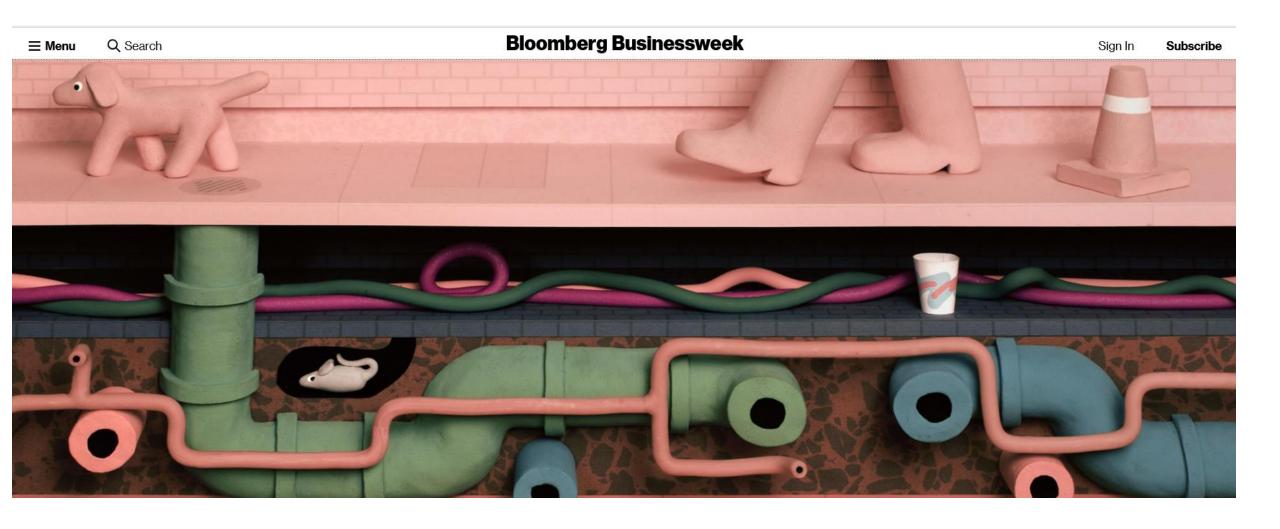
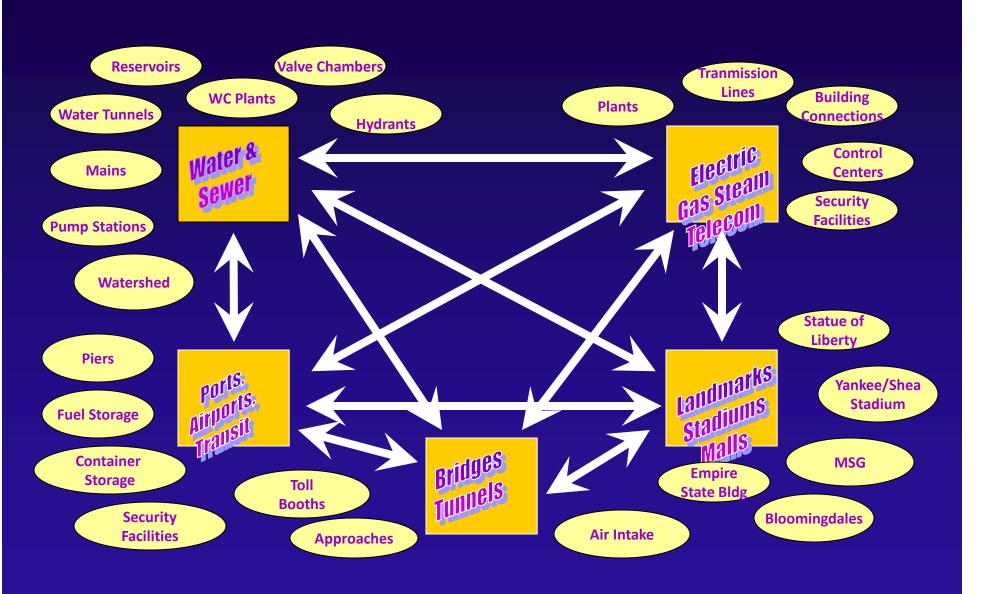
# Mapping Underground Infrastructure "Nobody Knows What Lies Beneath New York City"



