National Technical Information Service (NTIS) Advisory Board Meeting Minutes August 26, 2019 Held at 5301 Shawnee Road, Alexandria, Virginia 22312

Attendance

The following board members participated in the meeting: Dr. Ajit Gaddam, Advisory Board Chair, Mr. Aaron D. Burciaga, Ms. Claire L. Walsh and Ms. Diana M. Zavala.

NTIS senior staff participation included Mr. Avi Bender, Director, Mr. Greg Capella, Deputy Director, Associate Directors Ms. Elizabeth Shaw and Dr. Kathleen Kaplan, Acting Associate Director Mr. Wayne Strickland, Acting Chief Information Officer Ms. Allison McCall, and Deputy Financial Officer Ms. Andrea Patterson.

Welcome/Opening Remarks

Mr. Greg Capella, the NTIS Advisory Board Designated Federal Officer, called the meeting to order and welcomed the new NTIS board members and NTIS staff, and public attendees. Mr. Capella then briefly reviewed the agenda for the meeting and turned the meeting over to Dr. Gaddam to introduce the new board members.

Dr. Gaddam welcomed the new board members and each new board member introduced themselves and gave a brief summary of their backgrounds. NTIS senior staff, starting with Mr. Capella and Mr. Bender also introduced themselves and gave a brief summary of their backgrounds.

Department of Commerce Update: Accelerating Results for the Federal Government and the Private Sector

Mr. Bender provided context for NTIS, a Bureau within the Department of Commerce with a role for delivering innovation by leveraging data as a strategic asset. He then described the new NTIS Data Mission per the June 15, 2016, Federal Register Notice. He presented an overview of the NTIS fee-for-service data mission for the Federal government. Mr. Bender stated that NTIS is delivering significant value to both Federal customers, joint venture partners (private sector), and the Department, through NTIS' unique Federal-Private partnerships. By partnering with the private sector, NTIS can support pressing national data priorities for the Federal government. He continued that NTIS will use the joint venture authority to provide data services for speedy execution of innovative projects which are amenable to the NTIS Authority. He then walked through the NTIS authorities under Title 15, Section 3704b and described the evolving role of information management, new media, and data dissemination and the importance applying the latest innovations in data science to assist Federal agencies in accelerating results and mission outcome by leveraging data as a strategic asset. Mr. Bender described the newly established NTIS-JVP innovation framework that takes a project from the ideation phase through its implementation. Notably, Mr. Bender highlighted the role of the early conversation among

NTIS, the sponsoring agency, and the joint venture partner. Mr. Bender provided examples from recent projects that illustrated how a focus on engaging the private sector in the early formulation (conversation) of the Problem Statement (not the solution) helps agencies reduce the downstream risk of implementation and helps agencies maximize the experience of the private sector. NTIS is, therefore, able to apply its authority to work closely with agencies to provide the needed data expertise to rapidly scale and achieve time to value. Mr. Bender then identified the existing partners and indicated that NTIS will be seeking new partners to ensure that its federal agency customers will continue to benefit from a wide spectrum of data service providers and the latest capabilities in artificial intelligence, machine learning, and robotics. Mr. Bender discussed the alignment of the NTIS innovation framework with the current efforts across the Federal government to implement Evidence Based Policymaking and for implementing the Federal Data Strategy.

Operations of the Service and Lines of Business Overview

Mr. Capella provided the board members with information on NTIS organization and the five lines of business that NTIS provides. The lines of business include: Data Science Innovation, Data Accessibility, and Data Subscription services, as well as, the Technical Clearing House and Legacy Business. Mr. Bender previously described the Data Science Innovation Services and Mr. Capella stated that the last of the legacy business, which the NTIS Oversight Board defined as projects that were not-aligned with the NTIS new mission, were expected to end this fiscal year, unless the Federal agencies could not replace NTIS services in time.

Ms. Shaw, Associate Director, Office of Program Development, described her organization, walked through her own background, and had her team do the same. She then described how her team supported the NTIS mission by identifying new opportunities for NTIS support and how her staff works in concert with the Program Management and Data Science organizations to implement projects. She then briefly discussed the opportunities which NTIS anticipates supporting this next fiscal year, listed by whether they were new projects, existing projects with a strong NTIS presence, or existing projects but just beginning the work. Ms. Shaw then discussed three higher profile projects that NTIS has been engaged in which particularly are significant in their scope and impact on NTIS customers. Ms. Shaw closed by describing the NTIS Data Innovation Day, where NTIS provided a forum for federal organizations to share lessons learned and best practices in data science.

During Ms. Shaw's discussion Ms. Zavala stated that she was impressed with the opportunities that NTIS was actively tracking and asked about whether there were metrics on the ongoing and forecasted opportunities. Ms. Shaw stated that there were metrics captured on these, although manually captured not with a CRM tool. Ms. Zavala asked whether there were chokepoints or other issues that were observed. Ms. Shaw stated that coming to a completed agreement was difficult and time consuming. Mr. Capella stated that the novelty of the Joint Venture Partner agreement process, being outside the Federal Acquisition Regulations, caused many first-time agreements with a given customer to face a significant learning curve with the customer finance, legal and procurement organizations. This learning curve seemed to impact most first-time efforts with an organization. Mr. Burciaga asked whether there was any thought given to creating repeatable processes, frameworks, or products, building reusable NTIS intellectual

property, so that NTIS could achieve better margins. Ms. Shaw, Mr. Bender and Mr. Capella shared that was desirable and NTIS would further review options for that.

