National Technical Information Service (NTIS) Advisory Board Meeting Minutes May 24, 2021 Virtual meeting

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 participants included Mr. Greg Capella, Acting Director; Ms. Elizabeth Shaw, Associate Director; Mr. Wayne Strickland, Acting Associate Director; Dr. Chakib Chraibi, Acting Associate Director; Ms. Allison McCall, Chief Information Officer; and Ms. Andrea Patterson, Deputy Financial Officer.

Welcome/Opening Remarks

Mr. Capella, Acting Director welcomed everyone to the meeting. After waiting a few minutes for others to join, he shared there were members of the public in attendance. Mr. Capella then briefly reviewed the agenda, sharing that it was much like previous agendas with an anticipated ending at approximately 4 PM to 4:15 PM:

NTIS ADVISORY BOARD (Virtual)

National Technical Information Service

Register Through the WebEx Link:

https://ntis.webex.com/webappng/sites/ntis/meeting/info/c379402eff784c81950d87bbb9ce17db?isPopupRegisterView=true

May 24, 2021

AGENDA

I. NTIS Mission and Operational Update	
1:00 PM	 Call to Order and Introductions of Board Members Elizabeth Shaw, Designated Federal Officer Greg Capella, Acting Director/Deputy Director Dr. Ajit Gaddam, Advisory Board Chair
1:30 PM	 NTIS Update Greg Capella, Acting Director/Deputy Director
1:50 PM	Legal Update Rebecca Hermanowicz, Senior Attorney
2:00PM	 Operations of the Service and Lines of Business Overview Greg Capella, Acting Director/Deputy Director Elizabeth Shaw, Associate Director, Office of Program Development (OPD) Wayne Strickland, Acting Associate Director, Office of Program Management (OPM) Dr. Chakib Chraibi, Acting Associate Director, Office of Data Services (ODS)

	 Allison McCall, Chief Information Officer (OCIO) Andrea Patterson, Deputy Chief Financial Officer (OCFO)
2:50 PM	10-minute break
II. Discussion with Board Members	
3:00 PM 4:00 PM	 Advisory Board Discussion with NTIS Progress on implementing the new data mission Guidance on the operation of the Service
III. Summary and Close	
4:00 PM	Review Feedback and Action Items
4:15 PM	Members wrap up discussion and public comment*
IV. Meeting Adjourns 4:30 PM	

Director's Overview

Mr. Capella shared that overall NTIS is doing well, especially given the circumstances of this year. To date, we are reporting a net loss of just over \$600k. It was reported that this is not as accurate as it could be, in part, due to the transition into a new financial system with some of the revenue not being accrued in the same manner. Mr. Capella acknowledged that we anticipate ending the year on a positive note of \$100-200k.

Mr. Capella shared the NTIS COVID-19 response has been very successful. Even with the move to maximum telework, NTIS had reported 5 instances of staff /contractors becoming ill with COVID. Changes, such as rotating staff were made to accommodate the reduction in staffing. Due to the tremendous efforts of the CIO and OPM teams, NTIS was able to adjust with very limited impact on the assistive technology operations. Moving forward, the Department of Commerce (DOC) is considering "return to work" options. Mr. Capella shared, the Department's Management Council has spent 3 meetings talking about the implications of "return to work" policies to include pros and cons. Currently, directors from each bureau are empowered to choose the appropriate COVID response options based on their work environment, organization, and locale while waiting for the administration to provide further guidance.

NTIS has gone through several organizational staffing changes since the last meeting. Mr. Capella disclosed the National Institute of Standards and Technology (NIST), is in the process of advertising for a new Director. Of the recent hires, a Program Manager and Customer Engagement Manager left to pursue careers at DoD. A Data Scientist accepted a position at DoD assisting with artificial intelligence (AI) efforts.

NTIS continues to capitalize on the strength of repeat business. Mr. Cappella disclosed that there has been growth in a couple of accounts, and recurring actions in other accounts. In one instance, he shared NTIS projects with the Health and Human Services (HHS) were completing and the HHS appeared not to need NTIS assistance, but they came back with a sizable opportunity for continued work. Generally, net-new opportunities are difficult to acquire. Consequently, the pandemic has made new work efforts even more complex. NTIS has had more face time with accounts without immediate closures for new work. The net new business was described as in a state of flux with pandemic, election transition year and budgets. We anticipate closing more new opportunities now with these issues mostly addressed or being addressed. New

opportunities may have a lower impact than existing work efforts to the bottom line due to the initial upfront expenses to bring in the work.

