

Commonwealth of Pennsylvania

State GeoBoard Meeting

May 8, 2017

Agenda

- Welcome and Introductions
- Governance Task Force Lead - ***Vote***
- USGS
- Task Force Updates
- New Business
 - PEMA Update
 - NENA Update
 - Legislative
 - Outreach
 - Topics for next meeting
- Adjourn



VOTE

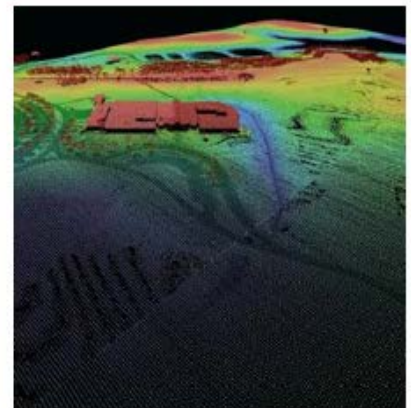
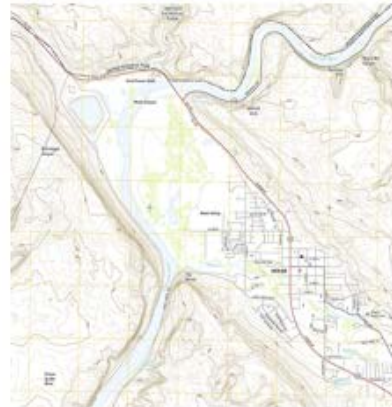
Governance Task Force Lead
Kevin Eaton



USGS

Scott Hoffman

US Geological Survey: National Geospatial Program & PA Water Science Center



- USGS, National Geospatial Program in Pennsylvania
- 3DEP/BAA
- Hazards
- PA Water Science Center
- StreamStats
- Flood Inundation Mapping (FIM)

USGS: What we do...

- Primary geospatial data-collection agency for the Nation
 - <https://nationalmap.gov/index.html>
- Support to Federal, state, and local government geospatial activities
- NEEA and HRBS partner input from the Nation
- Support mission-critical activities and applications
 - Elevation
 - Water
 - Hazards (natural, manmade)
 - USGS and DOI science mission areas
- NGP support staff for Pennsylvania
 - Craig Neidig – Geospatial Liaison (cneidig@usgs.gov)
 - Scott Hoffman – Associate Liaison (shoffman@usgs.gov)

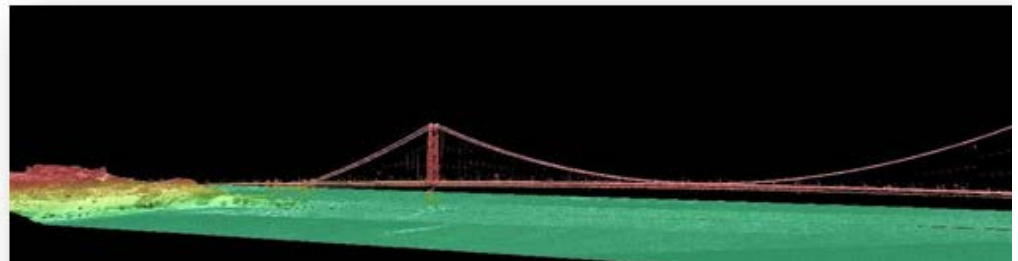
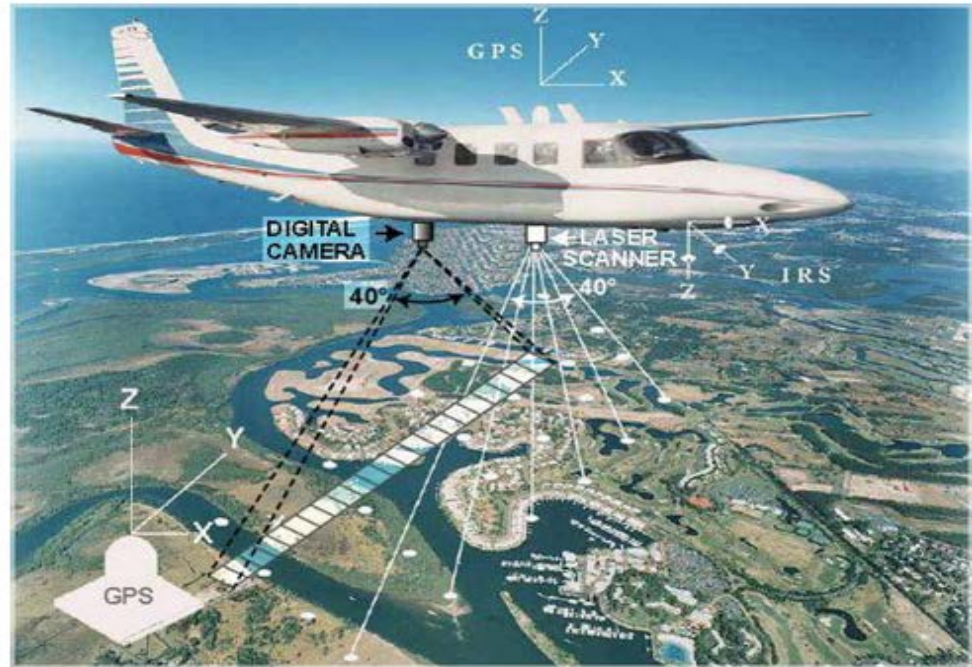
3D Elevation Program (3DEP)

Applies ground-breaking lidar technology to acquire and distribute 3D data

Includes surface elevations and natural and constructed features

Increases the quality level of lidar being acquired to enable more accurate understanding, modeling, and prediction

