2016 Day on the Hill Recap
On March 16 during the second National Surveying and Mapping Conference held in our Nation’s Capital, more than 80 surveying and mapping professionals from some 38 states visited Congress where they met with 76 Senators and more than 100 members of the House of Representatives. Contributors to the NSPS and MAPPS political action committees were treated to a breakfast featuring Representatives John J. "Jimmy" Duncan, Jr. (R-TN) and Mark Meadows (R-NC). Visits to Congress focused on four issues: private sector utilization, geospatial workforce development, ocean and coastal surveying and mapping, and mapping reforms to the National Flood Insurance Program (NFIP) within FEMA. During a Capitol Hill lunch on March 16, NSPS and MAPPS members were briefed by Representative Dutch Ruppersberger (D-MD), sponsor of the H.R. 4738, the "Digital Coast Act of 2016".

3DEP
NSPS has endorsed the USGS 3DEP program to provide a consistent elevation data, primarily through LiDAR collection, for the United States, and has been a leader in efforts to assure the program is fully funded. On September 13, NSPS Registered Lobbyist John “JB” Byrd attended the USGS Coalition reception on Capitol Hill attended by USGS Director Dr. Suzette Kimball and U.S. Reps. Chellie Pingree (D-ME) and David Joyce (R-OH), both members of the House Appropriations Committee. Joyce was singled out during the reception as a supporter of 3DEP. The following are highlights of the results of the NSPS effort:

The President’s FY 2017 budget request for 3DEP includes:
- National Enhancement, Landscape -scale 3-D Maps +$2,387,000 for a total of $21,887,000: To increase acquisition of LiDAR data and expand publicly available 3DEP holdings. Accelerating the national coverage of LiDAR will enable decision making in management of infrastructure and construction, more accurate and cost effective application of chemicals in farming, development of energy projects, and support of aviation safety and vehicle navigation.
- Coastal LiDAR +$500,000 for a total of $500,000: To collect enhanced elevation data using LiDAR in U.S. coastal zones to understand and mitigate the negative effects of coastal erosion and storm surge, to map existing and potential landslide hazards, and to monitor biomass.

The following bill and report language from the FY 2017 appropriations bills:
Senate Interior Appropriations Subcommittee report language:
"Core Science Systems. ... Program increases include $2,000,000 for 3D Elevation: National Enhancement and $2,500,000 for the Alaska mapping program."

House Interior Appropriations Subcommittee report language:
"Core Science Systems.—The Committee recommends ... An increase of $2,194,000 is provided for 3–D elevation mapping within the National Geospatial program, to include $500,000 requested for landscape level assessments of the Chesapeake Bay."

House Homeland Security Appropriations Subcommittee report language:
"Flood Hazard Mapping and Risk Analysis. The U.S. Geological Survey (USGS) is leading the 3D Elevation Program (3DEP), a collaborative initiative to systematically collect accurate elevation data nationwide. FEMA is a key partner in 3DEP, and uses this elevation data to ensure flood maps accurately delineate the flood plain and provide more accurate assessments and understanding of flood risk. The Committee encourages FEMA to continue to support this critical effort. FEMA is directed to allocate flood map funding to assist local governments and cooperating technical partners in acquiring the data collection tools necessary to produce accurate, local data that meets FEMA’s standards for use in the agency’s modeling processes to re-map local jurisdictions. FEMA’s data collection and modeling processes must be transparent from beginning to end and involve the active participation of local jurisdictions to ensure maps accurately reflect local conditions and minimize costs to local communities."
On July 8, NSPS Government Consultant John Palatiello, as President of the Business Coalition for Fair Competition (BCFC), of which NSPS is a member, testified before Congress on government versus private sector performance of commercial activities. He cited 3DEP as a best practices model:

"Another best practices model is the 3DEP or 3-Dimensional Elevation Program of the U.S. Geological Survey (USGS) in Reston, VA. Over a period of some 20 years, USGS has successfully transitioned from an in-house mapping production agency that was viewed as duplicating and competing with private enterprise to the entity it is today that effectively utilizes the private sector for mapping data acquisition and production, while focusing government employees on standards and coordination. A positive public-private partnership model is needed so that there are clearly defined roles and responsibilities to provide synergy between the public and private sectors in the Federal level, and particularly with regard to geospatial activities. There is a need and role for government in surveying, mapping and geospatial activities. Agency personnel should be focused on inherently governmental activities such as enforcement of standards and specifications, development of requirements, coordination, and administering contracts. Commercial activities, including data acquisition, processing, applications, and value added services should be left to the qualified, competent and capable private sector in surveying and mapping."

In May and June, NSPS signed coalition letters to leadership on the House and Senate Appropriations Subcommittee on the Interior supporting USGS 3D Elevation Program (3DEP) funding. 3DEP will satisfy the growing demand for consistent, high-quality topographic data and a wide range of other three-dimensional representations of the Nation's natural and constructed features. Among the applications that will benefit from 3DEP data are flood risk management, agriculture, water supply, homeland security, renewable energy, aviation safety, and other areas. The letter to Subcommittee Chairman Ken Calvert (R-CA) and Ranking Member Betty McCollum (D-MN) said, "We respectfully urge your subcommittee to fully fund this important program as requested in the President's budget, or, if possible, increase the appropriations level to meet the extraordinary demand for current, accurate elevation data for the nation." The letter concluded, "For FY 2017, Congress should appropriate funds for the 3DEP program at its optimal annual level of $146 million among all participating agencies. Within FY 2016, USGS was appropriated $5.4 million for 3DEP. Our request and recommendation is to provide for a $4.6 million increase for 3DEP as found in the President's FY 2017 request for USGS, thereby increasing the USGS amount for 3DEP to $10 million for FY 2017."

In March 3, NSPS Government Consultant John Palatiello and Registered Lobbyist John “JB” Byrd moderated another 3DEP coalition meeting in support of the USGS 3D Elevation Program (3DEP). The meeting held in Arlington, Virginia, included Jennifer Gimbel, Assistant Secretary for Water and Science, Department of the Interior, and chair of the Federal Geographic Data Committee (FGDC) and Kevin Gallagher, Associate Director for Core Science Systems at USGS. Coalition partners discussed the status of 3DEP, a recap of FY 2016 appropriations levels, and coordination of legislative activities in support of 3DEP. Also in March, USGS' National Geospatial Program announced the first round of awards resulting from the USGS Broad Area Announcement for the 3-D Elevation Program, initially issued in July 2015. The BAA is a publicly accessible process for collecting LiDAR and derived elevation data for 3DEP. (See www.3DEP4America.com for more information).

Council on Federal Procurement of Architectural and Engineering Services (COFPAES) & QBS
NSPS has been working with COFPAES, and as part of the Construction Industry Procurement Coalition (CIPC), to advance reforms to the Federal procurement process for reverse auctions for A-E services, including surveying and mapping. In May, H.R. 5199, the "Construction Consensus Procurement Improvement Act of 2016" was introduced by Rep. Mark Meadows (R-NC), and reported favorably by the House Oversight and Government Reform Committee. This legislation would limit the use of one-step design-build and reverse auctions in federal procurement of design and construction services. Section 4 specifically prohibits federal agency use of reverse auctions for architectural and engineering services, including surveying and mapping, which have been typically connected to qualifications-based-selection under the Brooks Act. This protection for QBS has long been championed by NSPS and COFPAES, of which NSPS is a member. In April, the Congressional Budget Office (CBO) issued a report “scoring” or estimating the cost of implementation of the Senate companion bill, S. 1526, at $10 million over the 2017-2021 period, or $2 million a year. The bill would amend current law to modify the federal government’s procedures for awarding design and construction contracts for federal facilities and prohibit the use of reverse auctions for such procurements. Specifically, the legislation would require a two-phase selection process for designing and constructing any federal facility with a cost of more than $750,000. NSPS, through COFPAES, has long supported the bill and related amendments introduced by Sens. Rob
Portman (R-OH) and Mazie Hirono (D-HI). In February, S. 1526 was reported favorably out of the Senate Homeland Security and Governmental Affairs Committee. Rep. Meadows was a speaker at the NSPS-MAPPS joint PAC breakfast held during the National Surveying, Mapping and Geospatial Conference in March. Both bills are awaiting floor action.

