3DEP
This is one of the issues NSPS members are taking to the Hill on March 15 as part of both the FEMA/NFIP Flood Map Reform bill as well as the 3DEP connection to Infrastructure. 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 December 8, NSPS Lobbyist John "JB" Byrd provided an overview on NFIP reform, LiDAR, and 3DEP to several lobbying groups representing the various elements of the real estate community in order to add these respective groups to the 3DEP Coalition and help pitch NSPS suggested reforms to the NFIP. The 3DEP Coalition consists of NSPS and other stakeholder groups, including a coalition of more than two dozen organizations from geospatial, science, housing, engineering, infrastructure, flood risk management and the environment that support 3DEP.

On February 13, NSPS led a 3DEP Summit during the Esri Federal User Conference in Washington, DC, NSPS Government Affairs Consultant John Palatiello briefed the audience on coalition efforts at the 3DEP Summit. Attendees included officials from the Office of Management and Budget (OMB), Federal managers involved with the 3DEP Executive Forum, Congressional staff, and fellow members of the 3DEP Coalition. Palatiello discussed efforts by the coalition to promote 3DEP and build support and funding.

Appropriations (Continuing Resolution, CR) Funding the Government Through April 28, 2017
In December 2016, President Obama signed into law H.R.2028, the "Further Continuing and Security Assistance Appropriations Act, 2017". As a result, P.L. 114-254 contains the following highlights:

- Section 101 amends the Continuing Appropriations Act, 2017 to provide FY2017 appropriations through April 28, 2017, to most federal agencies for continuing projects or activities at the levels of, and under the terms and conditions of FY2016 appropriations Acts, while reducing the across-the-board reduction included in the Continuing Appropriations Act, 2017;
- Section 151 permits funds provided for the NOAA to be apportioned up to the rate of operations necessary to maintain the planned launch schedules for the Joint Polar Satellite System weather satellites;
- Section 152 permits funds provided for the U.S. Census Bureau to be apportioned up to the rate of operations necessary to maintain the schedule and deliver the required data according to statutory deadlines for the 2020 Decennial Census Program;
- Section 163 permits funds provided to DHS for U.S. Customs and Border Protection to be apportioned at a rate for operations as necessary, and apportioned to provide staffing levels as necessary to ensure border security;
- Section 185 provides emergency appropriations for the Emergency Watershed Protection Program and the Emergency Conservation Program;
- Section 187 provides emergency appropriations for the USACE Construction account to address emergency situations at Corps of Engineers projects, and to rehabilitate and repair damages to projects, caused by natural disasters;
- Section 188 provides emergency appropriations for the Army Corps of Engineers Mississippi River and Tributaries account to dredge navigation projects in response to, and repair damages to Corps of Engineers projects caused by, natural disasters;
- Section 189 provides emergency appropriations for the Army Corps of Engineers Operation and Maintenance account to dredge navigation projects in response to, and repair damages to Corps of Engineers projects caused by, natural disasters; Section 190 provides emergency appropriations for the Army Corp of Engineers Flood Control and Coastal Emergencies account to prepare for flood, hurricane and other natural disasters and support emergency operations, repairs, and other activities in response to such disasters;
- Section 191 provides emergency appropriations for the Federal Highway Administration's Emergency Relief Program; Section 192 provides emergency and disaster relief appropriations for the Department of Housing and Urban Development's Community Development Block Grant Program for activities related to disaster relief, long-
term recovery, restoration of infrastructure and housing, and economic revitalization in the most impacted and distressed areas resulting from a major disaster declared in 2016;

- Section 196 provides additional appropriations to the EPA's Drinking Water State Revolving Loan Fund, consistent with the Water and Waste Act of 2016, for grants to states with declared emergencies relating to the public health threats associated with the presence of lead or other contaminants in drinking water provided by a public water system;

- Section 197 provides additional funding for the EPA's Water Infrastructure Finance and Innovation (WIFIA) Program Account to provide loans for water infrastructure projects (12/10);

**Aviation Bill including UAS Policy**

The current authorization of the FAA and aviation programs expires in September 2017, after Congress passed a 14 month expansion before recessing in July 2016.

In October, the FTC hosted a technology meeting on UAS as part of its Fall Technology Series with an emphasis on the implications for consumer privacy.