Addresses a broad range of critical applications of national significance



3DEP

READY for a national, 8-year program

- Published plan for action based on extensive stakeholder input
- Proposed 8-year collection cycle over CONUS
- Issued the first Broad Agency Announcement in 2014, in partnership with FEMA and NRCS
- Geospatial Products and Services Contracts (GPSC3) being established to address increased data volume
- Revised the base lidar specification to include 3DEP quality levels (QL1, QL2)
- Investigating new technologies (Geiger and Single-Photon lidar, green laser, etc.)
- New products and services being made available for *The National Map*



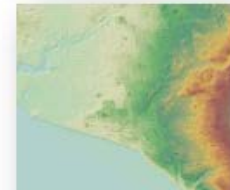
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5 meter Alaska DEMs



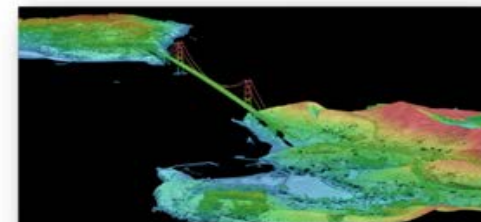
Alaska Ifsar ORI



Alaska Ifsar DSMs



1 meter DEMs



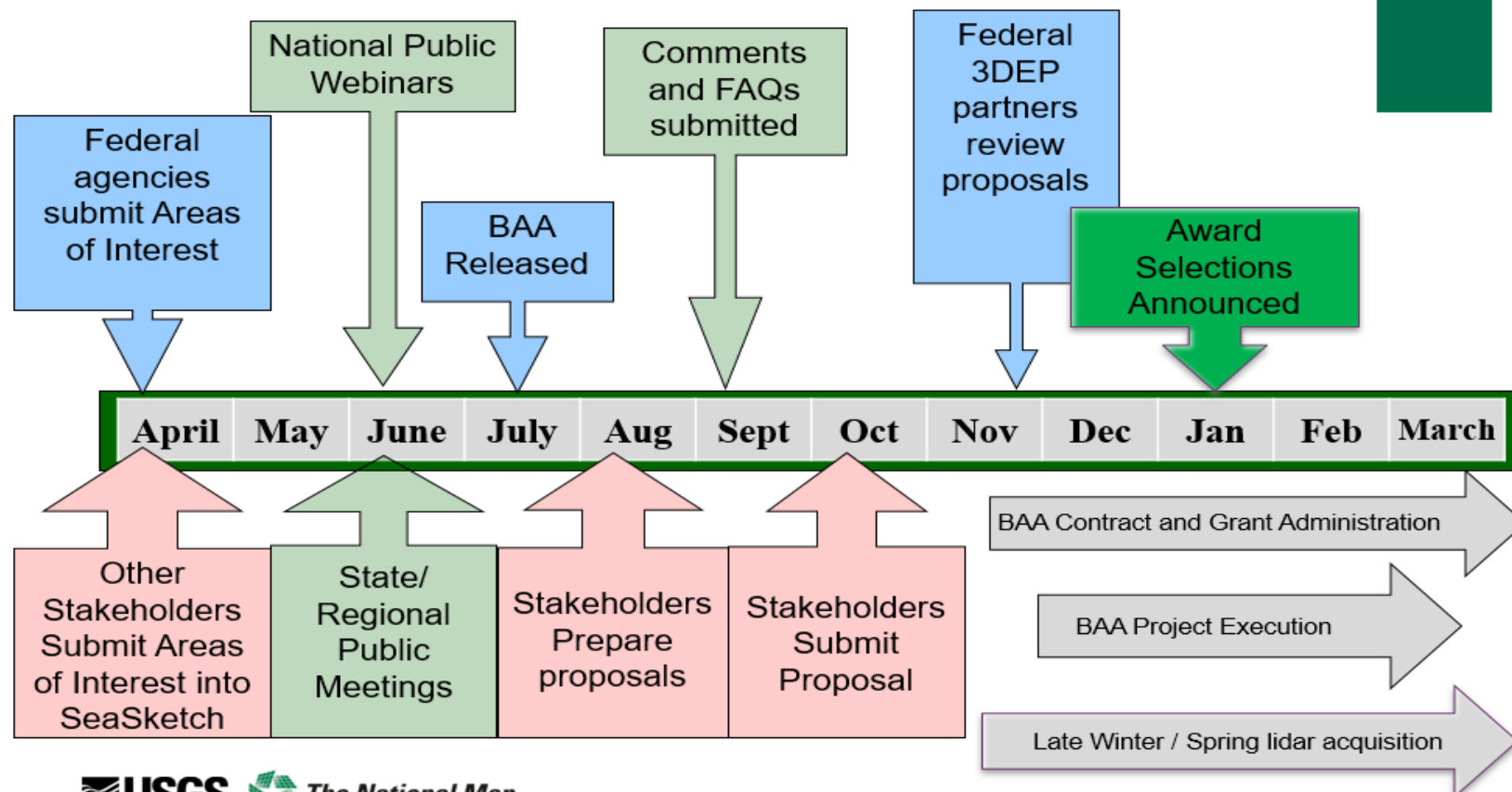
Lidar Point Cloud

3DEP Data Acquisition

Broad Agency Announcement (BAA)

