How the NYC Data Analytics Team Responded to and Learned from a Catastrophe…

Dr. Amen Ra Mashariki

esri THE SCIENCE OF WHERE™

The Washington Post

To Your Health

Seven dead, 86 infected as New York officials identify and disinfect cooling towers filled with Legionnaires bacteria

By Ariana Eunjung Cha August 4, 2015

Citywide Outreach Effort

MODA

Update the Model

Disseminate the list of Cooling Tower Locations

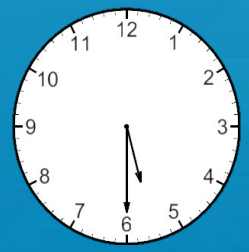
City Agencies

Share Canvassing Results

MODA

Send the Reports

City Leadership



- Over A million buildings in your City.
- Limited human and financial resources for inspection and canvassing.
- Accuracy and expediency are crucial
- Do not want another person in your city to get sick from Legionella.

What Would You Do?

Without Data and Analytics – There was a 1 in 10 chance of us identifying a building that had a cooling tower.

With Data and Analytics – There was 8 in 10 chances that we would identify a building that had a cooling tower.

Tactical Analytics Response Checklist

- [x] Translate a city question into a clearly Defined analytics problem
- [x] Access to City data, and ascertain it's provenance and quality.
- [x] Use Data and Analytics as a mechanism to create more informed decision makers in your organization.
- [x] Constant and consistent "ground-truthing" built into your analytics effort.
- [x] Communicate, Communicate, Communicate.
- [x] Embed the team of data scientists with the teams of Domain experts.

Citywide Intelligence Hub

NYC Emergency Data Drill

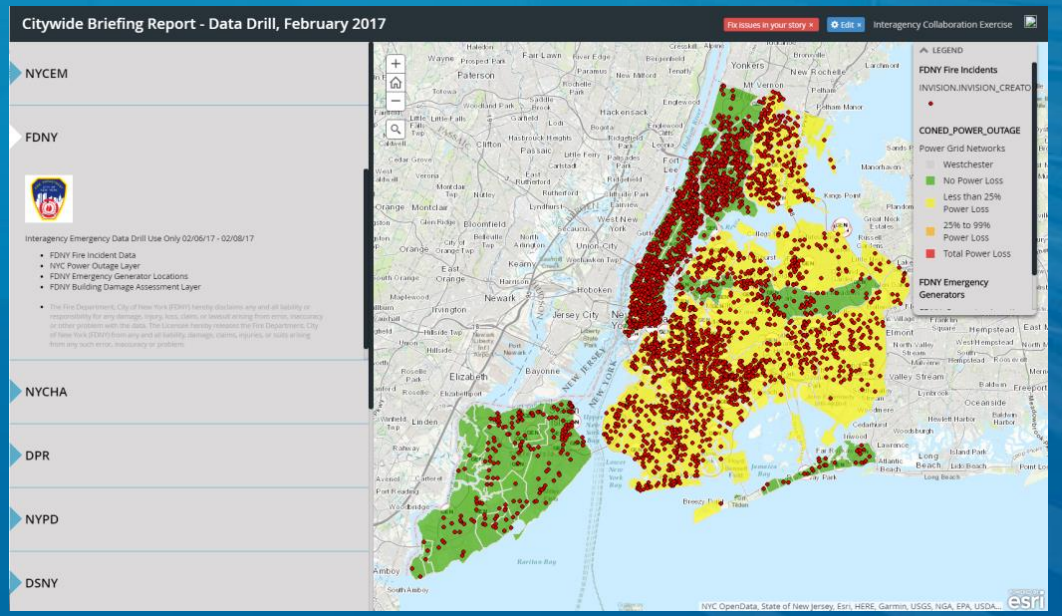
Schedule

- 11 trainings over 3 weeks prior
- Training attendees : 70
- POC users: 121
- Agencies: 22

Tuesday, February 7th – Part 1
- 43 participants on Initial Interagency Call
- Review agency datasets
- Develop Critical Operational Tool
- Collaboration Exercise – Citywide Briefing Report

Wednesday, February 8th – Part 2
- ~ 100 items uploaded/created by Feb. 8th
- NYCEM convening and call
- Review Critical Operational Tool prototype
- Review Collaboration Exercise Citywide Briefing Report

Agency division participation:
- IT and Telecommunications
- Policy and Planning
- Performance Tracking and Analytics
- Enforcement and Neighborhood Services
- Technology and Strategic Development
- Data Integration Team
- Property Division
- Management Analysis and Planning
- GIS Unit/Specialists/Developers
- Operations Research/Management
- Forestry, Horticulture, and Natural Resources
- Environmental Health/Epidemiology
- Business Solutions



Thank You