The NTIA, an agency within the U.S. Department of Commerce, was tasked in 2015 by President Obama to study the privacy, transparency, and accountability issues regarding commercial and private use of UAS. NSPS took the lead in 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, including NSPS, and at least one state legislature that promoted the positive societal benefits of UAS utilization by professional surveyors. The value of this activity to NSPS members 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 private sector geospatial community in opening up public airspace for the safe operation of UAS for commercial use by professional surveyors, 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 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 professional surveyors. In May 2016, 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.

**Council on Federal Procurement of Architectural and Engineering Services (COFPAES) & QBS**

In another major victory for NSPS and COFPAES, in December 2016, President Obama signed into law S. 612, the "Water Infrastructure Improvements for the Nation (WIIN) Act". P.L. 114-312 contains the following QBS provision:

> Section 5006 provides for qualifications-based-selection (QBS) be used for grants to rehabilitate high hazard potential dams as a condition on the receipt of a grant of an amount greater than $1,000,000, in that a non-Federal sponsor that receives the grant shall require that each contract and subcontract for program management, construction management, planning studies, feasibility studies, architectural services, preliminary engineering, design, engineering, surveying, mapping, and related services entered into using funds from the grant be awarded in the same manner as a contract for architectural and engineering services is awarded;

NSPS has been working within COFPAES, and as part of the Construction Industry Procurement Coalition (CIPC), to advance reforms to regulations involving the Federal procurement process for reverse auctions for A-E services, including surveying and mapping. On January 24, 2017, H.R. 679, the "Construction Consensus Procurement Improvement Act of 2017" was introduced by Rep. Mark Meadows (R-NC), and reported favorably with an amendment by the House Oversight and Government Reform Committee on February 2. Rep. Meadows was a speaker at the NSPS-MAPPS joint PAC breakfast held during the 2016 National Surveying, Mapping and Geospatial Conference. 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. On February 16, the Congressional Budget Office (CBO) issued a report “scoring” or estimating the cost of implementation of the House bill, H.R. 679, at about $600,000 a year and $3 million over the 2018-2022 period. The bill would also 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. Sens. Rob Portman (R-OH) and Mazie Hirono (D-HI) are planning to introduce the Senate companion bill, which was S. 1526 in the 114th Congress.

A restructured COFPAES is continuing to operate with NSPS, MAPPS, and ASCE as members. COFPAES 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. The COFPAES staff and delegates met in November 2016 in Reston, Virginia. Joe Dolan attended on behalf of NSPS.

COFPAES has filed comments and questions with GSA and NGA on the CIBORG IT Schedule 70 proposal.

**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 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." Most recently, this issue has been brought to the attention of the Trump transition team at the Department of Labor.

**Defense Bill**

In December 2016, President Obama signed into law S. 2943, the "National Defense Authorization Act of 2017". Highlights of Public Law 114-328, based on language found in the Conference Report to S. 2943, include:

- Authorizing a briefing on real property inventory thanks to a House amendment containing a provision (Section 1074) that would require the Secretary of Defense to brief the Committee on Armed Services of the House of Representatives by March 1, 2017 on the status of the Installation Geospatial Information Services of the Department of Defense as it relates to the real property inventory of the Department. On February 22, 2017, NSPS Lobbyist John "JB" Byrd met with staff of Rep. Paul Gosar (R-AZ), the sponsor of this provision, to discuss the timing of such briefing which has yet to be scheduled.
- Requiring the Secretary of Defense to submit to the appropriate committees of Congress, an annual report on observation flights over the United States under the Open Skies Treaty during the previous year. The House version contained a similar provision (Section 1231) that would limit funds that may be used to approve or permit approval of a request by the Russian Federation to carry out observation flights with an aircraft that has installed an upgraded sensor with infrared or synthetic aperture radar capability over the United States or the territory covered in the Open Skies Treaty, unless the administration can certify certain conditions. The Senate agreed with an amendment that would limit funding that may be used to vote to approve or otherwise adopt any implementing decision of the Open Skies Consultative Commission to authorize approval of requests by state parties to the Treaty of infrared or synthetic aperture radars, pursuant to the Open Skies Treaty, unless and until the Secretary of Defense, jointly with the relevant U.S. government officials, submits to the appropriate congressional committees...
a certification that such implementing decision would not be detrimental or otherwise harmful to the national security of the United States, and submits a report. The provision further states that not more than 65–percent of the funds authorized for fiscal year 2017 may be used to carry out any activities to implement the Open Skies Treaty until the Director of National Intelligence and the Director of the National Geospatial-Intelligence Agency submit an evaluation of whether it is possible, consistent with U.S. national security interests, to substitute commercial imagery or other phenomenologies for such data generated by Treaty overflights. The amendment further limits the funding until the Secretary of State submits a report on cost of implementing the Open Skies Treaty and on impact on participation and contributions by covered state parties and relationships among covered state parties;