Finally, we added classified work to the NTIS portfolio with the Joint Artificial Intelligence Center (JAIC) project. As part of this classified work effort, the NTIS team continues to communicate our expansion into this new area with existing and new accounts. We expect this work to expand with several of the staff obtaining clearances.

The U.S. Department of Agriculture (USDA) project was the last project from NTIS' previous mission space. It has now completely transitioned functionally over to USDA. NTIS is in the process of overwriting the data in a government-approved way to close out all NTIS support for the project. All other actions associated with this project are completed to include the closing out the financials. This project has migrated to a new platform.

NTIS is no longer hosting the Drug Enforcement Administration's (DEA) Controlled Substances Act database. Mr. Capella reported that the DEA migration has been completed. NTIS will no longer support this product offering. The impact of the loss was not overwhelming although it did impact NTIS' retained revenues.

Beginning this fiscal year, NTIS implemented a new financial system, leveraging the Commerce Business System (CBS) for most of the financial activities. CBS meets most NTIS' needs. However, there have been difficulties with making it work for a reimbursable bureau such as NTIS and the CBS team and NTIS are working through these issues now.

Mr. Capella then discussed NTIS continuing to bring in new Joint Venture Partners (JVP), as well as encouraging the existing partners to re-apply. The number of partners continue to grow with the last count of 44 partners.

Mr. Capella provided the status update of the NTIS technology infrastructure migration, to include the back-up site in Denver, Colorado which is mostly migrated. One of the exceptions is a relay for the Social Security Administration (SSA) at the Denver location, that will be migrated to the cloud. NTIS is continuing the migration at the Shawnee headquarters location. The National Technical Reports Library (NTRL) recently moved to the cloud. Mr. Burciaga's previous suggestion of looking at 2nd provider for Cloud providers to mitigate risk is being investigated as part of these efforts. Mr. Capella asked the participants if there were any questions. There were no questions regarding his overview.

Operations of the Service and Lines of Business Overview

Mr. Capella continued with an overview of the NTIS organization stating there have been no changes to the organizational structure. However, the organization still has numerous members of the senior staff still in acting roles. One exception, Allison McCall is now officially in the CIO role. Further, Mr. Capella shared NTIS is about to advertise the GS-15 vacancies for the Associate Director, Data Services and Associate Director, Program Management The legal staff was reduced by one with no intention to backfill at this time given NTIS' reduced workload due to its multi-year downsizing efforts. The total federal employees currently stands at 39 people.

The Federal Employee Viewpoint Survey (FEVS) results had favorable outcomes with improvement in the scores in several areas. Leadership and direct supervisor showed a

significant improvement. He cited the areas for improvement include workload and opportunity to advance. In 2016/17, NTIS was the 2nd lowest for small federal agencies. According to the latest FEVs, NTIS is in the top two bureaus within the Department. Mr. Capella shared positive progression in scores were due to the quality and professionalism of the staff.

Mr. Capella shared NTIS has four lines of business (LOB), down from five, reinforcing that legacy work, the fifth line, and DEA data subscription service work has ceased. He provided a brief overview of the other project work stating the Data Science LOB has been growing and there is a growth opportunity with the Veterans Administration within assistive technologies.

Next Ms. Shaw, Associate Director, Office of Program Development (OPD), described the organization structure which has remained unchanged since the last meeting. She shared there was a recent vacancy in OPD, resulting from the departure of the DoD customer engagement manager. The plan is to fill this vacancy. Ms. Shaw introduced the rest of the team and provided an overview of their respective portfolios.

Ms. Shaw described the 3-person structure consisting of OPD, OPM and ODS members along with the collaborative approach of providing solutions to federal agencies. She reported the OPD team's focus continues to be on:

- maintaining current relationships,
- researching agencies' current efforts and,
- review of current work.

Ms. Shaw also shared that the OPD team continues to focus on the efforts of the new Administration's four areas of equality, economy, climate and COVID-19 with additional emphasis on classified and assistive technology. Ms. Shaw noted certain events such as the ransom of the pipeline could also generate concentration to new areas. In support of these efforts, several pieces of collateral support are being produced specifically for classified, assistive technology as well as a new USAID case study. An internal research process is being refined with the development of a new research checklist that has been shared internally.