A restructured COFPSAES is continuing to operate with NSPS, MAPPS, and ASCE as members. COFPSAES has been working on the procurement legislation mentioned above, has helped members reverse individual procurement solicitations that fail to comply with the Brooks Act, and is promoting Davis-Bacon Act reform and QBS-related provisions in aviation, highway and other infrastructure-related bills in Congress.

Davis-Bacon
NSPS is trying to provide the U.S. Department of Labor a face-saving way to exempt the professional surveying community from being regulated within Davis-Bacon on Federal construction projects. In June, NSPS wrote the Wage and Hour Division of the U.S. Department of Labor offering a resolution to the issue of survey crew members being classified as "laborers and mechanics" under the meaning in the controversial Davis-Bacon Act. The NSPS letter is in response to Wage and Hour's most recent policy opinion and Q&A provided to the society. NSPS has indicated that consistent with Labor Department policy, "survey crew members whose primary function is to take measurements and to accumulate data upon which recommendations are based to advise licensed professional surveyors on conditions, plans, and plats related to professional judgments to be made regarding layout and construction decisions" are not laborers and mechanics and should be exempt from the Davis-Bacon law. NSPS wrote, "this position is consistent with the points we made in our previous meetings and correspondence, as well as the recommendations made in my letter to you of December 10, 2014. We renew our request that those recommendations be implemented in a revised AAM 212. Furthermore, the Department of Labor now has numerous documents providing conflicting positions related to Davis-Bacon Act application to members of survey crews. This has made compliance impossible for our members. NSPS urged the Labor Department to issue one document outlining that the Davis-Bacon Act does not apply to survey crews, but to 'construction helpers' not directly involved in the practice of surveying."

Digital Coast, NOAA Ocean & Coastal Surveying
*THIS IS ONE OF THE ISSUES TAKEN TO THE HILL ON LOBBY DAY, MARCH 16, 2016.*

In November 2015, Sens. Tammy Baldwin (D-WI) and Lisa Murkowski (R-AK) introduced S. 2325, the Digital Coast Act of 2015. In April, NSPS experienced a victory when the U.S. Senate Commerce Committee unanimously approved this NSPS-supported Digital Coast Act, and the bill may be "hotlined" for floor action later this year. The bill would create a coordinated and comprehensive national mapping effort for coastal, Great Lakes, and territorial waters of the United States. The Digital Coast is a geospatially enabled project to improve coordination and support work with stakeholders to identify geospatial priorities; improve coordination of coastal mapping and management activities; use standards and standardized methods for data acquisition, processing, and distribution to ensure broadest utility of data; promote best practices when applying geospatial data for coastal decision making; and contract for the collection and creation of quality non-navigation feature data sets to include: shoreline change, satellite and aerial imagery, land use and land cover maps, benthic habitat mapping, terrestrial topography, shallow water bathymetry, and submerged aquatic vegetation. The bill would build on the current “project” and authorize a full program. In March, Reps. C.A. "Dutch" Ruppersberger (D-MD) and Rep. Don Young (R-AK), reintroduced the companion bill in the House, H.R. 4738. NSPS continues to lead an advocacy coalition of 10 organizations supportive of Digital Coast.

Federal Prison Industries (FPI) Reform
In March 2015, Reps. Bill Huizenga (R-MI) and Carolyn Maloney (D-NY) introduced H.R. 1699, the "Federal Prison Industries Competition in Contracting Act". Rep. Huizenga later worked with NSPS to introduce more targeted bills for the House Small Business and Oversight and Government Reform Committees as well as a targeted campaign for letter-writing to various Chairmen and independent report opportunities (GAO and CRS). In March 2016, Reps. Huizenga and Maloney introduced a shorter and briefer bill, H.R. 4671, with safeguard language preventing federal inmates from accessing sensitive geospatial, mapping and surveying data, including as part of GIS services. As a member of the Business Coalition for Fair Competition (BCFC), NSPS is working to add H.R. 4671 as an amendment to the House version of comprehensive criminal justice reform legislation if it is brought up in the full House later this year.
The National Flood Insurance Program (NFIP) statutory authority is scheduled to expire at the end of 2017 and the NFIP remains roughly $24 billion in debt to U.S. taxpayers and hasn't repaid any principal on its loans since 2010. In 2016, Congress will seek to reauthorize Biggert-Waters or further reform, and NSPS is engaging the insurance and financial services sector to help educate affected stakeholders as legislation is drafted. In August 2015, NSPS met with Committee staff of Rep. Blaine Luetkemeyer (R-MO), the Chairman of the House Financial Services Subcommittee on Housing and Insurance. His staff requested NSPS to develop recommendations and rationale on both of the following scenarios: 1) If the NFIP is to remain intact, what suggestions for policy reform does NSPS have in mind; and 2) If the NFIP was completely restructured, overhauled or even privatized, how would this impact NSPS members, and what suggestions for policy reform does NSPS have in mind?

As a result of that meeting, in January of 2016, NSPS Executive Director Curtis Sumner and Government Consultant John Palatiello were invited to participate in a Congressional roundtable on the FEMA’s national flood insurance program. The informal session with twelve members of the U.S. House of Representatives focused on surveying and mapping. NSPS pointed out the important role of LiDAR technology and other mapping activities used to accurately locate structures and preparing letters of map amendment (LOMA), as well as the need for current/accurate elevation data, such as would be provided by USGS through the 3DEP program.

In July, NSPS met with House Financial Services Committee staff. They wanted to know: What are the road blocks to the privatization of flood insurance and the mapping that supports the flood insurance rating? Members of Congress and the committee staff are hearing from constituents that it takes too long to get a FEMA map and that there is still a lot of outdated information. Their thinking is that the private sector can speed up the mapping process and make better information available to private insurers to provide flood insurance policies. Also discussed was the current practice of FEMA rapidly accepting USGS 3DEP elevation data given the agencies coordination and understanding behind the scenes as to the accuracy and data standards. The committee staff wanted to know what mechanism or triggering regulation they could require private insurers mandate for similar data standards and thereby guarantee data accuracy for issuing such flood risk insurance in the private market. NSPS communicated that referencing the 3DEP standard, as similar to the current acceptance practice by FEMA, as a good model to ensure some form of Federal standard even if the NFIP eventually is privatized to be helpful in guaranteeing elevation data accuracy.

The FY 2016 Omnibus Appropriations bill funded $190,000,000 for Flood Hazard Mapping and Risk Analysis with an additional $155,899,000 available for flood mapping activities through the National Flood Insurance Fund, FEMA's fiscal year 2016 resources for flood plain mapping total $345,899,000. Specifically, the Omnibus appropriations bill states: "DHS/FEMA FLOOD HAZARD MAPPING AND RISK ANALYSIS PROGRAM A total of $190,000,000 is provided for Flood Hazard Mapping and Risk Analysis. With an additional $155,899,000 available for flood mapping activities through the National Flood Insurance Fund, FEMA's fiscal year 2016 resources for flood plain mapping total $345,899,000. This amount will enable FEMA to make significant progress toward its goal of maintaining 80 percent of its mapping inventory as maps with new, validated, or updated engineering. As directed in the Senate report, FEMA shall ensure mapping updates are done in coordination with ongoing state and local flood mitigation efforts; NATIONAL FLOOD INSURANCE FUND A total of $181,198,000 is provided for the National Flood Insurance Fund, for which administrative costs shall not exceed four percent."

USGS and FEMA are coordinating on having 3DEP efforts connected to NFIP, without having the language spelled out in legislation/report language.