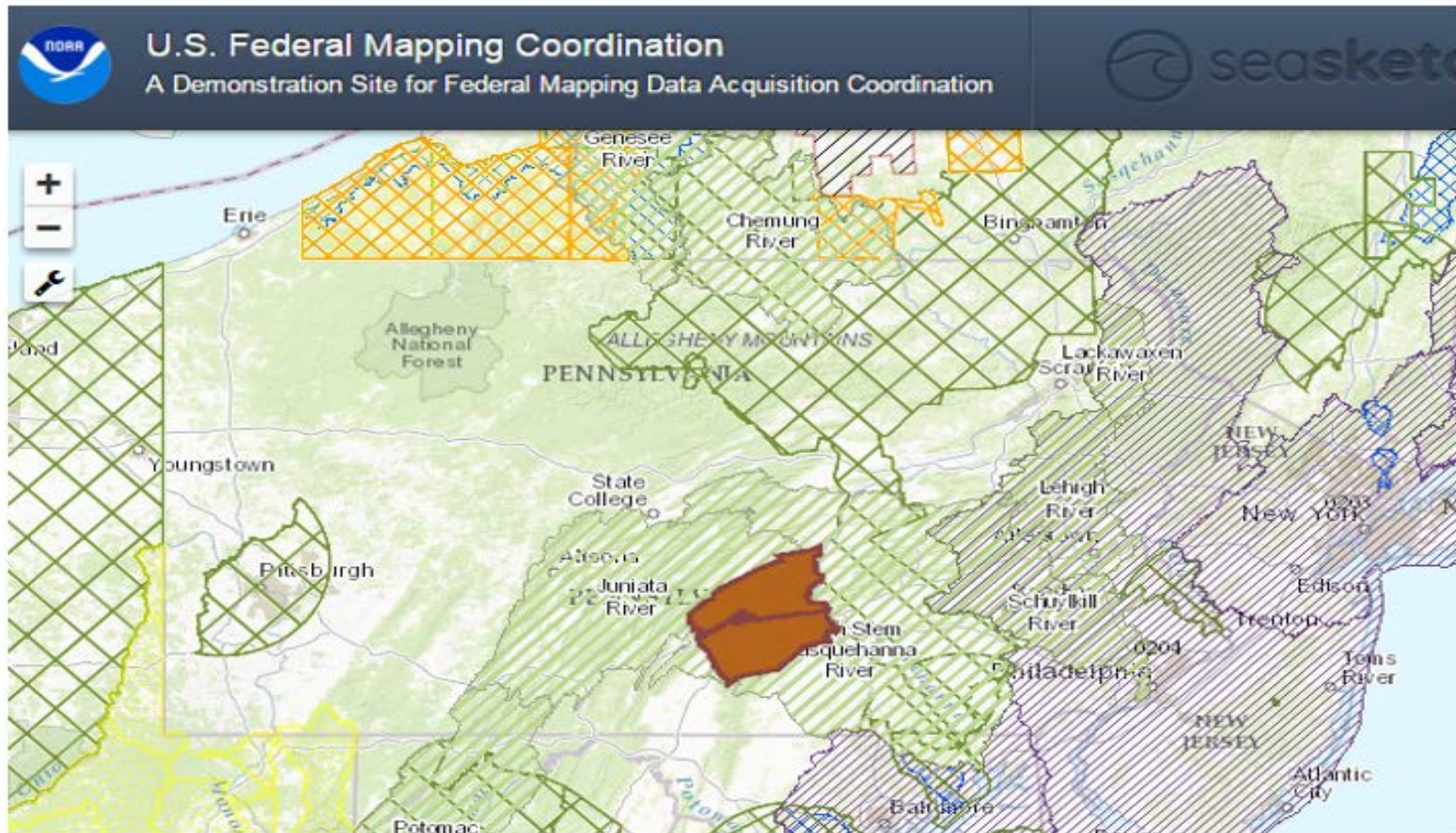
- Provides detailed information on how to partner with the USGS and other Federal agencies to acquire 3DEP quality data
- Announced at [Fed Biz Opps](#) and [Grants.gov](#)
- Partners may propose contributing funds toward a lidar data acquisition project using the USGS Geospatial Products and Services Contracts (GPSC) or they may request 3DEP funds toward a lidar data acquisition project using the partner's contract
- Provides a systematic, transparent process for non-Federal agencies to partner with Federal agencies - state and local governments, tribes, academic institutions and the private sector are eligible to submit proposals
- Augmented with additional Federal investments throughout the year

+ Generalized 3DEP Annual BAA Cycle



Seasketch

- <http://www.seasketch.org/projects/>



3DEP Data Acquisition

Recent Pennsylvania Collects (QL2)

- Philly area (DVRPC): Bucks, Delaware, Philadelphia Counties
- Hurricane Sandy: Chester, Lancaster, York Counties
- City of Allentown
- Dauphin County
- State College area

Hazards

- Earthquake, Volcano monitoring
- Specific to PA – flooding, landslides, sinkholes
- Hazards Data Distribution System (HDDS)
 - <https://hddsexplorer.usgs.gov/>
 - Imagery support for wildfires, flooding, weather-related events
 - Portal for downloading data for specific events (Oroville Dam, CA)
- Near real-time situational awareness and agency coordination
 - GIRT – Geospatial Information Response Team
 - <http://www.arcgis.com/home/webmap/viewer.html>
 - Baton Rouge flooding
 - Storm Team and coastal surge monitoring (Sandy, Irene, Lee, Matthew)

Oroville, CA

USGS
science for a changing world

Hazards Data Distribution System (HDDS) Explorer

Home Save Criteria Load Favorite Manage Criteria Item Basket (0) shc

Search Criteria **Events** Additional Criteria Results

2. Select Your Event(s)

Check the boxes for the event(s) you want to search. When done selecting event(s), click the *Additional Criteria* or *Results* buttons below. Click the plus sign next to the category name to show a list of events.

