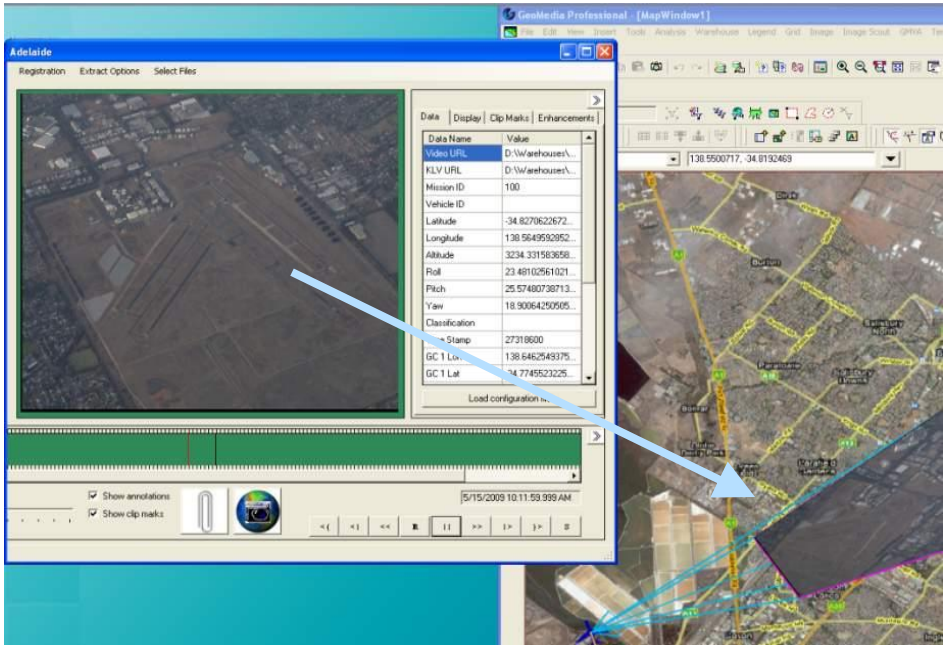
Event response is created if warranted

Geospatial Security Monitor: Geo Enabled Alarm Zones and Radar Target Tracking



Geo-referenced Full Motion Video





Dynamic GIS for Smarter Decisions

- Dynamic GIS provides integration of real time data and streamlining of new and existing workflows
- Dynamic GIS allows decision makers to work with a more current, accurate model of the real world
- Ultimately they can make Smarter Decisions