House Homeland Security Appropriations Subcommittee report language:
"Flood Hazard Mapping and Risk Analysis. The recommendation includes $177,531,000 for Flood Hazard Mapping and Risk Analysis, the same as the amount requested and $12,469,000 below amount provided in fiscal year 2016. With the additional $168,363,000 available for flood plain management and mapping activities within the National Flood Insurance Fund (NFIF), the combined amount available for flood mapping activities in fiscal year 2017 is equal to the comparable fiscal year 2016 level. The U.S. Geological Survey (USGS) is leading the 3D Elevation Program (3DEP), a collaborative initiative to systematically collect accurate elevation data nationwide. FEMA is a key partner in 3DEP, and uses this elevation data to ensure flood maps..."
accurately delineate the flood plain and provide more accurate assessments and understanding of flood risk. The Committee encourages FEMA to continue to support this critical effort. FEMA is directed to allocate flood map funding to assist local governments and cooperating technical partners in acquiring the data collection tools necessary to produce accurate, local data that meets FEMA’s standards for use in the agency’s modeling processes to re-map local jurisdictions. FEMA’s data collection and modeling processes must be transparent from beginning to end and involve the active participation of local jurisdictions to ensure maps accurately reflect local conditions and minimize costs to local communities. National Flood Insurance Fund. The Committee recommends $13,436,000 for salaries and expenses associated with flood management and $168,363,000 for flood plain management and flood mapping, as requested. Flood mitigation funds are available until September 30, 2018, and are offset by premium collections. In addition, the bill establishes obligation limitations on the use of mandatory National Flood Insurance Program (NFIP) collections, including $175,061,000 for flood-mitigation and flood mitigation assistance grants and $5,000,000 for the Office of the Flood Insurance Advocate (OFIA). ... Flood Insurance Rate Maps (FIRMs) are the basis for establishing the floodplain management responsibilities of communities participating in the CRS program and for determining which properties require flood insurance coverage as a condition of receiving a mortgage from a federally regulated or insured lender. The Committee is aware that, as FEMA updates FIRMs across the country, it requests documentation from local communities and levee sponsors to demonstrate that levees meet or continue to meet the regulatory criteria for accreditation. According to a November 2014 Memorandum of Understanding between FEMA and the U.S. Army Corps of Engineers (USACE), levee inspection reports by USACE may satisfy certain criteria for FEMA accreditation. FEMA is directed to work with closely USACE to share information related to levee accreditation and avoid imposing unnecessary costs on levee sponsors or surrounding communities.

Senate Homeland Security Appropriations Subcommittee report language:
"FLOOD HAZARD MAPPING AND RISK ANALYSIS
Appropriations, 2016 .......................................................... $190,000,000
Budget estimate, 2017 .......................................................... 177,531,000
Committee recommendation .............................................. 177,531,000

This appropriation supports the functions necessary to develop, and keep current, flood risk information and flood maps. The flood maps are used to determine appropriate risk-based premium rates for the National Flood Insurance Program, to complete flood hazard determinations required of the Nation’s lending institutions, and to develop appropriate disaster response plans for Federal, State, and local emergency management personnel. COMMITTEE RECOMMENDATIONS The Committee recommends $177,531,000 for Flood Hazard Mapping and Risk Analysis as requested and $12,469,000 below the amount provided in fiscal year 2016. In total, the bill provides $345,894,000 for flood mapping when combined with $168,363,000 in fee funded mapping activity. The Committee recognizes that many communities across the country continue to rely on flood hazard maps that are inaccurate or outdated or that do not reflect the true risks of flooding. Because these maps impact a community’s ability to participate in the National Flood Insurance Program, the Committee urges FEMA to closely coordinate with communities to the greatest extent possible to ensure that the data used as part of its ongoing remapping efforts is accurate and integrated with local flood control efforts. The Committee urges FEMA to implement the final recommendations and goals of the Technical Mapping Assistance Committee’s 2015 Annual Report, including forming a National Flood Hazard Risk Management Coordination Committee to help lead the ongoing implementation of the 5-year Flood Hazard Mapping and Risk Assessment Plan. The Committee should not only include Cooperating Technical Partners, but also State agencies and experts that have developed mapping expertise and models that can be useful in FEMA’s efforts to consider future conditions, such as sea level rise and coastal erosion.

NATIONAL FLOOD INSURANCE FUND
Appropriations, 2016 .......................................................... $181,198,000
Budget estimate, 2017 .......................................................... 181,799,000
Committee recommendation .............................................. 181,799,000

Fully offset by fee collections. The National Flood Insurance Fund [NFIF] is a fee-generated fund which provides funding for the National Flood Insurance Program [NFIP]. This program enables property owners to purchase flood insurance otherwise unavailable in the commercial market. The National Flood Insurance Act of 1968 authorizes the Federal Government to provide flood insurance on a national basis. This insurance is
available to communities which enact and enforce appropriate floodplain management measures and covers virtually all types of buildings and their contents.

FLAIR Act
In July 2015, a bi-partisan bill was introduced in the U.S. House of Representatives to create a current, accurate Federal inventory or "cadastre" of all Federal real property. The "Federal Land Asset Inventory Reform (FLAIR) Act of 2015", H.R. 3121, was introduced by Representatives Ron Kind (D-WI) and Kevin Cramer (R-ND). Since 2003 and as recently as February 2015, the Government Accountability Office (GAO) has repeatedly designated “Managing Federal Real Property” one of the high-risk areas within the Federal government most prone to waste, fraud and abuse. One of the reasons cited by the GAO is the fact that the government does not have a current, accurate inventory of the land it owns. A national cadastre has also been recommended by the National Research Council of the National Academy of Sciences, and the FLAIR Act has been endorsed by its Committee on Land Parcel Databases. The FLAIR Act will provide all agencies owning Federal real property an improved accounting of their land assets. The bill will also conduct an inventory of existing inventories to eliminate duplicate or obsolete activities and save tax dollars. Such a consolidated system will assist in improved Federal land management, resource conservation, environmental protection and utilization of real property, as well as identify property the Federal government no longer needs to own. H.R. 3121 was referred to the House Committee on Natural Resources on which both Congressmen Kind and Cramer previously served as members. S. 1225, the Senate version of this legislation, was introduced in May 2015 by Senator Lisa Murkowski (R-AK), and was referred to the Senate Committee on Energy and Natural Resources, where Senator Murkowski serves as Chair. In July 2015, the Senate Energy & Natural Resources Committee passed S. 1225, their comprehensive energy infrastructure (Energy Policy Modernization Act of 2015) bill by an 18-4 vote. In April, the U.S. Senate approved S. 1225. Included in the bill is a modified version of the Federal Land Asset Inventory Reform (FLAIR) Act S. 1225 and the collection of energy-related "data gathered by geomatics techniques, including tools and techniques used in land surveying, remote sensing, cartography, geographic information systems, global navigation satellite systems, photogrammetry, geophysics, geography, or other remote means.” On September 8, Senate and House began the conference to reconcile the two bills.

The following is the section by section analysis for the FLAIR Act portion (page 14) of the Energy bill:

"Subtitle E—Management
Section 4401. Federal land management. Authorizes the Secretary of the Interior to establish a “cadastre,” or computerized inventory of buildings and other real property (land), including associated infrastructure such as roads and utility systems and pipelines, collected from surveys, maps, charts and inventories that will be stored as digital data. Authorizes the Secretary to enter into discussions with other federal agencies to utilize the data inventory system to keep track of their holdings, and authorizes the development of cost-sharing agreements so that states, local governments, and Indian tribes may also utilize the inventory system. Outlines the coordination involved in collecting and creating the geographical (data) information system that will store the inventories. Requires that the information be kept in a graphically geo-enabled and searchable format available to the public on the Internet, provided that the identity of any buildings and facilities that would impair or jeopardize national security or homeland defense are withheld from public disclosure. Outlines how the system will be operated and clarifies that nothing in the provision requires any new appraisals or assessments of federal assets for any purpose."