- Restricting the obligation or expenditure of amounts authorized to be appropriated for fiscal year 2017 and available for the current product development contract for the GPS Next Generation Operational Control System (GPS–OCX) until the Secretary of Defense submits to Congress the certification required under section 2433a(c)(2), title 10, United States Code, commonly referred to as a Nunn-McCurdy certification;
- Directing the Secretary of Defense, Secretary of Transportation, and Secretary of Homeland Security to jointly conduct a study to assess and identify the technology-neutral requirements to backup and complement the positioning, navigation, and timing (PNT) capabilities of the GPS for national security and critical infrastructure. The provision would also direct the Secretary of Defense, Secretary of Transportation, and Secretary of Homeland Security to submit a report to the appropriate congressional committees not later than 1 year after the date of the enactment of this Act on the study;
- Requiring the Secretary of Defense to enter into an agreement with a federally funded research and development center to review the acquisition strategy for the Next Generation Operational Control System for the GPS, and amended requiring the Secretary of Defense, not later than 60 days after the date of the enactment of this act, to enter into an arrangement with a federally funded research and development center, or other appropriate independent entity to review the acquisition strategy for the Next Generation Operational Control System for the GPS. The amendment would also add a requirement that the independent assessment evaluate the ability of alternative systems to satisfy the requirements of the Department of Defense;
- Amending the Federal Communications Commission (FCC) conditions on commercial terrestrial operations (47 U.S.C. 301 et seq.) by adding that the FCC shall not permit commercial terrestrial operations in the 1525–1559 megahertz band or the 1626.5–1660.5 megahertz band until 90 days after the FCC resolves concerns of widespread harmful interference by such operations in such band to Department of Defense GPS (GPS) devices. The provision would also require the Secretary of Defense to conduct a review of harmful interference of Department of Defense GPS devices and to notify congress if the Secretary determines the existence of widespread harmful interference;
- Does NOT include a repeal of temporary suspension of public-private competitions for conversion of Department of Defense commercial functions to performance by contractors The Senate bill contained a provision (Section 806) that would repeal section 325 of the National Defense Authorization Act for Fiscal Year 2010 (Public Law 111–84). The House amendment contained no similar provision.

Digital Coast, NOAA Ocean & Coastal Mapping

On January 12 2017, Sens. Tammy Baldwin (D-WI) and Lisa Murkowski (R-AK) introduced S. 110, the Digital Coast Act of 2017 with original cosponsors Dan Sullivan (R-AK) and Corey Booker (D-NJ). On January 24, NSPS experienced a victory when the U.S. Senate Commerce Committee unanimously approved this NSPS-supported Digital Coast Act, with the next step having the bill prepaid for floor action later this Congress. NSPS Executive Director Curt Sumner was quoted in a news release issued by Sen. Baldwin. On March 1, 2017, COGO endorsed S. 110. 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 2016, Reps. C.A. "Dutch" Ruppersberger (D-MD) and Rep. Don Young (R-AK), reintroduced the companion bill in the House, H.R. 4738, and they plan to soon introduce this bill in the 115th Congress. NSPS continues to lead an advocacy coalition of 10 organizations supportive of Digital Coast.
Federal Prison Industries (FPI) Reform
In March 2015, Rep. 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 understands Reps. Huizenga and Maloney will introduce the bill in the 115th Congress, and is working to add the new bill as an amendment to the House version of comprehensive criminal justice reform legislation.

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). 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. Reps. Kind and Cramer will soon reintroduce the House bill in the 115th Congress.