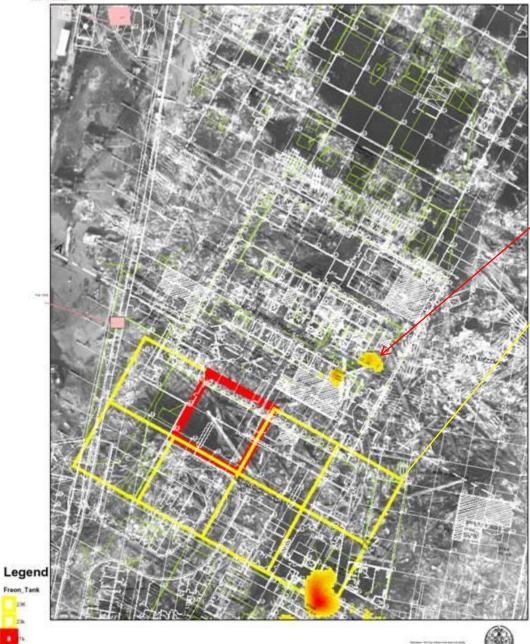
### Goal: Infrastructure Data Integration The Last Major Data Hurdle



9/11: GIS Operations on Pier 92 at W.57th and Hudson River

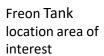


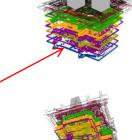
# Fuel and Freon Tanks



3D Model showing the search for Freon Tanks













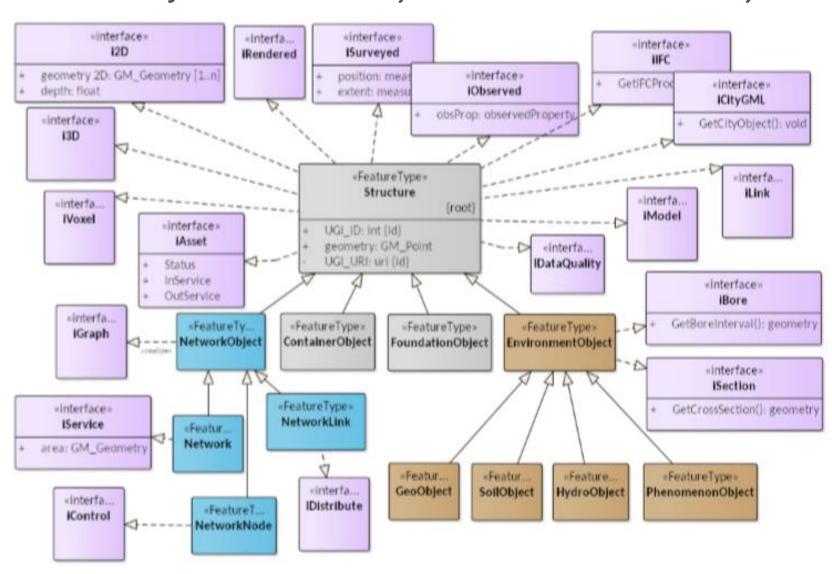
## 2017: OGC Agrees To Lead An Underground Data Effort

Supported by

The Fund for the City of New York (FCNY)
Ordnance of Survey of Great Britain (OS)
Singapore Land Authority (SLA)
NYC Geospatial Information Systems and Mapping Org. (GISMO)



#### Open Geospatial Consortium MUDDI Model (Model for Underground Data Definition and Integration) Pilot Projects conducted by London and New York City



### NYC Underground Mapping Pilot Project



#### **NYC 3D Underground Pilot and OGC MUDDI**

Erika Kamptner
Tim Keane
New York City
Dept. Information Technology & Telecommunications



#### Future: Integrate GIS Infrastructure Data and BIM

- Access, analyze and model the entire built and natural environment
- Provide foundation for Smart Cities technologies and applications Sensors, smart valves, smart pipes and conduit, smart connections, Al