Mr. Strickland, Acting Associate Director, Office of Program Management, described his organization, walked through his own background, and had his two senior managers do the same. Mr. Strickland then described the three main activities for his organization, managing the Technical Clearing House for NTIS and providing Data Subscription services. Managing the Technical Clearing House includes providing Federal and public individuals and organizations access to the National Technical Reports Library (NTRL), which contains over 3 million documents of which approximately 1 million are digitized and online. Mr. Strickland stated that the NTRL does not receive any appropriations to support it and that this is a free service. Next Mr. Strickland described the first of two NTIS Data Subscription services, which is providing public access to the Drug Enforcement Agency (DEA) Controlled Substances Act (CSA) data via a subscription service. NTIS makes available the CSA data as a cost reimbursement, feebased basis in an agreement with DEA. The CSA has over 1.8 million records of controlled substance prescribers and providers in the United States and the data is updated periodically by DEA. Mr. Strickland noted that NTIS does not control the content on either of the Data Subscription services. Mr. Strickland closed by describing the second NTIS Data Subscription service which provides access to the Social Security Administration (SSA) Limited Access Death Master File (LADMF) data via a tightly controlled, subscription service. The LADMF was created to help prevent identity theft and fraud and contains over 91 million records from 1936 to present.

Dr. Gaddam asked whether opportunities to partner with industry to digitize the NTRL further in a "share the gain" model were pursued. Mr. Capella shared that NTIS engaged with 5-6 organizations on this but that all but one requested funding to implement this. The one organization that did not request funding, was no longer interested in the project. When commercial enterprises seem to be not a workable solution to digitize the NTRL documents, Mr. Strickland described how NTIS innovated in a different manner to help address the digitization needs. NTIS engaged local high schools in a work-skills program to digitize documents. The effort with the high schools is expanding and NTIS hopes this will start impacting the amount of un-digitized paper and fiche-based documents the NTRL carries. Ms. Zavala shared that NOAA has some digitization efforts and was interested if NTIS had engaged with NOAA on this. Mr. Bender and Mr. Capella stated that there have been multiple discussion with NOAA on various levels but have not talked with NOAA about digitization. NTIS took action to try to understand if there were opportunities for partnership with NOAA on digitization.

Dr. Kaplan, Associate Director, Office of Data Services, described her organization, walked through her own background, and had her team do the same. Dr. Kaplan then describes how her team supports NTIS projects including how they support the definition of the customer problem to be addressed, the participation in the selection process, and post-partner selection work. Dr. Kaplan described how her team's technical expertise supports the innovations and design thinking aspects in NTIS projects, and how this helps differentiate NTIS projects from contract-based ones.

Ms. McCall, the Acting Chief Information Officer, described her organization next, and gave a brief overview of her senior staff. Ms. McCall then described how as NTIS was shifting from its prior mission, which included hosting applications for other Federal agencies as an example. She then reviewed how NTIS expects to migrate much of its infrastructure to the Cloud to help reduce costs and increase availability. She then briefly highlighted how the CIO organization will evolve with the changes in the infrastructure and the new mission.

Ms. Patterson, the Deputy Chief Financial Officer, described her organization next, and gave a brief overview of her senior staff. Ms. Patterson shared that Mr. Jenkins is the NIST and NTIS Chief Financial Officer but had schedule conflicts and could not attend today. She then gave an overview of her team and their functions. Next Ms. Patterson provided NTIS financial status as of the third quarter fiscal year close, which showed a \$1.7 million loss on operations, excluding a financial adjustment for investment in in-house software. Next Ms. Patterson shared the forecasted end-of-year projection for operations, which projects a \$2.2 million loss on operations, excluding a financial adjustment for investment in in-house software.

Advisory Board Discussions with NTIS

After a short break, the Advisory board came back into session to discuss what had been heard and provide additional feedback.

Ms. Zavala asked whether the Federal Data Strategy would assist NTIS in obtaining mind-share and projects by focusing attention of Federal data needs. She also asked whether NTIS was aware of and involved with this Federal effort. Mr. Bender stated he was directly involved at the Department level in the Federal Data Strategy and that he sees this as promising for NTIS and the Federal government. But he noted that without funding for data projects and for Chief Data Officers, that this is not having as much affect as hoped on NTIS opportunities.

Mr. Burciaga stated that an area that would likely help NTIS would be to define the data sets that would be useful across data science projects and to make these reusable. With the data sets defined, NTIS could significantly increase its rate of impact on customers and margins on projects. He stated that he had used this successfully to engage with new customers and suggested that NTIS should review its applicability for NTIS Federal customers. Mr. Burciaga also discussed whether NTIS could provide value by assessing the data science readiness of the customer and whether this could be a means of increasing opportunities.