☐ Use Event Prefilter ([What's This?](#))

Event Search:

- Baseline
 - 2017 Events
 - 201703_Tornado_US
 - 201702_Dam_RadarSAT_CA
 - 201702_Flood_US
 - 201702_Dam_CA
 - 201702_Dam_CA
 - Public Ad hoc 201702_Dam_CA
 - 201702_Earthquake_PHL
 - 201702_Tornado_US
 - 201701_Exercise_Patriot_South_MS
 - 201701_Fire_CHL
 - 201701_Tornado_US
 - 201701_Flood_US
 - 201701_Fire_ARG
 - 2016 Events
 - 2015 Events
 - 2014 Events
 - 2013 Events

Search Criteria Summary (Show)

Map Satellite

Porters Ravine Recreation Area

Thermalito Diversion Pool

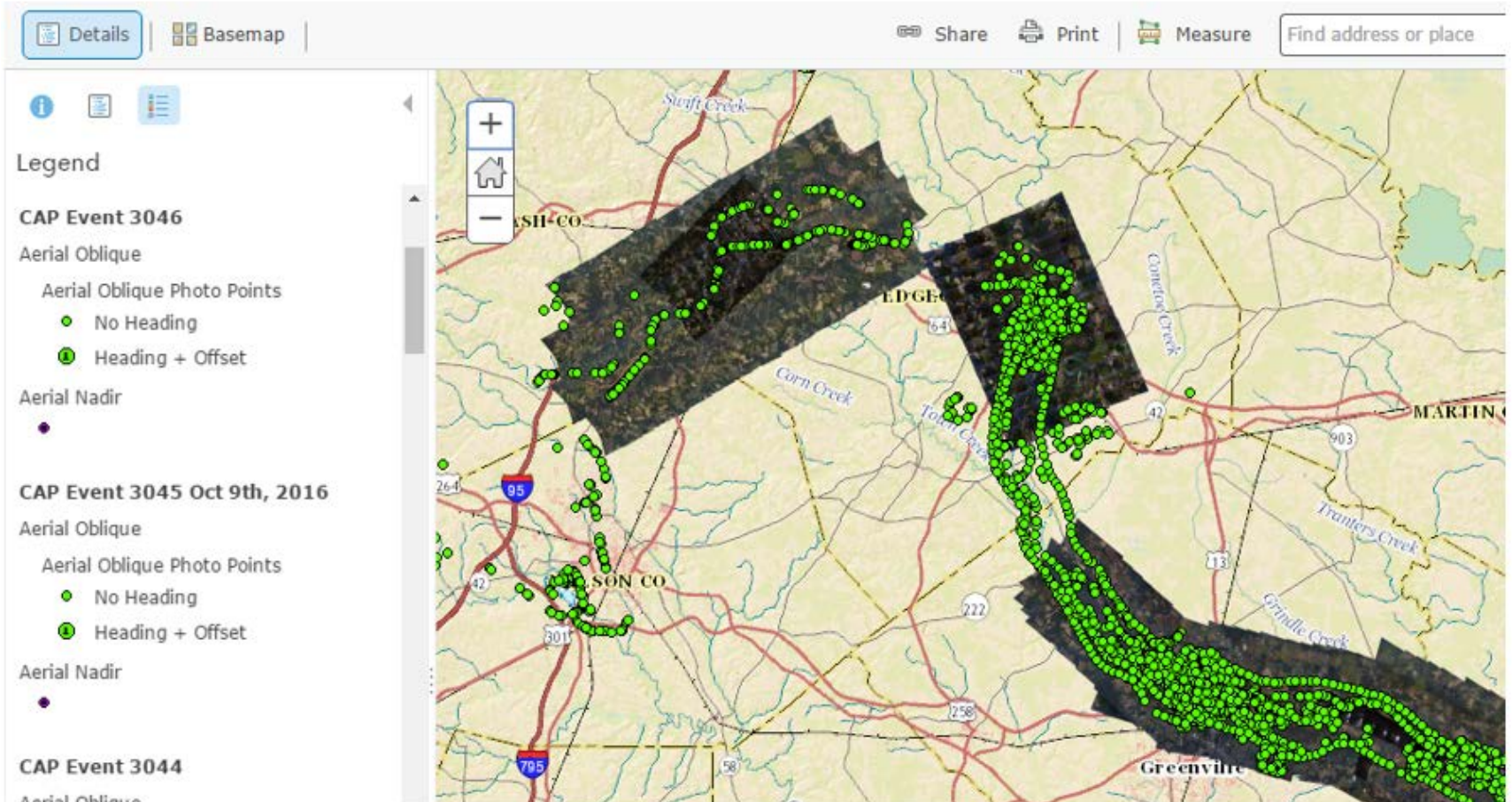
Oro Dam Blvd E

Oroville Dam Blvd E

Royal Oaks Blvd

Hurricane Matthew

ArcGIS ▾ USGS - National Map Disaster Coordination Preparedness & Response - Hurricane Matthew 2016



PA Water Science Center

- Streamgauge network
 - <https://maps.waterdata.usgs.gov/mapper/index.html>
- Groundwater and surface-water projects
 - NAWQA - <https://water.usgs.gov/nawqa/digmap.html>
 - Unbiased data collection and interpretation
 - Cooperating agencies include: EPA, DEP, DOH
 - Flood modeling, mapping, and analysis
- Drought Web page: <https://pa.water.usgs.gov/drought/>
- Geospatial projects/products
 - Small watersheds of PA: <https://pa.water.usgs.gov/infodata/gisdata.php>
 - Bridge scour