For FY21, the OPD team's focus continued in 5 areas: "Grow/Farm", "Capture/Hunt", "Transformational Architect", "DTA/Assistive technology" and "Maintain" within existing clients. Agency assignments and focused efforts of the OPD team were shared. Ms. Shaw reiterated her concerns over the outreach in a virtual world, specifically the length of the sales cycle. It was noted that one project took almost 2 years to begin work. From October to April, the OPD team reached out to almost 200 agencies. From this outreach, the NTIS team was able to average 1.3 meetings per week with federal agency contacts.

The Joint Venture Partners (JVP) communication efforts were shared with acknowledgment of the accomplishments of Mr. Randy Caldwell and Ms. Patricia Gresham. The ongoing meetings/ discussions with the JVPs is providing great insights into their capabilities and the needs of the federal agencies. Follow-up with the JVPs will include specific meetings to discuss the outreach efforts. These meetings are in the process of being scheduled.

Ms. Shaw shared the OPD team's initial efforts on awards programs. An internal calendar of events and awards is in the process of being finalized. This will provide insight into speaker placement as well as recognition for the solutions provided by the NTIS team. Ms. Shaw shared

members of the NTIS team have been involved in speaking engagements to include the Data Scientists, CIO and Deputy Director. To date, several award proposals have been submitted. The NTIS team continues participation with working groups such as AFCEA, ATARC and ACT -IAC. The OPD team attended over 30 virtual events from Oct to April. These virtual events help the team gain insights into the marketplace.

Ms. Shaw closed by sharing specific tactics for "growing" current accounts. In the next few weeks, an internal training program will be shared on how to approach existing accounts through collaboration with the OPD, ODS and OPD team members. The importance of working with current portfolios on expanded solutions was a critical step in making significant impacts within the Federal Government. There were no questions regarding her overview.

Mr. Strickland, Acting Associate Director, Office of Program Management (OPM), described the OPM organization chart, outlining the roles and responsibilities for the staff contributions to the data services lines of business with a focus on project lifecycle management and client delivery. He introduced Mr. Tim Stanback, Supervisory Program Manager, as the lead for the Data Transformation and Access (DTA) activities. Mr. Strickland shared the values and benefits of the DTA team's focus on ensuring data accessibility for client federal agencies even during the impact of COVID. In collaboration with the OCIO team, NTIS was able to transition the majority of the DTA work into a telework framework. For those working onsite, additional steps were taken to ensure the safety of the DTA team. Mitigation of employee risk when someone may have been exposed to COVID, consisted of quarantining and replacing the onsite work team. For all incidents, the entire building was sanitized. All COVID actions were reported to DOC. He shared that this effort protected of all NTIS staff that periodically visited the building.

Mr. Strickland highlighted the changing roles within the OPM team and the on-boarding of the newer IT Project Manager positions. Since the beginning of the FY, 3 new IT Project Managers were onboarded with one leaving to accept a promotion at to another agency. The vacancy has been posted for refilling. While the primary structure of OPM comprises Program /Project Manager, Program Analyst and Program Assistants, efforts now has been focused on training for project lifecycle management.

Within the DTA, there are multiple project activities to include Social Security Administration (SSA), Department of Education (DoED) and the Veteran Administration (VA). The latter project is currently being deployed. Many of the details of the VA project are still in development. The assistive technology/data transformation Line of Business has the potential to grow and further support the special needs for accessibility to federal information.

Mr. Strickland then discussed the efforts on the Program Control operation introducing Mr. Daniel Ramsey as the Supervisory Program Manager for this unit. Mr. Ramsey is responsible for overseeing the project life cycle management activities to include IT, accounting, legal, and client relationships support. Mr. Strickland shared, in his experience, there has been a substantial learning curve of the complexities for legal processes/reviews as NTIS shifted from Memorandums of Understanding (MOU) to Inter-Agency Agreements (IAA) 7600 A&B resulting in improved timelines for launching projects.