Sen. Lisa Murkowski (R-AK) will soon reintroduce the Senate version of the bill which was S. 1225 in the 114th Congress, and which was referred to the Senate Committee on Energy and Natural Resources, where she serves as Chair. In April 2016, the U.S. Senate approved S. 2012, a comprehensive energy infrastructure bill, the Energy Policy Modernization Act of 2015. 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." 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."

A major NSPS legislative priority, to improve the Federal government’s inventory of real estate it owns, was realized in December 2016 when President Obama signed into law H.R. 6451, the "Federal Property Management Reform Act". P.L. 114-318 requires GSA to create and publish a single, comprehensive database of all federal real properties, including whether those properties are excess, surplus, underutilized, or unutilized to prevent a future stockpiling of unused and underutilized property. Section 6 of the bill authorizes the Federal Real Property Council and the GSA Administrator the access to information for the establishment and maintenance of the database described in separate legislation, section 21 of H.R. 4465, the Federal Assets Sale and Transfer Act (FASTA) of 2016, which was also signed into law by the President, P.L. 114-287.

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 then-General Services Administrator Denise Turner Roth in a February 2016 hearing of the House Appropriations Committee, Subcommittee on Financial Services
and General Government. On February 15, 2017, 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 2017 Financial Service Subcommittee report language:

"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 2016, 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 in S. 2943, the: "National Defense Authorization Act of 2017" and signed into law by President Obama on December 23. It authorizes a briefing on real property inventory based on language found in the Conference Report to S. 2943:

"The House amendment contained a provision (Section 1074) that would require the Secretary of Defense to brief the Committee on Armed Services of the House of Representatives on the status of the Installation Geospatial Information Services of the Department of Defense as it relates to the real property inventory of the Department. The Senate bill contained no similar provision. The House recedes. The conferees direct the Secretary of Defense to provide a briefing by March 1, 2017 on the status of the Installation Geospatial Information Services of the Department of Defense as it relates to the real property inventory of the Department."
On February 22, 2017, NSPS Lobbyist John "JB" Byrd met with staff of Rep. Paul Gosar (R-AZ), the sponsor of this provision, to discuss the timing of such briefing which has yet to be scheduled.

**Geospatial Governance and Coordination**

In November 2016, NSPS submitted public comments to the 'Commission on Evidence-Based Policymaking' recommending a priority on Federal government collection and application of geospatial data, particularly the National Spatial Data Infrastructure (NSDI), to address national policies and priorities.

NSPS staff has also provided input to the Trump transition and Interior Department “landing” team on geospatial governance, NSDI improvement, and 3DEP.

In July 2016, NSPS Executive Director Curt Sumner, Government Affairs Consultant John Palatiello, and 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. A follow-up conference call hosted by the FGDC to discuss the NSDI was held on November 18.

On February 14, 2017, NSPS Lobbyist John "JB" Byrd met with staff of Rep. Doug Lamborn (R-CO) who is planning to introduce the “Map It Once, Use It Many Times (MIO-UIMT)” Act (H.R. 1604 from the 113th Congress). Sen. Orrin Hatch (R-UT) will soon introduce the “Geospatial Data Act (GDA)” (S. 740 in the 114th Congress). In early 2016, NSPS staff compiled a list of positive sections of the Hatch bill that could be worked into MIO-UIMT. In May 2016, NSPS staff met with the Senate Commerce Committee staff to explain our concerns with GDA, with the intent to work with both Rep. Lamborn and Sen. Hatch to help bridge the gap by including the positive provisions of Lamborn's bill into GDA. Sen. Hatch's staff hosted a meeting with NSPS staff in June 2016 to itemize our highest priorities. As a result of the NSPS consultation with Sen. Hatch’s staff, the redrafted version of the bill is an improvement. It will have 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. Given this agreement on the language, a hearing or action can now be scheduled in the Senate Commerce Committee once the new GDA is introduced in the Senate. In September 2016, Rep. Bruce Westerman (R-AR) introduced the House companion bill, H.R. 6294, with 2 cosponsors. The House bill includes some, but not all of the revisions found now in the Hatch bill and NSPS has since met with the Westerman staff to provide help prior to introduction in the 115th Congress.

NSPS staff met with an OMB official March 8 to discuss broadening the understanding of the need for geospatial program reforms and coordination as part of the expansive list of the Government Accountability Office's (GAO) High-Risk series for programs prone to waste, fraud and abuse.