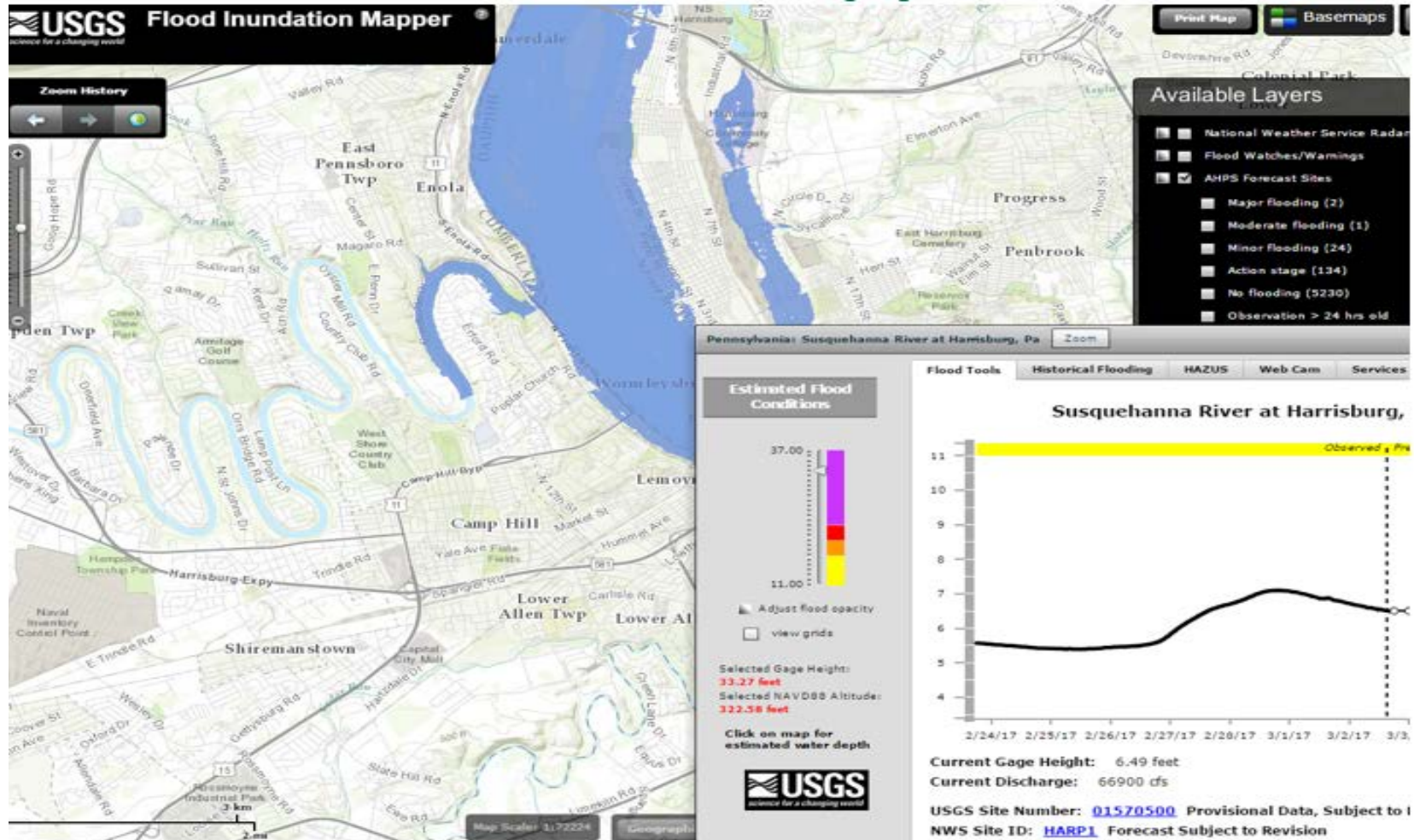
StreamStats

- <https://water.usgs.gov/osw/streamstats/>
- Web application supported by a GIS database
- 3rd operational state in 2004
- Analytical tools for basin characteristics and streamflow statistics
 - Stats based on published regression equations
- PASS has historically been the Number 1 SS application
 - Over 7 million hits in one year
- Download basin shapefiles and basin characteristics(r 4.0 basin editing)
- Upstream/downstream tracing (?)
- Raindrop tool (?)
- Elevation profiles (r 4.0)