Under Program Control operation, the statutory requirement of the Limited Access Death Master File (LADMF) is being managed. The focus has been on the making the current oversight of the certified access program more efficient with a much smaller team. Mr. Strickland shared

information on the other congressionally mandated NTIS responsibility, the National Technical Reports Library (NTRL). With the congressional update to the mandate shifted the NTRL (in 2016) from a subscription fee-based product to an open access for the public, staffing was reduced from 25-30 people to a much smaller team and this service is exploring modernization technologies. He recognized OPM team members transitioned from data entry cataloging and indexing support to now participating in the full scope of data projects. This was described as another successful transition in the telework environment.

Mr. Strickland shared the Program Control operations also has responsibility for additional activities such as Freedom of Information Act (FOIA), Risk Management, Records Management, and Public Affairs guidance. In particular, risk management analysis is being incorporated into project lifecycle management activities. Additionally, three interns from the Wounded Warriors Project have been supporting specific task for project lifecycle activities.

As shared at the last Federal Advisory Committee Act (FACA) meeting, Mr. Strickland updated then highlighted data projects to demonstrate the extended benefits delivered both to the Nation and the World by such projects as USAID Presidential Malaria Initiative (PMI) and DTA projects with the Department of Education, Social Security Administration, and U.S. Department of Veteran Affairs. The OPM teamwork has encouraged the client federal agencies to engage NTIS for additional project support for multiple work orders. For example, the USAID PMI project as an example of such success with its sixth order of continuance over four years that benefits 28 countries. Further, Mr. Strickland explained that there is a renewed effort to gather project metrics with the cooperation of client agencies. He provided further project updates for the accessibility projects with SSA, DOEd and the VA. Additionally, the OPM team highlighted the growth within the LADMF. Since the last meeting the LADMF has increased content access from 90 million records to over 101 million records. Currently, the LADMF service focus is on customer interface and simplifying the interactions while adjusting pricing in compliance federal cost recovery guidance.

Mr. Burciaga asked about the restriction of how the LADMF data can be used. He asked that in addition to using the LADMF information for fraud, waste and abuse use, what other demographic information may be useful?

In response, Mr. Strickland provided the following to Mr. Burciaga's questions:

1. Why was it downselected to waste, fraud and abuse?

A clarification was provided as to the use of the LADMF data. Mr. Strickland appreciated the chance to clarify the earlier statements and shared that we do not control how the users apply the information. Once the user is certified to have access to the data, they can determine usage.

2. *Have we explored some other elements of the files and potential applications?* Mr. Capella shared the law defines who has access. NTIS does not have access to the data with no legitimate need for the files. NTIS only redistribute the information and certify access to the appropriate parties. For this offering, there are approximately 250 subscribers; however, they may have third parties utilizing the data. The LADMF data is provided by the states, as such, some states opt not to provide the information for sharing in the LADMF. In these instances, parties will go directly to the states making the LADMF not as attractive as it was previously.

3. Does it have a point of diminishing returns?

The data provided by SSA has a limited scope that we can redistribute based on laws Congress set up. We are required to cover our costs and are not authorized to work directly with the states.

Dr. Gaddam asked if there is any impact due to the Health Insurance Portability and Accountability Act (HIPAA) rules on the LADMF files. Mr. Strickland shared that NTIS came up with the processes based on requirements of the laws. Certified access to LADMF was set up in response to a 2013 CBS reporting on "60 Minutes" story about misuse of the data.

The National Technical Reports Library (NTRL) general overview and history was provided. By law, the collection must be made publicly available. There are approximately 3 million technical reports in the collection. Of those, an estimated half of the records are in digital format. The challenge is digitizing the remaining records in the collection, particularly since NTIS does not get an appropriation for such work. He further described the open access to full-text documents of the collection is for the digital collection; however, the bibliographic information is available for all 3 million records in the database. Mr. Strickland shared that microfiche, microfilm and magnetic tapes have been shared and evaluated by NARA in compliance with their record retention guidelines. NTIS onsite digitization has been suspended during COVID. This is due to the digitization equipment is physically on the premises.

In response to Mr. Burciaga's question from the last FACA meeting, Mr. Strickland shared the OPM team has been drafting the NTRL's future evolution for the next 3-5 years. As part of this effort, the OPM team started with a review of the current processes. This effort has been focused on streamlining, automating, and implementing options. This includes outreach to specific agencies to consider electronic format. Social media has been integrated for visibility and awareness of the reports and scientists. Engagement with the organizations is an integral part of the plan to include Federal Libraries, American Library Association, National Information Standards Organization, Commerce, Energy, NASA, Defense Information (CENDI) and Federal Laboratory Consortium. Working with NTIS/OCIO will be key to this automation effort. The OCIO recently moved the NTRL to the cloud platform. Prior to COVID there were approximately 10,000 new documents added to the NTRL annually. The number has been significantly reduced during staff realignment and COVID.

