Bio: My career in City government spanned 34 years, including 6 years as a Legislative Analyst at the City Council Finance Unit; and 21 years of service at NYC DEP where I directed mapping of the City’s water supply system and worked on the development of NYC’s basemap. I directed infrastructure mapping at the Emergency Mapping and Data Center following the 9/11 attack. Since then I consulted for Plangraphics, a GIS firm, and Parsons Brinckerhoff, an infrastructure/engineering firm. Currently I serve on the Board of Directors of the NYC Geospatial Information Systems and Mapping Organization (GISMO). I am engaged in an international project of the Open Geospatial Consortium to develop a data model for all underground infrastructure.

While working at NYC DEP in the mid 1980’s, I was tasked with an effort to manage a project to digitize and create a 6,000 mile network of the city’s water mains. The budgetary justification for mapping the accurate location of water mains was to coordinate planning and operations and also to facilitate design and construction, to reduce excess costs incurred by delays in construction. Further, if the city was able to locate a water main break rapidly, property damage, and payments associated with damages, could be reduced. This could only be accomplished with a networked map of water mains made possible with the use of geospatial information systems.

The successful implementation of the water main map for operations at DEP convinced the managers to fund a citywide sewer map layer. New York City is one of the very few cities in the world that has digital maps of its water and sewer systems.

I was in charge of underground infrastructure mapping of the World Trade Center site. I worked with DEP, DDC, MTA, Port Authority, Con Edison, Empire City Subway, etc. I collected maps of different scales and media and supervised a team of GIS technicians and engineers assigned to align/layer the maps for use by the responders as they navigated the World Trade Center site. It took several weeks to bring all of this information together, but it enabled us to discover a buried tank of freon gas threatened by underground fires, and enabled us to take measures to avoid the release of phosgene, mustard gas.

Since 9/11 I have been working on the development of an accurate, integrated underground infrastructure map for first responders. Since 9/11 we have canvassed colleagues, interviewed agency executives, had presentations with representatives, etc. …all of whom agree that this initiative is critical for emergency response and for the development of New York as the premier Smart City. The project has been stalled due to lack of funding.

My efforts in advancing the use of GIS for infrastructure has been seriously impeded by lack of leadership, a lack of planning and difficulties with coordination between City infrastructure
agencies and utilities. Yet recent analysis has shown that City infrastructure agencies and utilities could save billions of dollars by having complete, accurate and interoperable infrastructure data. Available interoperable utility data is also critical for disaster planning and response.

I support amendments to Chapter 48, DOITT of the City Charter as follows:

- The appointment of a Deputy Commissioner who serves as the City’s Chief Geospatial Information Officer
- The establishment of a GIS Steering Committee comprised of Agency GIS leaders and other experts.
- A requirement that the City produce and keep up to date a GIS strategic plan.
- A requirement that the spatial data connecting most of the City’s open data be standardized, interoperable and easy to use.
- The establishment of an underground infrastructure steering committee comprised of representatives from City infrastructure agencies and private utilities, to guide the improvement of utility data so it can be quickly accessed and used during routine operations and emergencies.