**Healthcare GIS**

On March 6, 2017, the House Energy and Commerce Committee, along with the Ways and Means Committee released its version of Obamacare repeal and replacement legislation. As Congress works to repeal and replace the "Patient Protection and Affordable Care Act (ACA)", also known as 'Obamacare', NSPS is pursuing having the House and Senate include a provision to assure that geographic information system (GIS) technology links health and location data for the purpose of efficiently delivering healthcare services.

**Highways/State DoTs**

FHWA 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 on June 22. State DOTs will have one year to update their policies and procedures to comply with the new regulations.
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.

Hydrographic Services Improvement Act (HSIA)
On January 3, 2017, Rep. Don Young (R-AK) introduced H.R. 221, the "Hydrographic Services Improvement Act (HSIA)" which was referred to the House Committee on Natural Resources. Also on January 17, 2017, Sen. Dan Sullivan (R-AK) introduced S. 171, the "National Oceanic and Atmospheric Administration Commissioned Officer Corps Amendments and Hydrographic Services Improvement Act Reauthorization and Amendments Act of 2017". Title V of S. 171 is the Hydrographic Services Improvement Act (HSIA). 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. 171 on January 24 and reported the bill out of Committee as amended. Sen. Sullivan wants to work with NSPS to insert our ideas for language into a manager’s amendment before the bill reaches the Senate floor. On March 3, the Congressional Budget Office (CBO) released a cost estimate for S. 171:

"CBO estimates that implementing S. 171 would cost $697 million over the 2018-2022 period and $28 million after 2022, assuming appropriation of the authorized amounts. Enacting the legislation would affect direct spending and revenues; therefore, pay-as-you-go procedures apply. However, CBO estimates that any such effects would be insignificant. ...Hydrographic Activities. Title V would authorize the appropriation of $183 million a year through 2021 to carry out hydrographic activities, including nautical mapping and charting, collecting hydrographic data, maintaining a geodetic reference system (a worldwide coordinate system used for navigation purposes), and measuring tides and currents. In 2016, NOAA allocated $207 million to carry out similar activities. CBO estimates that implementing title V would cost $697 million over the 2018-2022 period."

Infrastructure
This is one of the issues NSPS members are taking to the Hill on March 15.

Infrastructure is critical to our nation’s prosperity. President Trump and Congress are planning a major infrastructure program of an estimated $1 trillion for roads, bridges, airports, and other types of infrastructure. All of these projects require quality and accurate surveying and mapping data, products and services. In recognizing the importance of accurate geospatial data, Congress should include legislative language calling for surveying, mapping and geospatial data for the planning, design, construction, operation, and maintenance for all related infrastructure projects. Data needs include: Elevation; Boundary; Topo; Planimetrics; As-Builts; Asset Management; and others. NSPS is urging sponsorship of provisions enabling the utilization of surveying and mapping technologies and applications in infrastructure legislation in the 115th Congress.

LightSquared
In 2016, 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. S. 2943, the "National Defense Authorization Act of 2017" and signed into law by President Obama on December 23 contains this language as found in the Conference Report to S. 2943:

"Section 1698 indicates that the House amendment contained a provision (Section 1673) that would amend the Federal Communications Commission (FCC) conditions on commercial terrestrial operations (47 U.S.C. 301 et
National Address and Parcel Data
In June 2016, NSPS Executive Director Curt Sumner, NSPS Government Affairs Consultant John Palatiello and NSPS 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 a NSPS public policy goal for many years. NSPS remains optimistic that this session will result in actions that will finally result in a parcel system that will assist with economic development, housing, homeland security, land management, and dozens of other government and commercial activities.

At this conference, a Parcel update will be presented on Monday, March 13.

National Flood Insurance Program (NFIP) & Flood Map Reforms
This is one of the issues NSPS members are taking to the Hill on March 15.

The National Flood Insurance Program (NFIP) statutory authority is scheduled to expire on September 30, 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 2017, 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 January 2016, NSPS Executive Director Curt Sumner was 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 2016, NSPS Lobbyist John Byrd met with House Financial Services Committee staff. They wanted to know: What are the roadblocks 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 recommendations of the FEMA task force were drafted into legislation by NSPS staff. In the 115th Congress, Representative Alex Mooney (R-WV) and Senator Mike Rounds (R-SD) will hopefully introduce legislation known as the
Improvement of Mapping, Addresses, Geography, Elevations and Structures (IMAGES) Act to accomplish these vital reforms.