Ms. Zavala asked if there were parallels between NTRL and reporting from Federal Statistical Research Centers. Mr. Strickland shared there is not a parallel from a science information access perspective but perhaps from technology focus. Ms. Zavala asked if there would be a way to enrich technology information with statistical data. It was shared since the NTRL does not receive appropriations so it is not a direction we can immediately support.

Mr. Capella announced a 10 min break.

Due to a conflict, Rebecca Hermanowicz, Senior Attorney was not able to provide the briefing. In her stead, Hisham El Mawan, Attorney from the Ethics office provided the update. He provided the annual briefing for the advisory board, reminding that the members are considered Special Government Employees. As such, FACA members must file the annual financial disclosure report, Office of Government Ethics (OGE) Form 450. He reintroduced some of the ethics rules that impact board members to include gift, employment, board participation, stock investment, outside activities, government communication and political activity rules. He further stressed specific guidance can be provided by the ethics office if there are any questions regarding ethics rules. Pending no questions, the meeting moved to the Office of Data Services presentation.

Dr. Chraibi, Acting Associate Director, Data Service (ODS) described how the data services office supports the mission of NTIS by assisting federal agencies in their quest to leverage data as a strategic asset and harness innovative technologies to achieve their mission outcome. He focused on the critical DS role that is central to the NTIS mission. They act as technical advisors and data scientists. The DS team works with a range of agencies with the objective of leveraging data and data science to support Federal agencies' mission more effectively and efficiency. While presenting the organization structure, he reiterated the earlier message that Dr. Lee accepted a new position at the DoD. Dr. Chraibi shared there are plans to fill the vacant position as soon as possible.

A brief overview of the projects was given to include the DoD's JAIC, USAID, HHS, FDA and NIST Forensic Science Interactive Process Map (FSIPM). Dr. Chraibi provided more details on the HHS, Office of Inspector General (OIG) project highlighting they are a repeat client implementing a new project with a larger scope. As stressed earlier, that ODS works closely with the OPD and OPM teams providing a collaborative approach to all accounts.

The DS team has been working on expanding skill sets in keeping with the emerging technology and in general, the state-of-the-art solutions. As part of communicating our valuable position, the DS team has been involved with updating capability statements, developing the project summary reports, and participating in several working groups, work forum and events to deliver value in ML, AI, image and technology.

Another critical role reported by Dr. Chraibi is assisting with the JVPs efforts to include training and evaluating proposals. This work directly impacted our ability to increase the number of JVPs and extending our capabilities. The current number of JVP stands at 44 partners. The work further strengthens the readiness to deliver value and service in a credible fashion. This work directly impacts the process of extending the capabilities.

Dr. Chraibi reinforced the value proposition is operationalized by the innovation framework. This framework is strongly grounded in design thinking, user centric approach and methodology. It is an excellent vehicle to develop strong problem statements. From there, he detailed the process stating that the agency involvement early in the process is key to the success of the projects. The early exchange provides insight into the wants, needs and pain points of the agency. The next point shared is the importance of involving the JVPs upfront in conversation, so they focus on the right problem.

Then Dr. Chraibi gave an overview on the Phase 4 of the DOL project which is focused on the Registered Apprenticeship Programs. These are valuable models for federal government agencies to recruit and develop well-trained Federal workers in highly skilled occupations. The challenge at DOL, like many agencies is there are vast volume of disconnected and siloes of data across multiple systems. The focus of Phase 4 is modernizing, securing and providing better access control by strengthening a modern data platform with data analytics. This platform provides analytics modeling and reporting that allowed the agency to better leverage the data and reporting capabilities and converting it to actional insights and knowledge.

For the HHS OIG project, Dr. Chraibi shared the goal of striving to leverage data and advanced data analytics to produce actionable data insights in order to keep pace with the fast-changing nature of fraud, waste, and abuse. The team continues to mature the data analytics helping HHS be in the forefront of the effort to fight fraud. To date, we had the largest number of JVP proposals for this work. Even though the HHS OIG has had multiple projects, Mr. Capella pointed out that this was new work under new leadership. NTIS continues to build solutions based on the effective use of the JVP authorities. He stated the NTIS solutions continue to build a strong reputation and creating a firm repeat business model.