NSPS is working with Reps. Jason Chaffetz (R-UT), Mike Quigley (D-IL), and Jeff Denham (R-CA) on their Federal real property disposal bill, H.R. 4465, the Federal Assets Sale and Transfer Act (FASTA) of 2016. Section 21 has strong geographic language for the Federal real property database. Geo-referenced attributes to be included within the database: geographic location of each Federal real property of each such agency; address and description for each such property; total size of each Federal real property of each such agency; square footage and acreage of each such property; and the replacement value of each Federal real property. In May, the U.S. House of Representatives passed H.R. 4465. The bill seeks to improve the process of surplus and disposal of unneeded Federal land and buildings. It authorizes GSA to "publish a single, comprehensive, and descriptive database of all Federal real property under the custody and control of all executive agencies, other than Federal real property excluded for reasons of national security." The database will include the geographic location of each Federal real property of each such agency, including the address and description for each such property, and the level of use of each Federal real property for each such agency, including whether such property is excess, surplus, underutilized, or unutilized. The GSA database will be accessible by Federal agency personnel, as well as to the public at no cost, through GSA’s Web site. The database will provide a level of transparency far greater than what is currently available, using an open, machine-readable format; will permit users to search and sort Federal real property
data; and include a way to download a large amount of Federal real property data and a selection of such data retrieved using a search. Sen. Ron Johnson (R-WI) introduced the Senate companion to FASTA (S. 2375) in December 2015, and section 13 has language about the “tangible” real property database. In addition in July 2015, Sen. Mark Warner (D-VA) introduced S. 1750, the “Civilian Property Realignment Act (CPRA) of 2015” with 6 original cosponsors. Section 15 of the bill relates to the Federal Real Property Profile, but is absent a provision to improve the geo-referencing of such real property inventory data. The Senate version of this bill (S. 2375) has been approved by the Senate Committee on Homeland Security and Governmental Affairs and is awaiting action on the Senate floor.

Does the Federal government have a current, accurate, accessible inventory of the land it owns? The answer is a regrettable “no”, according to questioning by Rep. Kevin Yoder (R-KS) of General Services Administrator Denise Turner Roth at a February 29 hearing of the House Appropriations Committee, Subcommittee on Financial Services and General Government. In April, a Government Accountability Office (GAO) report found that the federal government has made progress addressing real property challenges within its owned portfolio, but agencies still face long-standing challenges that existed when GAO first designated real property management as a high-risk area in 2003. The Office of Management and Budget (OMB), the General Services Administration (GSA), and selected agencies have taken steps to improve the quality of data in the Federal Real Property Profile (FRPP) — the government-wide real property database. Those steps include issuing guidance and implementing various data validation procedures. Starting with fiscal year 2015 data, OMB and GSA are transitioning FRPP from a real property inventory to an analytical tool to guide real property management and to evaluate the performance of the government-wide portfolio. However, GSA has not analyzed agencies’ collection or reporting practices or the limitations for using the data. GAO’s review of FRPP shows that certain key FRPP data elements, such as utilization status, continue to be inconsistently collected and reported by agencies. An analysis could help OMB and GSA determine the extent to which efforts have improved data quality and identify the next steps. Outlining the limitations of the FRPP data, as suggested by GAO’s data reliability standards, could improve transparency for decision-makers on how to properly use the data to, for example, identify underutilized properties for consolidation and co-location. GAO recommended that GSA, with OMB and federal agencies, access, analyze, and identify any limitations in how agencies collect and report FRPP data to address long-standing management challenges.

House Financial Service and General Government Appropriations Subcommittee report language contains the following: "Federal Real Property Profile.—The Committee remains extremely frustrated with the slow pace at which GSA and other Federal agencies are improving the accuracy of the Federal Real Property Profile. The U.S. Government Accountability Office (GAO) named managing Federal real property to its 2015 High Risk List. The Committee is concerned that despite language in the fiscal year 2015 and 2016 reports, GSA has not made progress on the value and accuracy of its inventory, taken steps to include public lands as required by Executive Order 13327, made the FRPP available to the public, or geo-enabling the FRPP. The Committee is outraged that the Federal Government cannot provide an accurate accounting to the American public of all the property that it owns. The Committee expects GSA to work with agencies across government and utilize geographic information technology to improve the data contained in this report and enhance transparency to the American taxpayer. The Committee directs GSA to report to the Committees on Appropriations of the House and Senate on steps taken to improve the quality and transparency of the profile within 60 days after the enactment of this Act."

In May, Rep. Paul Gosar (R-AZ) filed an amendment, which eventually was adopted by the House, to the 2017 National Defense Authorization Act (NDAA), H.R. 4909. This amendment would require the Secretary of Defense, in consultation with other appropriate Federal agency officials, to develop and maintain a current, accurate, interoperable cadastral geographic information systems-based inventory of Department of Defense (DoD) buildings, land, and other real property assets. In April 2015, DoD published a memo, Installation Geospatial Information and Services (IGI&S) itemizing better coordination of geospatial data and activities, including providing guidance to meet federal agency obligations in accordance with Office of Management and Budget (OMB) Circular A-16. IGI&S was to apply to the management of DoD installations and environment to support military readiness related to facility construction, sustainment, and modernization. This amendment is expected to lead to a provision in the 2017 NDAA, which will require a Congressional briefing on implementation of and adherence to the 2015 memo by DoD. Rep. Gosar spoke to NSPS members on Capitol Hill at the 2015 National Surveying and Mapping Conference. While the original Gosar language was strongly worded, it was watered down into provision, eventually adopted by the House, authorizing a Congressional briefing on the subject: 

SEC. 1074. BRIEFING ON REAL PROPERTY INVENTORY.

(a) BRIEFING REQUIRED.—Not later than 180 days after the date of the enactment of this Act, the Secretary
of Defense shall brief the Committee on Armed Services of the House of Representatives on the status of the Installation Geospatial Information and Services of the Department of Defense as it relates to the real property inventory of the Department, and the extent to which the Department has made use of the cadastral geographic information systems-based real property inventory.

(b) MATTERS COVERED.—The briefing required by subsection (a) shall, at a minimum, cover the following:

(1) The status of current policies of the Department governing real property inventories and the use of geospatial information systems, the status of real property inventory in relation to the financial improvement and audit readiness efforts of the Department, and the status of implementation of Department of Defense Instruction 8130.01, Installation Geospatial Information and Services (IGI&S).

(2) The extent to which the Department is coordinating with the Federal Geographic Data Committee, other Federal agencies, and State and local governments, and how existing Department standards and common protocols ensure that the interoperability of geospatial information complies with section 216 of the E-Government Act of 2002 (Public Law 107–347; 44 U.S.C. 3501 note) and Executive Orders 12906 and 13327.

(3) The existing real property inventories systems or any components of any cadastre currently authorized by law or conducted by the Department of Defense, the statutory authorization for such inventories or components, and the amount expended by the Federal Government for each such activity in fiscal year 2015.

(4) A discussion of the Department’s ability to make this information publicly available on the Internet in a graphically geo-enabled and searchable format, and how the Department plans to prevent the disclosure of any parcel or parcels of land, any buildings or facilities on any such parcel, or any information related to any such parcel, building, or facility, if such disclosure would impair or jeopardize the national security or homeland defense of the United States.

(5) Any additional topics identified by the Secretary.

Geospatial Governance and Coordination

In July, NSPS Executive Director Curtis Sumner, Government Consultant John Palatiello, and Registered Lobbyist John “JB” Byrd attended the Federal Geographic Data Committee (FGDC) workshop to readdress the National Spatial Data Infrastructure (NSDI). NSPS advocated adding underground utilities as a new framework layer to the NSDI, which was previously suggested to FGDC by NSPS several years ago. As part of this point made by NSPS, the COGO report card indicated a lack of geospatial data for many of the other framework themes. As a result, not only was populating underground utility data highlighted, but gathering data to help populate the other framework layers and themes was emphasized. Finally, NSPS advised to replace the FGDC with an entity that would also include state and local government officials, as well as private sector representation.

Last Congress, Rep. Doug Lamborn (R-CO) reintroduced H.R. 1604, the “Map It Once, Use It Many Times (MIO-UIMT)” Act. NSPS has learned that Rep. Lamborn will soon introduce an updated version in the 114th Congress. NSPS is still looking for a Senate sponsor, most likely Sen. Mike Rounds (R-SD), for companion legislation to the updated House bill.