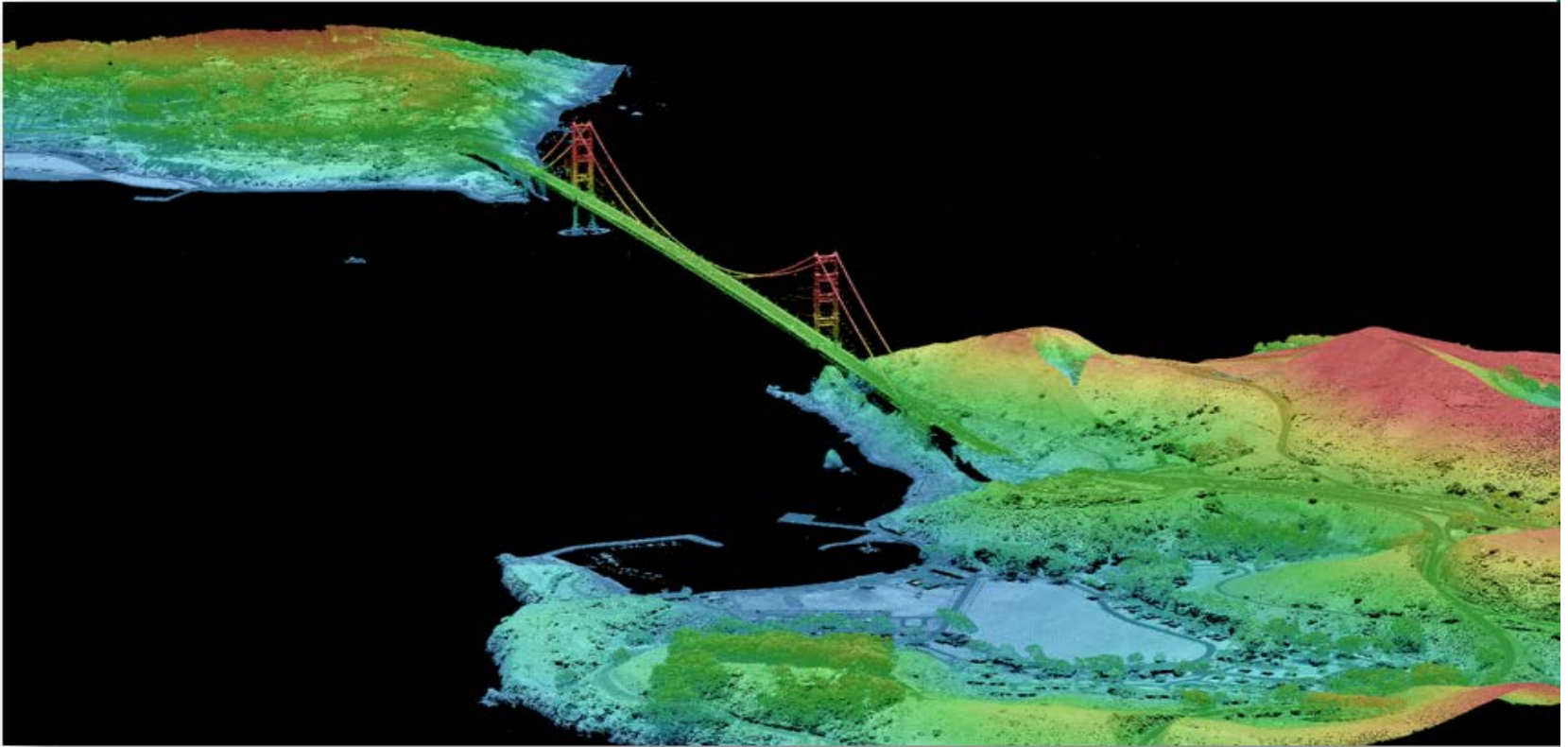
Flood Inundation Mapping (FIM)

- <http://wimcloud.usgs.gov/apps/FIM/FloodInundationMapper.html>
- Jersey Shore, Lewisburg/Milton
- Harrisburg, Trenton (USACOE)
- HEC-RAS, HEC-GeoRAS models used
- One-foot increment flood levels
- Download inundation polygons and depth rasters
- NWS stages: Action, Minor, Moderate, Major
- Near real-time situational awareness and agency coordination

Flood Inundation Mapper



Thank You



Task Force Updates

Governance Task Force

Task Force Meetings

- Held 5 meetings since last GeoBoard all focused on drafting strategic plan
- Tasked with developing a strategic plan after March GeoBoard meeting (3/20)
 - Skeleton plan by May GeoBoard meeting
 - Full plan by August GeoBoard meeting
- Met weekly to draft / comment / edit as a group
- Stayed in contact with Data Program TF & Service Delivery TF to ensure their vision included in our draft

Governance Task Force

Strategic Plan Considerations

- Focus on goals & objectives identified by Task Forces
- Must tie into already established documents to create continuity
- Plan needs to have consistent progress towards singular “future state”
- Must acknowledge need to revisit & update plan

Governance Task Force

Strategic Plan Draft Skeleton

- State Geospatial Coordinating Board
 - Mission Statement
 - Vision Statement
 - Task Forces
- Purpose of GIS Strategic Plan
 - Current Assessment
 - Accomplishments
 - Challenges
 - Opportunities

Governance Task Force

Strategic Plan Draft Skeleton

- Desired Future State
- Path to Future State
 - Key Tenet: Sustainability of GIS in the Commonwealth
 - Sustainable Funding
 - Sustainable Personnel / Leadership
 - Geographic Information Officer (GIO) / Staff
 - GeoBoard Future
 - Key Tenet: Cooperation, Collaboration, and Coordination

Governance Task Force

Strategic Plan Draft Skeleton

- Phased Implementation Plan
 - Phase 1
 - Phase 2
 - Phase 3
 - Future Phases
- Measuring Success
- Ensuring Continued Progress

Governance Task Force

Strategic Plan Draft Skeleton

- Appendix
 - Current GeoBoard Members
 - Current Task Force Members
 - Definitions