Dr. Chraibi concluded with an overview of the NIST project, the Forensic Science Interactive Process Maps (FSIPM). The solution developed for this project will link to layered information content, including terminology, relevant databases, standards, training, research, and technology aids. Discipline specific process maps that provide a visual description of the various ways that forensic examinations are performed. The creation of the innovative process maps will enhance the user experience and will include links to richer content that will improve the utility of the process map. The kick-off is expected in the next two weeks.

There were no questions so proceeded with the CIO presentation. Mr. Capella introduced Ms. McCall sharing that she was officially placed into the NTIS CIO role.

Ms. McCall, Chief Information Officer, described her organization sharing that her team was significantly impacted by the earlier cost cutting efforts to include the loss of 10 federal employees due to the reduction in force (RIF). She was pleased to disclose that all the federal employees from the last update are still present. Ms. McCall stated this FY there have been many demands on the CIO team regarding security and reporting. She reinforced earlier updates that it would have been even more difficult if she had not had one of the best CIO staffs in the federal government.

Ms. McCall updated the board on the efforts surrounding the cloud migration. She was pleased to share the team just completed the migration of the NTRL into the cloud. She noted all of the cloud migrations have been a difficult undertaking due to a myriad of challenges to include the loss of staff, loss of system knowledge, and ongoing security challenges in the cloud and on premise. Another current effort is the migration for the virtual desktop infrastructure (VDIs).

For all technology efforts, the CIO team is investigating best in class tools to include other platforms. Simultaneously, Ms. McCall shared NTIS is working to operationalize security tools as well as the completion of the necessary security packages each time. These packets are required each time a migration occurs. Thus far, all security packages are completed.

She discussed the benefits of cloud migration that were shared previously. While the state of flux is challenging, it will address issues with the older infrastructure. Along with strengthening the ability to scale and replicate. The migration will also provide the flexibility needed to effectively deploy and maintain solutions provided to other agencies.

Ms. McCall shared there are challenges with the DTA work. This is due, in part, to the loss of staff and the lack of continuous investment in the infrastructure coupled with the growth in customer data and volumes. The NTIS team will continue to innovate addressing the manual intervention in the process. She described the work as a holistic approach to the DTA projects

addressing improvements to automate more and reduce human intervention. She stressed the DTA team does an excellent job. These efforts are not trying to replace human with machines but looking to be more efficient. Automation will improve error rates so there are fewer rejects.

Dr. Gaddam asked additional questions regarding the impact and security efforts needed because of the recent security initiatives and issues such as the pipeline ransom. Further, he asked of the engagement process internally and multi-factor authentication and the relationship of the Administration's Executive Order (EO).

Ms. McCall shared NTIS is part of the DOC's CIO and CISO councils. These councils provide the ability to work on issues and incidents along with input from other agencies such as the Department of Homeland Security (DHS). Some of the focus of the council include better supply chain and asset authentication.

Dr. Gaddam asked a broader question regarding the new EO on cyber security. This was characterized as one of the most ground-breaking, expansive EOs to come out. There appears to be a concentrated effort on data exchange, zero trust and threat intelligence representing possible opportunities for NTIS to assist the federal government.

Mr. Capella shared this focus is more on the project side rather than CIO side. He stated that NTIS is looking at this as a growth area within the government. Cyber projects have been identified as a growth area; however, the charter is focused on data science. There is opportunity if the cyber work vectors from the data science work.

Dr. Gaddam asked if the intersection between NTIS' mission on data science analytics and fraud analytics is the "sweet spot." In response, Mr. Capella shared we are getting real traction mostly, from word of mouth in the area of fraud analytics efforts. Additional opportunities to create awareness come from speaking engagements and outreach. Ms. McCall has spoken at three different events on zero trust architecture. Ms. Shaw shared when incidents occur, the OPD team reaches out to federal agencies to see how NTIS may assist in collaborative efforts. In the fraud area, NTIS continues to reach out to OIGs.