In March 2015, Sen. Orrin Hatch (R-UT) introduced S. 740, the “Geospatial Data Act of 2015”, and now has 9 bipartisan cosponsors. The bill was referred to the Senate Commerce Committee chaired by Sen. John Thune (R-SD). NSPS has adopted a policy on the Hatch bill. Currently, COGO is attempting to develop a statement of principles that all its member organizations can agree to on geospatial coordination and governance legislation. NSPS is participating in that effort to harmonize the Senate bill with Lamborn's bill in the House, the Map It Once, Use It Many Times (MIO-UIMT) Act. NSPS has compiled a list of positive sections of the Hatch bill that could be worked into MIO-UIMT. In May 2016, NSPS met with the Senate Commerce Committee staff to explain concerns with S. 740, with the intent to work with both Rep. Lamborn and Sen. Hatch to help bridge the gap by including the positive provisions from S. 740 in the soon to be introduced Lamborn bill. This also led to Sen. Hatch’s staff hosting a meeting with NSPS in June to itemize the highest priorities preferred in a redrafted version.

As a result of the NSPS consultation with Sen. Hatch’s staff, the redrafted version of the bill is an improvement. It has 4 revisions that should be beneficial to NSPS. The bill, as redrafted, would: 1) relocate the FGDC from the Department of the Interior and to the Office of Management and Budget; 2) outline, by law, a role for the private sector; 3) clarify, broaden and codify application of the Brooks Act; and 4) establish the primacy of state surveying licensing law. The support of the NSPS leadership to the bill, as revised, has been communicated to Senator Hatch’s staff. This may lead to action later this year by the Senate Commerce Committee.

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Highway Bill
In December 2015, President Obama signed a five-year Highway bill into law, Public Law 114-92. The "Fixing America's Surface Transportation (FAST) Act" is a $305 billion fully paid-for surface transportation reauthorization of federal highway, transit, highway safety, motor carrier safety, hazardous materials, and passenger rail program. The bill reforms and strengthens transportation programs, provides long-term certainty and more flexibility for states and local governments, and streamlines project approval processes. It was paid for with gas tax revenue (but no tax increase) and a package of $70 billion in offsets from other areas of the federal budget. It calls for spending approximately $205 billion on highways and $48 billion on transit projects over the next five years. Provisions of interest to the surveying and mapping community include Section 1312 which calls for improving state and federal agency engagement in environmental reviews and the activities for which funds may be provided including information gathering and mapping; Section 41005 directs coordination of required environmental reviews by authorizing the lead agency to make information available in the environmental review regarding the environmental, historic, and socioeconomic resources located within the project area and the general locations of the alternatives under consideration with this information based on existing data sources, including geographic information systems (GIS) mapping; Section 1430 is a "sense of Congress" that USDOT should utilize, to the fullest and most economically feasible extent practicable, modeling and simulation technology to analyze highway and public transportation projects to ensure that these projects will increase transportation capacity and safety, alleviate congestion, and reduce travel time and environmental impacts; and Section 3028 authorizes $199,000,000 from the Mass Transit Account of the Highway Trust Fund for fiscal year 2017 to assist in financing the installation of positive train control systems.

In January 2015, NSPS met with House Committee staff to discuss mobile mapping as part of a definition of surveying and mapping, subject to licensing and QBS. NSPS sought a provision in the MAP-21 Act Reauthorization (Highway Bill) to clarify that for the purpose of determining services subject to the Brooks Act qualifications based selection (QBS) process, the following definition found in 23 U.S.C. 112 (b)(2) is amended at the end thereof, by adding the following new subparagraph:

"'surveying and mapping services' includes geospatial activities associated with measuring, locating and preparing maps, charts, or other graphical or digital presentations depicting natural and man-made physical features, phenomena, and legal boundaries of the earth."

Unfortunately, that provision was not included in the bill. In October 2015, the House Committee on Transportation and Infrastructure began marking up the Highway Bill. After securing sponsorship from Rep. Duncan Hunter (R-CA) to offer an amendment to the House Highway bill markup to address the QBS issue, NSPS learned that Rep. John Garamendi (D-CA) offered an amendment to weaken QBS compliance and implementation. Working in tandem with other COFPAES members and constituencies, Garamendi chose to withdrawal his amendment. However, given that NSPS had to play expend resources in defeating Garamendi, the Hunter provision was also withdrawn after not being able to secure a Democrat cosponsor for the Hunter amendment.

FHwA has also published new regulations governing the procurement, management, and administration of engineering and design-related services, including surveying and mapping, on federal-aid highway projects. The rules include changes and clarifications to State DOT procurement policies and QBS procedures, contract negotiation and administration, audit and accounting of allowable costs, and program management and oversight. The rules took effect in June 2015. State DOTs will have one year to update their policies and procedures to comply with the new regulations.

HSIA
*THIS IS ONE OF THE ISSUES TAKEN TO THE HILL ON LOBBY DAY, MARCH 16, 2016.*

In June 2015, Rep. Don Young (R-AK) introduced the Hydrographic Services Improvement Act (HSIA) which was referred to the House Committee on Natural Resources. On October 26, Sen. Dan Sullivan (R-AK) introduced S. 2206, the "National Oceanic and Atmospheric Administration (NOAA) Sexual Harassment and Assault Prevention Act". Section 301 of S. 2206 is the Hydrographic Services Improvement Act (HSIA) found on pages 64-66 of S. 2206. NSPS is working to add language emphasizing/strengthening contracting out with the private sector as well as increasing the overall authorization amount while seeking to prevent NOAA from adding to its current vessels and similar assets. The Senate Commerce Committee marked up S. 2206 on November 18, and Sen. Sullivan would like to work with NSPS to insert our ideas for language into a manager’s amendment before the bill reaches the Senate floor.
HUD
In April 2015, NSPS responded to a request for feedback on proposed changes in the Department of Housing and Urban Development (HUD) loan underwriting guidelines on multi-family projects. In its response, NSPS provided suggestions and volunteered to assist in resolving the numerous redundancies and problems related to the HUD Multi-family survey requirements. Examples include the use of a separate "Surveyors Report," requiring an additional certification, and other requirements that cause confusion such as those related to wetlands and references to "as-built" surveys. Gary Kent, PS, chair of the NSPS committee on the ALTA/ACSM Standards, coordinated the NSPS participation.

LightSquared
Earlier this year, LightSquared, which has rebranded with a new name, Ligado Networks LLC, continued to concern the Air Force command that operates U.S. military satellites over possible interference with GPS signals. General John Hyten, head of the Air Force Space Command, told a subcommittee of the Committee on Armed Services of the U.S. House of Representatives he wants to see results from new tests that will begin in April. In May, Reps. Mike Rogers (R-AL) and Jim Cooper (D-TN) introduced a "Sense of the Congress" amendment, which eventually was adopted by the House, to the 2017 National Defense Authorization Act (NDAA) to prevent the next version of "LightSquared" from damaging GPS signals. DoD is working with the Department of Transportation through its adjacent band study to evaluate this new proposal and to conduct GPS-adjacent band compatibility testing. The FCC will analyze the report and public comments before making a final recommendation and before it issues a final decision, and possible rulemaking. The FCC, DoD, and USDOT are working together, cooperatively, to develop the technical record to support a final recommendation on the revised proposal.

National Parcel Data
On June 17, NSPS Executive Director Curtis Sumner, Government Consultant John Palatiello, and Registered Lobbyist John “JB” Byrd participated in a National Parcel Summit held at the USGS headquarters in Reston, Virginia. The meeting focused on how to successfully build a national-level parcel system utilizing parcel data holdings of local government, state government aggregators, and commercial firms, as well as the need for a Federal champion to ensure progress to enable users at all levels and in all sectors to access data for projects, applications and analysis. The summit was a series of facilitated discussions to generate ideas on Federal leadership, as well as cooperation and coordination with other levels of government, and across the public and private sector. Participants heard from a variety of Federal, state, local government, academia, and private sector experts as to the needs, current conditions, a lessons-learned review of past efforts, and development of next steps and an action plan to make a National Parcel System a reality. The summit was hosted by the Federal Geographic Data Committee (FGDC) and its Homeland Infrastructure Foundation - Level Data (HIFLD) Subcommittee, along with the Department of Homeland Security (DHS). More than 120 experts from Federal, state and local government, private companies, and nonprofit organizations attended to develop the parcel strategy. A parcel system has been promoted by NSPS for many years. NSPS remains optimistic that this session will result in actions that will finally result in a parcel system that will assisting with economic development, housing, homeland security, land management, and dozens of other government and commercial activities.