On December 8, NSPS Lobbyist John "JB" Byrd provided an overview on NFIP reform, LiDAR, and 3DEP to several lobbying groups representing the various elements of the real estate community in order to add these respective groups to the 3DEP Coalition and help pitch NSPS suggested reforms to the NFIP. The 3DEP Coalition consists of NSPS and other stakeholder groups, including a coalition of more than two dozen organizations from geospatial, science, housing, engineering, infrastructure, flood risk management and the environment that support 3DEP.

**Pipelines, 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, 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.

NSPS has drafted a Congressional Research Service (CRS) for a member of Congress to file to gather information on policies and programs related to underground utilities.

**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 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 NSGIS.

On February 15 2017, Sen. Ron Wyden (D-OR) introduced S. 395, the “Geolocational Privacy and Surveillance (GPS) Act of 2017” to specify the circumstances in which a person may acquire geolocation information. The House companion bill, H.R. 1062, was also introduced that day by Rep. Jason Chaffetz (R-UT). Both bills were referred to the respective Judiciary Committees.

**Private Sector Utilization**
*This is one of the issues NSPS members are taking to the Hill on March 15.*

On March 2 2017, Rep. John J. “Jimmy” Duncan, Jr. (R-TN) and Sen. John Thune (R-SD) introduced the Freedom from Government Competition Act (FFGCA), legislation (H.R. 1339/S. 506) that would require federal agencies to rely on the private sector when providing goods and services that are commercially available.

In July 2016, a hearing by a subcommittee of the House Committee on Oversight and Government Reform was held on with NSPS Government Affairs 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. NSPS has advocated before Congress that “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.” NSPS has said, “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.” The hearing included a review of the “Freedom from Government Competition Act” which 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.

Railroad Reauthorization
Recent railroad accidents in highlight 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 2015 Highway Bill 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.

Water Resources Development Act (WRDA)
In December 2016, President Obama signed into law S. 612, the "Water Infrastructure Improvements for the Nation (WIIN) Act". P.L. 114-312 contains the following provisions:

- Section 1124 authorizes the designation an individual, within the headquarters office of the Corps of Engineers, to serve as the coordinator and principal approving official for developing the process and procedures by which the Corps of Engineers operates and maintains sUAS systems in support of civil works and emergency response missions of the Corps of Engineers, and acquires, applies for, and receives any necessary FAA authorizations for such operations and systems;
- Section 1134 amends Section 2040 of the Water Resources Development Act of 2007 by enabling an applicant or requester to track the status of a permit application or request in a manner that will allow identification and display of the location of the activities subject to a permit or request through a map-based interface;
- Section 3101 authorizes the Bureau of Indian Affairs to establish a flood plain management pilot program to provide, at the request of an Indian tribe, guidance to the Indian tribe relating to best practices for the mitigation and prevention of floods, including consultation with the Indian tribe on flood plain mapping or new construction planning as part of Indian Dam Safety;
- Section 5006 provides for qualifications-based-selection (QBS) be used for grants to rehabilitate high hazard potential dams as a condition on the receipt of a grant of an amount greater than $1,000,000, in that a non-Federal sponsor that receives the grant shall require that each contract and subcontract for program management, construction management, planning studies, feasibility studies, architectural services, preliminary engineering, design, engineering, surveying, mapping, and related services entered into using funds from the grant be awarded in the same manner as a contract for architectural and engineering services is awarded;
- Section 5009 authorizes a report to Congress on groundwater contamination by the Secretary of the Navy on the groundwater contamination from the Bethpage, New York site that includes a description of the status of the groundwater contaminants that are leaving the site and migrating to a location within a 10-mile radius of the site, including detailed mapping of the movement of the plume over time, and projected migration rates of the plume;

Workforce Development
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.

NSPS is implementing a program, with its state affiliates, to develop high school programs in surveying and geospatial in Career and Technical Education (CTE) through the state CTE offices and local workforce boards.

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.

In 2016, NSPS Executive Director Curtis Sumner and NSPS Government Consultant John Palatiello met 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 submitted a grant application, with the support of NSPS and others, but was not selected.