

May 9, 2019 – Manhattan Borough Hearing on NYC Charter Revision
Written testimony submitted by Amy Jeu (amyjeu@gmail.com)

Good evening.

My name is Amy Jeu. I am a citizen and resident of Brooklyn. I am in full support of the GIS charter amendments to Chapter 48: Department of Information Technology and Telecommunications (NYC DoITT). I support the works of GISMO (NYC Geospatial Information Systems and Mapping Organization) and the larger GIS community.

By professional, I am a Geoscience College Laboratory Technician at Hunter College, City University of New York (CUNY). I received a BA in Geography from Hunter College and a terminal professional MGIS degree (Masters of Geographic Information Science degree) from the University of Minnesota – Twin Cities campus.

In 1998, I founded the Theta Pi Chapter of Gamma Theta Upsilon, an international honor society in geography and continue to serve as the chapter's President and Coordinator.

In 2001 while at the University of Minnesota, a Geographic Information Science Student Organization (GISSO) was formed using grassroots organizing efforts. I had the honor and privilege of serving as the organization's Founding President. I held the position for one year due to graduation and handed over the reins to the next cohort of MGIS students and GIS practitioners. To this day, GISSO remains a thriving organization with a strong sense of community and ties to the University's Department of Geography, Environment and Society; ESRI; the MN GIS/LIS Consortium; and the state of GIS in Minnesota.

Also serving as the Professional Staff Counselor (PSC) / CUNY Grievance Counselor, Delegate, and Vice Chair of the College Laboratory Technicians (CLT) Chapter; and as a NYSUT and AFT Delegate, I understand the critical importance and need for a Chief Geospatial Information Officer (GIO) within local government, and its relationship to other city agencies, students in academia, GIS practitioners, various industries, community volunteers, and residents of this great city. The values added are to our good and welfare; cost savings in the billions on scales ranging from local to global; data accuracy and accessibility; strategic planning; emergency preparedness and response; civic engagement and public participation.

What attracted me to GIS was the ability to model the real world inside a computer system. I was fascinated with all the things one could do with a GIS: map making, modeling, forecasting future events, location analysis, decision support, marketing, routing applications, and visualization.

The need for geospatial intelligent systems is a high priority and inherent to any discussion related to the strength and resilience of NYS critical infrastructure (Source: NYS2100 Commission's report entitled, "*Recommendations to Improve the Strength and Resilience of the Empire State's Infrastructure*"; released in 2013 at the behest of Governor Cuomo). The ability to convey information in clear and concise ways is immeasurable. Related to that are standards, metadata, accuracy and accessibility.

I am privileged to be working with the best of the best in this golden age of geospatial big data, digital and information revolutions, and advanced technologies. The wealth of information we are collecting is resounding and beyond human comprehension for just one single person.

We live in a dynamic world where the tensions of our interactions, connections, and relationships are being tested at every juncture. The world has experienced significant increases in natural disasters, changes in sea level rise, climate change, and school shootings to name a few, and if we (humans) do not reverse our course, these trends will continue to advance as we move forward.

I concur with all my colleagues who have testified before you, and I would like to add:

My family owned several businesses and homes throughout our lifetime, one to include a 25 year run in Coney Island. I am a survivor. I survived events to include,

- The Great Nor'easter of December 1992 that washed away 100 feet of Steeplechase Pier in Coney Island;
- Hurricane Sandy in 2012 that flooded my house with six feet of water; and
- Hurricane Maria in 2017 that also affected my home in Puerto Rico.

Having been on different sides of the fence, I can give you a first-hand account and ground level assessment of where we can all do better, but I want to testify today about the vital role that city government has played in disaster mitigation, emergency management, relief and recovery efforts, helping neighborhoods and communities rebuild, and the human toil in healing.

9/11 was one of the darkest days in America and in spite of the horrific tragedy and the trauma we endured; the GIS community was rallied together by a single email sent out by GISMO Founder, Dr. Jack Eichenbaum, asking for volunteers to assist in the mapping efforts.

The GIS community sprang into action, accepted the challenge and worked together towards common goals and a shared mission.

In essence, the networks of partnerships, friendships and alliances that were built up over the years and decades were galvanized and we reacted and responded by pulling together all our expertise and placing calls to get key stakeholders to get them on board and to get the job done and to save lives. We collaborated at federal, state, local, regional, and international levels.

One of the greatest lessons learned from 9/11 was the absolutely critical and essential need for coordination of efforts at the local government level. It takes a uniquely qualified top city official to do the job --- someone who is intimately familiar with NYC geography, protocols, policy and procedures; geospatial data; data acquisition and dissemination; data interoperability; data standards; QA/QC processes; information science; legacy systems; GIS technologies; remote sensing; aerial photography; photogrammetry; sensors; GPS; surveying; ground-truthing and field methods. Such an individual embodied as the NYC Chief, would manage not only technological equipment and devices, but the human interactions among technology constituents - this is commonly referred to as exchange technology.

When a disaster strikes, we put into action the strategic plan we have been developing all along. That is the critical moment we jump as we are called into action to respond and to respond with great urgency and efficiency.

Today, we are nearly 20 years from 9/11 and local government is without a Commissioner to assume this vital role and responsibility at the NYC DoITT level. Of greatest concern is our safety and security. NYC is the financial capital of the world and we do not want to be caught with our pants down again.

In closing, we are calling on this body to seriously consider and codify into the City Charter the position of a Chief Geospatial Information Officer (GIO) and to also support in full the additional GIS charter amendments outlined below:

- The appointment of a Deputy Commissioner for Geospatial Information Systems
- The formation of a GIS steering committee composed of City agency GIS managers and outside experts
- A requirement for the development and maintenance of a GIS strategic plan
- Responsibility for ensuring that spatially enabled open data is interoperable and easy to use
- The formation of an underground utility data interoperability steering committee composed of representatives of public and private utility companies and agencies

Thank you.