In April, NSPS attended a workshop of the Mapping Science Committee of the National Research Council in Washington, D.C. The session focused on federal efforts to create a national address database. Presentations were made by representatives of the Census Bureau, Department of Transportation (USDOT), National Science Foundation (NSF) and the National Institute for Science and Technology (NIST). The discussion also covered the announcement in July for the Smart Cities Challenge. In March, the USDOT pledged up to $40 million to one city, to be awarded in June 2016, to help it define what it means to be a "Smart City" and become the country's first city to fully integrate innovative technologies — self-driving cars, connected vehicles, and smart sensors — into their transportation network. USDOT Secretary Anthony Foxx announced the finalists to be: Austin, TX; Columbus, OH; Denver, CO; Kansas City, MO; Pittsburgh, PA; Portland, OR; and San Francisco, CA. Columbus was recently awarded as the winner of the challenge. USDOT developed the Smart City Challenge as a response to the trends identified in the 2015 "Beyond Traffic" draft report. The report revealed that our nation’s aging infrastructure is not equipped to deal with a dramatically growing population in regions throughout the country. It also identified a need to increase mobility options in developing megaregions — specifically mid-sized cities.
Pipeline, Utilities and Infrastructure

In a major victory for NSPS, President Obama in June signed into law the "Protecting our Infrastructure of Pipelines and Enhancing Safety" or "PIPES Act" of 2016 as Public Law 114-183. The law extends the Pipeline and Hazardous Materials Safety Administration (PHMSA), makes changes to PHMSA safety policies and gives the Department of Transportation more power in the event of pipeline emergencies. The law also includes an issue promoted by NSPS in 2015, along with colleagues in MAPPS, in the organizations' annual "lobby day" activities in Congress. It ensures coordination and collaboration on pipeline mapping, research, development, and technology between PHMSA, industry, and public stakeholders, including provisions strengthening geolocation data for pipelines and other underground utility infrastructure through enhanced underground utility location data requirements. Improved location and mapping of underground utilities has been a NSPS priority and was an issue NSPS members took to Congress in April 2015.

The Department of Energy's (DOE) Quadrennial Energy Review also highlighted pipeline safety as an issue for the nation's energy infrastructure. Trends in pipeline accidents suggest there continues to be opportunity for safety improvement. The federal pipeline safety program resides within the Department of Transportation's PHMSA, although its inspection and enforcement activities rely heavily upon state partnerships. For FY2017, PHMSA's budget request is approximately $179 million — more than double the agency's budget authority in FY2007. The DOE and PHMSA have since announced an interagency task force to "initiate regulatory actions to help ensure the safety of natural gas storage facilities." PHMSA has yet to complete key regulatory mandates imposed by the Pipeline Safety Act of 2011, including mandates related to automatic shutoff valves, integrity management expansion, leak detection, and maximum allowable operating pressure. Congress has expressed frustration with the agency's failure to fulfill these mandates. "Improving data collection and reporting, including geospatial data" was one area highlighted in the January 2015 study on integrity management by the National Transportation and Safety Board (NTSB). In March, NSPS Registered Lobbyist John “JB” Byrd met with NTSB Christopher Hart. Chairman Hart discussed the important role geospatial data plays in understanding geographical relevance to patterns for car accidents or aviation disasters. Byrd complimented Chairman Hart on his September 2015 testimony before the Senate Commerce Committee where Hart emphasized the importance of, and increased need for, geospatial data collection as part of improving location data and "integrity management" for underground utilities and pipelines connected to PHMSA Reauthorization. Chairman Hart's position as Chair of the NTSB ends in March 2017 and overall NTSB term in December 2017.

In February, NSPS met with staff of the Committee on Energy and Commerce in the U.S. House of Representatives to discuss infrastructure-related legislation such as H.R. 3021, the "Aerial Infrastructure Route (AIR) Survey Act of 2015" introduced last year by Rep. Mike Pompeo (R-KS). In February, the Subcommittee on Energy and Power held a markup hearing on the bill, and reported it favorably to the full committee. However, the bill, while scheduled for a markup at the full committee, has not moved since. The bill amends the Natural Gas Act to allow the use of aerial survey data for certain applications. Based on a fact sheet by the Committee, specifically, the legislation includes the following provisions: Section 1: This section provides the short title of the “Aerial Infrastructure Route Survey Act of 2015” or the “AIR Survey Act of 2015.” Section 2: Section 2 amends section 7 of the existing gas law to clarify that data collected by aerial survey is acceptable for the purposes of (1) completing any pre-filing process established to facilitate the formal application process for obtaining a certificate of public convenience and necessity for a natural gas transportation facility, or (2) an application associated with a Federal authorization concerning a certificate application. The section also provides the Federal Energy Regulatory Commission (FERC) with the discretion to require, as a condition of approval, that data gathered by aerial survey be verified through the use of ground survey data before construction or extension of proposed facilities. In late February while scheduled to be marked up by the Full Committee, H.R. 3021 was pulled from consideration following views of negative or poison pill amendments that would have gutted the opportunity for geospatial firms and professionals from helping out during the permitting and verification processes.

Privacy and Geolocation Legislation

The Federal Trade Commission (FTC) issued a report, "Privacy in an Era of Rapid Change" and its proposal that firms engaged in collection, sharing or use of "precise geolocation data" about a citizen be required to obtain “affirmative express consent” or advance approval of each such citizen. The final rule was released in March 2012. It did not include the expected exemptions and clarifications. NSPS has prepared a Sense of the Congress resolution to address this issue, approved its own resolution, and COGO has adopted a similar resolution. A similar resolution was recently approved by the Virginia Geographic Information Network (VGIN).
In November 2015, Senator Al Franken (D-MN) introduced S. 2270, the “Location Privacy Protection Act of 2015” to close legal loopholes that allow stalking applications to exist on smartphones while requiring companies to get customers’ permission before collecting their location data or sharing it with third parties. The bill also defines the term ‘geolocation information’ to mean any information that is not the contents of a communication, is in whole or in part generated by or derived from the operation or use of an electronic communications device, and is sufficient to identify the street name and name of the city or town in which the device is located, and does not include the Internet protocol address or the home, business, or billing address of the individual, or any component parts of such addresses. It also defines the term ‘geolocation information service’ to mean the provision of a global positioning service or other mapping, locational, or directional information service. And finally it defines the term ‘geolocation information service’ to mean the provision of a global positioning service or other mapping, locational, or directional information service. S. 2270 has not been moved yet by the Committee.

In March 2016, the NSPS Board endorsed a privacy best practices guideline for handling geospatial data. This guideline was first drafted by MAPPS and has also been endorsed by NSGIC.

Private Sector Utilization

A positive public-private partnership model is needed so that there are clearly defined roles and responsibilities to provide synergy between the public and private sectors in the Federal level, and particularly with regard to geospatial activities. Geospatial technology, identified by the U.S. Department of Labor as one of the top three emerging technologies for the 21st century, is estimated to be a $100 billion worldwide market growing at an annual rate of 10-15%. In this difficult economy, government agencies should be utilizing private sector geospatial firms to the maximum extent practical, not duplicating or directly competing against them. In 2015, Representative John J. “Jimmy” Duncan, Jr. (R-TN) and Senator John Thune (R-SD) introduced the “Freedom from Government Competition Act”, H.R. 2044/S. 1116.

