GIS Network Meeting, 9/14/19

Location: Pope Park – Hartford, CT

Attendance – Sign in Sheet

9:15 – 9:30 Committee Updates:

Standards
Stormwater Standards Working Group met earlier this week

Communications
New Website. Contact Steve Birney or Kristen Ponak to add content

Education Committee
October 19th - Rocky Hill Town Hall - Stormwater Mapping Requirements
Inviting vendors

GIS Day
ESRI workshop (2) - Registration
Operations Dashboards
Web App Builder
Limebike, Fleet Feet
Mappy Hour - Arch Street Tavern
Looking for sponsors for Coffee and Cake
Poster Session

Data Acquisition and Advocacy
Spring 2019 Flight
CT, MA, RI
USGS, NRCS, State of RI, State of MA, State of CT
Imagery - similar specifications to 2016 Flight

9:30 – 10:15 FirstNet
Michael Varney
Director of Field Operations

Communication Issues - 9/11 brought to forefront

2012 - Police Chiefs, Fire Chiefs, ICMA, - Middle Income Tax bill.
$7Billion - and 20 Mhz Spectrum

2012-2015 - Outreach to public safety community

2015-2016 - Nationwide RFP

2017 - Awarded to AT&T

Public Safety LTE Network
Plus everything on AT&T's network

5 Year Build Plan
  1000 macro sites
  Specific to each state

  Additional sites location determined by State's public safety interoperability group
  40,000 WiFi Hotspots
  6,000 Distributed Antenna Systems
  MetroCell Solutions

  3 Mobile Sit

  Priority and Preemption plus no throttling across all AT&T LTE bands

FirstNet Core Launched March 2018
  Physical core infrastructure
  Standalone security operations center

Local Control Portal
  Application Catalog
    Internal certification check
  API, SDK’s,
  Developer Portal
  No Fee’s

QPP
  Quality of Service
  Priority
  True, ruthless Preemption

Devices
  Popular smartphones
  Anything that will run 4G LTE

Eligibility
  Primary - first responders
  Extended Primary - ESF’s, NGO’s
  Can put personal device on Network

Future
  Budgeted for the next 25 Years
  Board of 15

FY2019 Priorities
  Network buildout
  Public Safety Advocacy
Innovation
Reinvestment

Individual Engagements with Public Organizations

10:30 – 11:15 City of Hartford - GeoEvent Server

Incoming Adaptors
Filter/Processors
Output Connectors

Quality of Life App
Call Before You Dig

Open Sourced on GITHUB
Compiled to 10.5

Event based data collection
Garbage collection -

Sensor based data collection
Air Temperature
Road temperature
Humidity

Raspberry Pie

11:15 - 12:00 UAS Technology Beyond the Flight

Drone technology is an extension of geospatial
Started program in 2012
Utility Sector - Mega Programs

FAA Moved rapidly to making easier.
Over 100K licensed pilots

Use case for UAS Services

UAS Payloads.
  Thermal imagery
  NIR
  Multispectral
  Chemical detection
  Aerial LiDAR
  RGB Corridor Imagery
  Photo Documentation
Video Documentation
Detection Modelling
Underwater Mapping
Spray Technology

Post Processing largest element of a UAS Project

Current Commercial Regulations

FAA Airspace Mission Planning Tool

Risk Management
Significant
Assess Risk Prior to Each Flight

Sitewide Aerial Surveys
Two methods.
   Fixed Wing - Large Area
   Rotary Blade - Isolated area. High resolution camera.

Volumetric Calculations

3D Model of structures - Communication towers, Utility Structures

Safe Remote Inspections
High Resolution

Resolution and Accuracy
Less than 1" resolution

   Flying less than 400' ABG

   Survey Ground Control, Open GPS, RTK GPS in Drone

Virtual Reality / Augmented Reality

Payloads
   Thermal Inspection
      Solar Farms, Power plants
   Near Infrared
      Restoration analysis
   Multispectral Analysis
   Archaeological and Cultural Inspections
   Wildlife Surveys
Construction Management and Monitoring