Governance Task Force

Strategic Plan Draft Skeleton

- Desired Future State

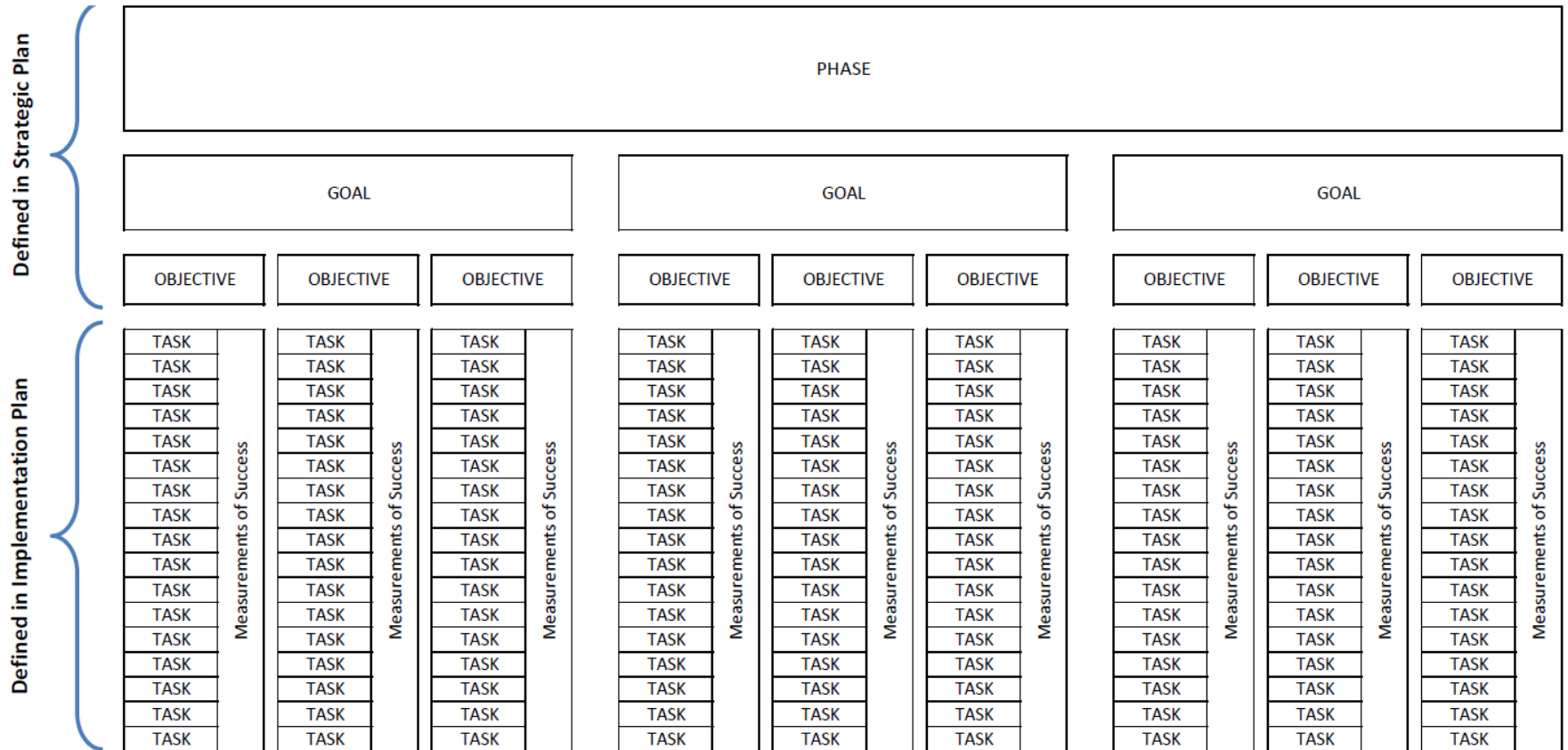
- Geographic information is acknowledged as a public asset by a broader constituency.
- The Commonwealth's base layers are seamless across the entire state, current, accurate, and freely accessible.
- Data is maintained over time and archived consistently for future use.
- Collaboration, cooperation, and coordination among the Commonwealth's entities are the norm.
- Duplication of effort is effectively eliminated; data should be created once, maintained as necessary, and used many times.
- Resources are allocated to support GIS operations and projects across the Commonwealth in a sustainable, long lasting manner.
- Pennsylvania's GIS industry attracts and retains talent by fostering personal and professional growth through employment, academic research, education, and participation opportunities.
- All levels of government (federal, state, county, and local) as well as universities, nonprofit organizations, and the private sector can be involved in planning, creating, distributing, funding, and enhancing the geospatial capabilities of the Commonwealth.

Governance Task Force

- Strategic Plan Draft Skeleton
- Key Tenets – Ideas incorporated
 - Sustainability of GIS in the Commonwealth
 - Sustainable Design & Model for All GIS Activities Including
 - Sustainable Funding
 - Sustainable Personnel / Leadership
 - Cooperation, Collaboration, and Coordination
 - Cooperation Between Entities
 - Collaboration Among Entities
 - Coordination Across Entities
- Phased Approach
 - Constructed to include objectives that have similar criteria:
 - priority
 - implementation time frame
 - resource allocation
 - pre-requisite dependencies
 - Arranged chronologically