A hearing by a subcommittee of the House Committee on Oversight and Government Reform was held on July 8, with NSPS Government Consultant John Palatiello, in his capacity as President of the Business Coalition for Fair Competition (BCFC) of which NSPS is a member, as a witness. The hearing examined the impact on the private sector from the decreased use of public-private competition in sourcing government products and services. The hearing also examined best practices for encouraging a more robust utilization of commercially available products and services to increase government efficiency while decreasing costs. The hearing included a review of the “Freedom from Government Competition Act”, H.R. 2044/S. 1116 would codify the “Yellow Pages” test, applied by Mayors and Governors, both Democrat and Republican, that says if you can find private sector firms in the Yellow Pages providing products or services that the government is also providing, then the service should be subject to market competition to break up the government monopoly and prove a better value to the taxpayer. This bill will not only make government more efficient, saving more than $35 billion annually.

NSPS has pointed to a need and role for government in surveying, mapping and geospatial activities. Agency personnel should be focused on inherently governmental activities such as enforcement of standards and specifications, development of requirements, coordination, and administering contracts. Commercial activities, including data acquisition, processing, applications, and value added services should be left to the qualified, competent and capable private sector in surveying and mapping.

Railroad Reauthorization

The railroad accident in New York highlighted the need for Positive Train Control (PTC) systems, which utilize highly accurate geospatial data, such as GPS data, LiDAR data, high resolution digital imagery, survey data, and mobile mapping to delineate the location of rails, clearances and a detailed asset inventory, to assure safety, train separation or collision avoidance, speed enforcement, and for asset management. The Railroad Authorization was attached to the Highway Bill recently signed into law by President Obama included a three-year delay in the implementation of the PTC program for Class 1 railroads. NSPS is still working on the issue of survey monumentation upon railroad abandonment, but no legislative remedy has been identified.
STEM and Geography Education

In December 2015, President Obama signed Public Law 114-95, a bipartisan K-12 education bill to replace No Child Left Behind. The Every Student Succeeds Act (ESSA). The bill authorizes dedicated funding to support important priorities, including increased access to STEM education. Specifically found in the bill, Section 3127 allows grants to be used for activities directly related to improving student academic achievement based on the State’s academic standards or directly related to improving student reading skills or knowledge of geography; and Section 5121 supports projects to develop, test, and demonstrate the effectiveness of services and programs to improve educational opportunities and achievement of Indian children and youth with grants available to raise the achievement of Indian and Alaska Native children in geography. (See, also, Workforce Development, below)

Unmanned Aerial Systems (UAS)

Professional surveying provides enormous "societal benefit" and state legislation that limits the use of emerging UAS technology will have "unintended consequences". Aerial surveying and mapping were specifically mentioned in the FAA "Roadmap" for UAS. Some state legislation has recognized the benefits of mapping from a UAS. NSPS-state societies should be calling on state legislatures to exempt aerial surveying and mapping from any legislation limiting UAS.

Prior to December 2014, certificates of authorization (COAs) had been granted to government agencies and universities while the private sector awaited the Federal Aviation Administration plan for civil, commercial COAs for UAV, as required by Congress in sections 332-336 of the Federal Aviation Administration Modernization and Reform Act, Public Law 112-95. There is concern that agencies and universities are acquiring UAS and utilizing them on projects that can otherwise be accomplished by the private sector.

In April 2015, NSPS filed comments with the Federal Aviation Administration (FAA) in response to its Notice of Proposed Rulemaking (NPRM) for commercial operation of small unmanned aircraft systems (sUAS). NSPS stated its strong support for, "the safe integration of commercial unmanned aircraft systems (UAS) into the National Air Space (NAS). UAS presents an extraordinary opportunity for utilization by surveyors to provide services to contribute to public health, safety, and welfare, and enhance the quality of life of all Americans, foster economic growth, increase the efficiency of surveying activities, and create business opportunities for the surveying profession."

In April 2015, the Small Business Administration, Office of Advocacy, hosted a roundtable meeting to discuss the FAA’s NPRM on small unmanned aircraft systems (sUAS). NSPS Government Consultant John Palatiello was invited to be the spokesman for small business. He was joined by FAA Assistant General Counsel Mark Bury in presentations on the proposed rules, with an emphasis on its affect on small business. Mr. Palatiello presented an overview of the geospatial profession and comments on UAS and the rules. Throughout this event, a variety of topics were raised and for which NSPS may wish to address in the public comments including: definitions, seek and avoid, people on the ground being in the area of interest of a UAS mission, insurance, time of day, testing/certification, and unfair government competition.

Later in 2015, NSPS Registered Lobbyist John “JB” Byrd not only met with Mr. Marke "Hoot" Gibson, FAA’s Senior Advisor on UAS Integration, but also questioned House Oversight and Government Reform Committee Chairman Jason Chaffetz (R-UT) on UAS as the ‘next wave of commerce’ as the committee had held a 2015 hearing on that very subject.

In September 2015, NSPS cosigned a letter prompted by the Association for Unmanned Vehicle Systems International (AUVSI). The letter was sent to the Federal Aviation Administration (FAA) marking its failure to meet the congressionally mandated deadline for integration of UAS into the National Airspace System (NAS). Key points communicated in the letter include:

"While the FAA has hit some milestones in the integration process, it has yet to finalize small UAS rules, let alone facilitate the full integration of UAS that Congress contemplated in 2012. ... The increasing number of businesses applying for Section 333 exemptions demonstrates the pent-up demand for commercial UAS operations and the immediate need for a regulatory framework. ... The benefits of UAS are significant. Whether it is assisting first responders with rescue missions, helping the insurance industry more efficiently survey damages due to natural disasters, or helping farmers improve crop yields, the applications of UAS are virtually limitless and enable public agencies and businesses to do things safer and more cost effectively. ... On behalf of businesses across a wide range of industry sectors in the United States, we urge the FAA to use all available means to finalize the small UAS rules immediately without any further delays and move ahead with the next regulatory steps on the path for integrating all UAS into the NAS. Once this happens, we will have an
In December 2015, the FAA released rules for registration and marking requirements for small unmanned aircraft systems (UAS). The ruling is based on suggestions submitted by the UAS Registration Task Force (RTF) Aviation Rulemaking Committee (ARC). In March 2016, the FAA announced a "blanket" approval for section 333 UAS operators to fly up to an altitude of 400 feet. The change makes commercial UAS operations for surveying and mapping more practical and profitable. Later that month, NSPS Registered Lobbyist John "JB" Byrd asked U.S. Department of Transportation Secretary Anthony Foxx specifically asked Secretary Foxx to discuss the FAA’s regulatory process for UAS.

In June, the FAA finalized its part 107 operational rules for routine commercial use of small unmanned aircraft systems, opening pathways towards fully integrating UAS into the nation's airspace. The new rules, which took effect August 29, govern unmanned aircraft drones weighing less than 55 pounds used for commercial (non-hobby) operations, within visual line of sight, during daylight, up to an altitude of 400 feet, at up to 100 mph, and only over persons directly participating in the UAS operation. A remote pilot certificate is required, based on a knowledge test and security review. The FAA will make an online portal available in the coming weeks to apply for certain permitted waivers. The Office of Science and Technology Policy (OSTP) has also released a 624-page document of the expected final FAA rule on sUAS, while the White House published a fact sheet on UAS entitled, "Enabling a New Generation of Aviation Technology." USDOT Secretary Anthony Foxx provided a blog on the release of the policy via the White House website entitled, "Growing the Economy through Innovation: New Rules for the Commercial and Scientific Use of Drones." Aerial surveying, mapping and photography are prominently mentioned in the FAA rule, as are the comments related to geospatial applications submitted by NSPS.

Also in June as Congress continued its work on appropriations bills, in FY 2017, USDA will receive funds for rural infrastructure and opportunities to advance the utilization of UAS. The House Report (114-531), accompanying the House Appropriations bill (H.R. 5054), includes language regarding UAS activities in USDA’s National Institute of Food and Agriculture (NIFA):

"Unmanned Aircraft Systems — The rapidly evolving field of Unmanned Aircraft Systems (UAS) provides highly promising opportunities for timely collection of geospatial data that can be used to increase profitability for agricultural producers and improve environmental stewardship in a broad range of areas. The Committee believes that research, development, education, and extension programs are needed to help further develop the technology and educate farmers and natural resource managers on best practices and safe operation of UAS. The Committee encourages NIFA to support the research, development, education and training of techniques, sensor and imaging technology, data analytics tools, best practices, and the safe and efficient deployment of UAS for improved agriculture and environmental stewardship."

