

PIIM CASE STUDY

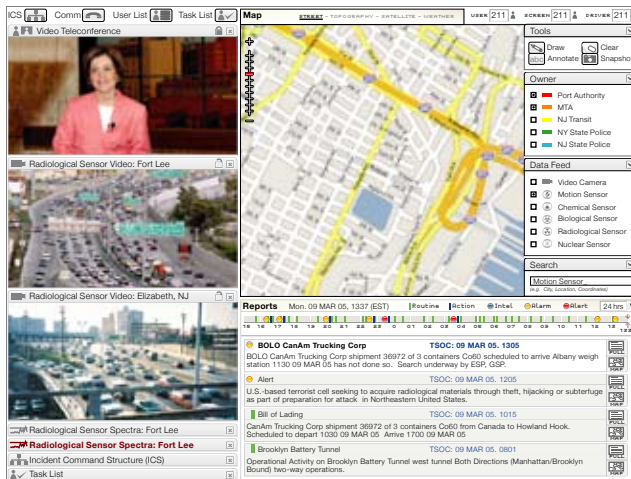
THE EOC: EMERGENCY OPERATIONS CENTER (EOC)
SUPPORTING SHARED SITUATIONAL AWARENESS DURING EMERGENCIES

THE NEW SCHOOL

PARSONS INSTITUTE
FOR INFORMATION MAPPING

68 5th Avenue
Room 200
New York, NY 10011

T: 212 229 6825
F: 212 414 4031
<http://piim.newschool.edu>



The Emergency Operations Center Shared Situational Awareness system provides advanced collaboration and monitoring of the New York and New Jersey region airports, ports, and roadways. This unique system integrates a vast network of satellite offices, sensors, and alert and reporting systems for use by analysts, emergency responders, and decision makers.

Needing to meet a rapidly approaching deadline with more than just spreadsheets of technical requirements, The Port Authority of New York and New Jersey (PANYNJ) turned to PIIM to design a thin-client solution to protect the region's airports, ports, and roadways. As a replacement solution to a legacy system, PIIM was additionally tasked to ensure a "3 minute" user adoption requirement.

By integrating PIIM's *Visualization Driven Rapid Prototyping* process with extensive end-user focus groups, usability sessions, and technical reviews, PIIM provided a solution in weeks — not months — to PANYNJ. Delivering one of its unique, all-inclusive visualization and engineering manuals PIIM supplied PANYNJ a meticulous blueprint for each functionality and feature in the system with highly refined representations of each asset, screen state, and user-experience flow.

Once delivered, the development task was transferred to the U.S. Army's Communications-Electronics Research, Development, and Engineering Center (CERDEC). Astoundingly, the CERDEC engineers were able to

complete and deliver the entire system *without any additional instructions or specifications from PIIM.*

The PIIM manual created tremendous cost- and time-savings for PANYNJ. The deployed system, which is in use today, offers the following, unique features:

1. Collaboration modules to enable real-time communication via email, text message, voice, and video
2. Advanced sharing and tracking technology to support "screen swapping" from one analyst to another
3. Integration of thousands of sensors, reports, and streaming data feeds into a single application
4. Specialized time- and context-based visualization modules
5. Geographic Information System (GIS) mapping and geo-information components

CONTACT PIIM

BRIAN WILLISON Director
Parsons Institute for Information Mapping
Telephone: 212 229 6825 ext. 4712
Email: willisob@newschool.edu

The Parsons Institute for Information Mapping (PIIM) is a Research, Development, and Professional Services facility within The New School and located in New York City. PIIM's mission is to advance the field of Knowledge Visualization through academic and commercial pursuits.