Governance Task Force

Strategic Plan Phase Implementation Layout



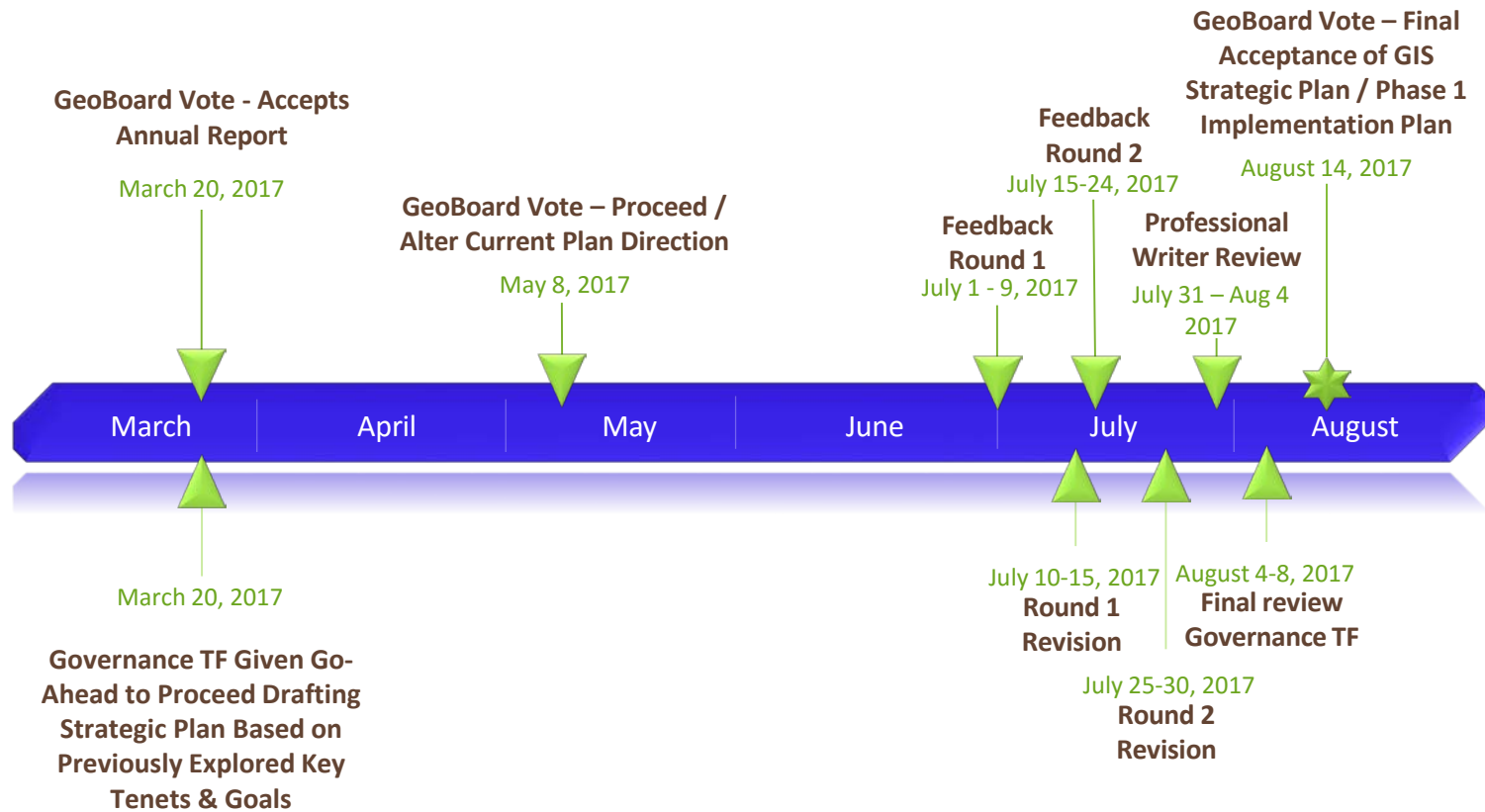
Governance Task Force

Phase Implementation Plan Example

Phase I	Goal: Increase Awareness & Provide Educational Outreach
	Objective 1: Involve the GIS Community in Geoboard Initiatives
	Objective 2: Enhance GIS Familiarity of Key Decision Makers
	Objective 3: Public Awareness Campaign for GIS in PA
	Goal: Enhance Collaboration, Cooperation, and Coordination
	Objective 1: Develop and Promote Platform for Collaboration / Cooperation / Coordination
	Objective 2: Reduce / Eliminate Redundant Efforts
	Objective 3: - UNDEFINED AT THIS TIME -
	Goal: Begin Development of Sustainable Model Options
	Objective 1: Assess Geoboard's Future (Composition, Long Term Viability, Sunset, Etc.)
	Objective 2: Assess Funding Opportunities for GIS in PA
	Objective 3: Assess GIS Leadership and Personnel throughout PA

Increase Awareness & Provide Educational Outreach	Goal:	Objective 1: Involve the GIS Community in Geoboard Initiatives	Involvement = fresh perspectives, larger braintrust, & "buy in"
		Task 1: Hold Meetings / Workshops / Conference Speaking Events	Involving the GIS community to stay in the loop & contribute unofficially
		Task 2: Expand TF Membership	Increasing the TF memberships will bring fresh people & help
		Task 3: Creation of new focused subcommittees / TF	Adding additional subcommittees & TFs to specialize in specific topics
		Objective 2: Enhance GIS Familiarity of Key Decision Makers	More familiarity = more informed & carefully formulated decisions
		Task 1: Compile List of Decision Makers in PA	List needed to aim future contact & outreach
		Task 2: Develop Business Cases & Studies that Affect Decision Makers	Case studies on how GIS benefits their interests drives decisions
		Task 3: Create Consistant "Elevator Pitch" for different levels	Consistant message delivered in different detail to different audiences
		Objective 3: Public Awareness Campaign for GIS in PA	Public perception & support helps drive decisions
		Task 1: Identify public platforms of GIS use in daily life	Examples make a connection to people and help drive awareness
		Task 2: Identify manners to reach public	If we are not contacting public in a suitable manner, it is ineffective
		Task 3: PR Campaign on How GIS benefits the public on daily basis	People aware of how something benefits them makes them supporters

Governance Task Force



Data Program Task Force

- Base Map
 - Work continues on the drafting of the data analysis report for the base map themes
 - Current status
 - Desired end state
 - End user needs / benefits
 - Stage one approach and recommendations
 - Governance
 - Service delivery
 - Data
 - Stage two approach and recommendations
 - Priority
- Data Sharing
 - Working on the draft language for the Data Sharing Agreement
 - Considering a workgroup to discuss details

Service Delivery Task Force

Strategic Plan Themes

- Enhance data sharing across agencies, jurisdictions and organizations across Commonwealth
- Enhance existing service delivery centers capabilities and staff to support the deployment of web services
- Ensure business continuity and appropriate preservation of data

New Business

- PEMA – Jeff Boyle
- NENA Update – Barry Hutchins
- Legislative Items
- Outreach
- Topics for next meeting

Future Meetings

- August 14, 2017, 2:00 -3:00 PM
- November 6, 2017, 2:00 -3:00 PM

Location: 333 Market Street, Harrisburg, PA 17126-0333