Later that month the House Agriculture continued its series of hearings on Big Data while focusing on the role of geospatial data, including through the use of UAS. NSPS Registered Lobbyist John "JB" Byrd recently met with the House Agriculture Committee staff.

The NTIA, an agency within the U.S. Department of Commerce, was tasked by President Obama to study the privacy, transparency, and accountability issues regarding commercial and private use of UAS. NSPS took the lead in October 2015 in compiling the first ever document aggregating "positive societal benefits" of UAS. This document cited public comments, testimony, issue papers, and reports produced by fifteen organizations and trade associations, including NSPS, and at least one state legislature that promoted the positive societal benefits of UAS utilization by private sector geospatial firms. The value of this activity to NSPS was aligning as many of the groups connected to promoting the "positive societal benefits" theme thereby leveraging a coalition to help with the goals of the geospatial community in opening up public airspace for the safe operation of UAS for commercial use by surveying firms, while also nullifying the opposition to UAS utilization based on privacy concerns. Without this NSPS-led effort, no such document would exist thereby empowering the privacy concern opposition. At the October 2015 NTIA Stakeholder meeting, NSPS Registered Lobbyist John "JB" Byrd formally provided a report on this document to over 40 leading stakeholders in Washington, DC including the Federal Aviation Administration (FAA) and U.S. DOT legal team, among other Federal agencies such as the Federal Trade Commission (FTC) and NTIA. This has increased national and opinion leader awareness of and appreciation for the professional surveyor community. In May, NTIA published the final report of this stakeholder process. The best practices
agreed to by a diverse group of stakeholders -- including privacy and consumer advocates, business sectors, news organizations and trade associations -- represent an important step in building consumer trust, giving users the tools to innovate in this space in a manner that respects privacy, and providing accountability and transparency. The voluntary best practices encourage UAS users to inform affected persons of UAS use and the collection of data; take care in the collection and storage of information that identifies a particular person; limit the use and sharing of such data; secure data; and monitor and comply with the law as it evolves. Based on the NSPS demonstrated advocacy and leadership, NSPS Government Consultant John Palatiello participated at UAS Summit in July hosted by the Office of Science and Technology Policy (OSTP) at The White House.

Water Resources Development Act (WRDA)
In May, the Senate Environment and Public Works Committee (EPW) advanced a new Water Resources Development Act (WRDA) out of committee by a vote of 19-1, and on September 15, the Senate passed the bill (S. 2848) by a vote of 95-3. The $9 billion bill authorizes new projects and studies at the Army Corps of Engineers, adds a dam rehabilitation component to the National Dam Safety Program, establishes a new Water Infrastructure Trust Fund, and provides $220 million in aid for Flint, Michigan. The legislation will also address western drought issues, increases federal drinking water and clean water infrastructure funding, strengthens the nation's levees, and beneficially uses dredge material for ecosystem restoration projects. Both the dam rehabilitation program and drinking water revolving fund program will be subject to Qualifications Based Selection (QBS)/Brooks Act requirements, as sought by COFPAES, of which NSPS is a member. Also in May, the House Committee on Transportation and Infrastructure approved their version of WRDA, H.R. 5303. In June, NSPS cosigned a coalition letter urging swift Congressional action in enacting the bill. The house bill is expected to move by "suspension" vote as early as late September.

White House Conference on Small Business (WHCSB)
The White House Conference on Small Business (WHCSB) was a series of three conferences that occurred in 1980, 1986, and 1995. They were convened by presidents Jimmy Carter (originating from Executive Order 12091), Ronald Reagan (originating from Congressional authorization of P.L. 98-276) and Bill Clinton (originating from Congressional authorization P.L. 101-409) in an effort to foster better relationships with members of the business community and to develop innovative policy solutions to economic problems. A November 2015 Congressional Research Service (CRS) report provided an analysis of the three Conferences to date. NSPS led the effort on legislation, soon to be introduced by Rep. Rod Blum (R-IA), authorizing the next White House Conference on Small Business. Rep. Blum briefed NSPS and other interested supporters during a policy roundtable in April.

Workforce Development
*THIS IS ONE OF THE ISSUES TAKEN TO THE HILL ON LOBBY DAY, MARCH 16, 2016.

NSPS has been working with members of Congress to introduce legislation to create a public-private partnership to help assure development of the future geospatial workforce America will need to contribute to economic growth, environmental protection, preservation of property rights, home ownership and rebuilding the nation’s infrastructure.

In June, the House Education and Workforce Committee approved H.R. 5587, the Strengthening Career and Technical Education Act (CTE) for the 21st Century Act. On September 13, the House passed the bill by a vote of 405-5. Introduced by Reps. Glenn Thompson (R-PA) and Katherine Clark (D-MA), the legislation reauthorizes and reforms the Carl D. Perkins Career and Technical Education Act to help more Americans enter the workforce with the skills they need to compete for high-skilled, in-demand jobs. NSPS has recently learned that the Senate bill will not likely be introduced. As a result, it is expected that the Senate will pass H.R. 5587 instead of moving their version of the CTE bill later this year. Unfortunately, the legislation drafting does not outline or single out any respective sectors of the economy or professions, but rather simply provides grant money to the states as part of their worker education and training grant programs.

In December 2015, President Obama signed Public Law 114-95, a bipartisan K-12 education bill to replace No Child Left Behind. The Every Student Succeeds Act (ESSA). The bill authorizes dedicated funding to support important priorities, including increased access to STEM education. Specifically found in the bill, Section 3127 allows grants to be used for activities directly related to improving student academic achievement based on the State’s academic standards or directly related to improving student reading skills or knowledge of geography; and Section 5121 supports projects to develop, test, and demonstrate the effectiveness of services and programs to improve educational opportunities and achievement of
Indian children and youth with grants available to raise the achievement of Indian and Alaska Native children in geography.

NSPS has also agreed to cosign a COGO letter drafted by the Association of American Geographers (AAG) concerning a new Advanced Placement course in Geographic Information Science & Technology (AP GIS&T) in high school.

JMP&A has developed a campaign for workforce development, pursuant to action taken by the NSPS Board in March.

As announced in News and Views, model letters for all NSPS state societies to send to their state’s Career and Technical Education (CTE) office seeking to prioritize surveying and geospatial workforce development. Also, model letters for local chapters and individuals surveyors to send to their local workforce development board were prepared. NSPS is currently encouraging its members to begin this grass roots lobbying and awareness campaign.

This initiative is designed to help attract the next generation of professional surveyors and technicians. That program begins with a letter-writing campaign by state surveying societies, as well as by local chapters and individual surveyors and firms.

On the NSPS website, a new page for workforce development has been created. On it are two sample letters to urge state and local workforce agencies to place a focus and emphasis on the surveying and geospatial workforce. The first is a sample letter that every state surveying society is urged to use to send to its state Career and Technical Education (CTE) office. The second sample letter should be used by chapters of state affiliate societies, or individual surveyors and/or surveying firms, to send to their local workforce development board and office. Included on the top of the letter is a link to the every local workforce board across the nation.

This is the first step in a NSPS effort to attract more individuals into a career in surveying. The Federal government provides more than $2 billion to state and local government for workforce development and career and technical education through the Departments of Labor and Education. These letters are a way for state and local surveying organizations to tap into the benefits of those funds.

NSPS Executive Director Curtis Sumner and NSPS Government Consultant John Palatiello met earlier this year with officials of the U.S. Department of Labor to discuss the need for a surveying and geospatial workforce development initiative to attract younger and new workers into the profession. An upcoming grant opportunity was presented. As a result, the Virginia Association of Surveyors Foundation is submitting a grant application, with the support of NSPS and others. Grants from $1 to $10 million will be awarded.