Mr. Burciaga then discussed whether NTIS captured performance metrics on its projects such as closing rates. Ms. Shaw stated that NTIS did and that it was captured manually not with a CRM tool.

Ms. Zavala asked Mr. Capella on the differences between Joint Venture (JV) authority and Other Transaction Authority (OTA). Mr. Capella stated that although NTIS has both, it only uses the JV authority. He stated that both are intended to quickly and efficiently obtain services or products, and there seemed to be advantages and disadvantages to both. He stated that the OTA authority at first, maybe 2-3 years ago, seemed to be fairly light on paperwork and quick to execute, but seemed to be focused on mostly smaller projects. The program offices he had heard

discuss OTA projects stated that they had significantly less paperwork than a typical FAR based contract. But it also seemed that the projects were of limited scope with defined activities. More recently larger projects were undertaken under the OTA, and it seems that the level of paperwork seems to have grown especially with the recent protests on OTA based projects. On the positive side OTAs can leverage FAR based contract clauses and language that has been refined over decades. And this accelerates those projects needing those clauses and provides comfort to the FAR aware managers. JV authority being independent of the FAR, cannot leverage these FAR based clauses. On the positive side with the JV authority and unlike the OTA based projects, NTIS creates all the initial paperwork and oversees the project. This takes a very significant administrative burden off of the customer. Plus the high-level scope of the JV project is well defined, but the execution is very flexible within the bounds of the scope and implemented as an Agile project with the customer as its lead. Further JV authority-based projects are implemented using a Federal to Federal action, with NTIS having the relationship with the partners. So the customer can request a change in partners if there ever are issues with the current partners or request unspent funding be deobligate within a short timeframe once all the services which were rendered up until that date were paid. And if there was a need to terminate a project, there are not any liquidated damages under a JV authority-based agreement.

Mr. Bender shared that he was considering whether other authorities provided to NTIS in Title 15 U.S.C. might be leveraged to achieve NTIS mission. Mr. Bender continued that NTIS was looking at adding new partners under the JV. Mr. Burciaga felt that adding partners would be beneficial and that it should be pursued. He also suggested that if NTIS could help educate customers on the JV process that it would likely increase opportunities.

Ms. Zavala asked whether there might be opportunities to create products for groups of Federal customers, maybe leveraging the partners skills. Mr. Burciaga noted that this could be a way of creating NTIS Intellectual Property with the partners.

Ms. Walsh stated that NTIS needed to be cautious as they implemented projects and products such that it avoided vendor lock in. Mr. Bender stated that NTIS focuses on reducing chances of vendor lock in and that NTIS discusses these issues, and things like open source/proprietary products with customers.

Ms. Zavala asked whether OMB and the new Chief Data Officers required for organizations under the new Federal Data Strategy might provide inroads to Federal organizations. Mr. Bender described how NTIS is engaged with OMB and that it seems promising in the longer run.

Mr. Burciaga asked what NTIS was doing to sustain engagements with agencies since this is the traditional method service organizations tend to grow. He discussed potentially helping organizations with overseeing projects or deploying staff with projects. Dr. Kaplan stated that her and Ms. Shaw's teams are very small and that this would be very tough to do until NTIS could staff up. Ms. Walsh asked about the constraints on hiring more staff. Mr. Capella stated it was not authorization of positions that held NTIS back from adding staff, NTIS currently was authorized more positions than it was staffing, it was the inability to pay for additional staff at this time that was holding NTIS from increasing its staffing. Mr. Burciaga stated that NTIS should consider, when it had more funding, how to grow its professional services part of the

organization. Mr. Bender stated that NTIS was downsizing staff currently, mostly from the roles not aligned to the new mission, but over time expected to add staff as funding permits. He continued to describe how NTIS encourages customers to undertake a Concept of Operations to help socialize and define a project at the onset. Mr. Burciaga agreed that that seemed to be a good idea.

The advisory board went to lunch and then took a tour of the NTIS organization and facilities supporting the Data Accessibility services being provided to the Social Security Administration.

Member Wrap up Discussion and Public Comment:

Dr. Gaddam mentioned that cyber security was a focus area for Government and industry and that it would likely be an area ripe for NTIS data science and other services. He went on to describe how a cyber maturity model might help customers understand where they were in terms of readiness to address threats and would enable a deeper discussion of what NTIS could do to help.

Ms. Zavala asked what was in the NTRL. Mr. Strickland responded that there were documents with some images, of mostly US content. Mr. Burciaga stated that the depth of the content, 3 million plus documents, represented significant value and that content was king. He suggested NTIS continue to pursue out-of-the-box ideas on how to leverage the content.

Mr. Burciaga shared some of the methodology he uses to increase his business value. He suggested NTIS look at how to categorize opportunities to maximize impact and value going forward.

Mr. Capella stated that he would be coordinating the minutes of the meeting internally, and then with Dr. Gaddam. He would then post the minutes on the FACA site provided by GSA.

Board Governance/Administration and Adjournment:

No date was set for the next meeting although it was generally discussed that the next meeting would be conducted early in 2020.

Dr. Gaddam thanked the panel for their support and Mr. Capella closed the meeting.