Mr. Capella asked for assistance with getting the "marquee customer." Dr. Gaddam shared he and the board will assist in with ideas in this area. Dr. Chraibi clarified he believes our "sweet spot" is to help agencies be more proactive than reactive. NTIS should focus on how to use AI and data science to help prevent cyber issues and threats.

Dr. Gaddam highlighted some aspects of the EO, sharing that it is based on three controls: 1. Zero trust 2. Multi factor authentication 3. De-value the data so hackers do not get access. Another aspect of data work is a focus on privacy preserving or surge against data that is encrypted. Currently there are initial efforts in this area but may offer an opportunity for NTIS. It is significant work initial efforts to how can you facilitate without compromising on privacy aspect. Dr. Chakib shared another area may be in synthetic data to preserve privacy. Pending no further questions, Mr. Capella introduced Ms. Patterson.

Ms. Patterson, the Deputy Chief Financial Officer, shared her organization's structure had not changed from the previous meeting sharing the NTIS CFO is a great team. While there were no changes from a staffing perspective this FY has brought many new challenges.

In October, the OCFO team implemented the Commerce Business System (CBS) expressing there was a learning curve with deploying a new system. In addition, the team had to learning a new overhead allocation process. Complicating the matters further, she shared these efforts were completed totally in a remote environment. In 2023, as part of the DOC system modernization, NTIS will have another transition for the entire financial system. The CBS move was needed to transition into the new Commerce's solution.

It was shared that most of the OCFO team works remotely with the exception of members of the accounts receivable team who, on a rotating basis, go onsite to process checks. Ms. Patterson noted the importance of the safety of the team stating that all the COVID protocols are followed.

Another large undertaking involved the DEA project. In addition to the transition efforts, Ms. Patterson provided an update on the cancellation of the DEA project. This involved roughly 770 customers and about \$1M in refunds. These efforts are almost completed.

Next, Ms. Patterson provided the NTIS financial status by the line of business. Based on the forecast, it is predicted NTIS will end the year with a positive net. She provided the breakdown by business lines:

- Revenue from the Data and Innovation services are approximately \$15 M; however, the same period last year it was around \$12M up about \$2.5M.
- Revenue from the Data Accessibility services is \$14M, which last year it was \$17.7 M. The decline was due to the SSA work with a reduction in the surge periods work when compared to last year.
- Data subscription services is at \$1.4M compared to last year's revenue reported at \$2.9M This is due to the DEA project cancellation.
- There is no longer any legacy project but there are still underlying costs with a showing a slight loss.
- The NTRL has no revenue but costs associated with maintaining the collection at \$761K.

Mr. Capella noted this is the first time the data service revenue exceeded any of the other lines of business. Ms. Patterson stated we are operating at a slight loss. NTIS has been closing the gap and historically NTIS tends to sign more agreements at the end of the year.

Dr. Gaddam inquired about the reduction of cost with the NTRL. Ms. Patterson stated savings were due to labor and the migration to the cloud. Mr. Capella weighed in that the system efficiency to include streamline of process played a role in the savings. It is anticipated that we will end the year with a positive net of \$100K.

Mr. Burciaga asked moving forward if we could include a column of Same Period Last year (SPLY).

There were no additional questions, so Mr. Capella moved into the advisory Board discussion portion of the agenda.

Advisory Board Discussions/Recommendations for NTIS

The Advisory Board discussed what had been shared and provided additional feedback specifically focused on how to move forward, what NTIS can do to improve, and capabilities to target.

Dr. Gaddam shared congratulations to Ms. McCall for her move from the acting to permanent status. He felt that it was important to support employees with career progressions. Further, he congratulated NTIS for the successful adaptation of the changes with a particular focus on COVID.

Dr. Gaddam noted the NTIS staff was down to 39 employees disclosing concerns with staffing and human resources. In the Data Service and legal areas, Dr. Gaddam expressed concerns on balancing demand with the potential increase effort in data science. He was concerned with the steps needed to scale human subject matter expert (SME) on demand.

Mr. Capella stated the reduction with the legal team can be scaled because NTIS is paying for Full Time Equivalent of one staff member not just a single individual and the agreement with NIST has been a very cooperative. Within their available staffing, NIST has flexible day-to-day to meet demand as needs arise.

Regarding the vacancies with the data services team, Mr. Capella shared we are planning to fill ODS and OPM leadership positions as well as the OPD customer engagement manager.

Dr. Gaddam asked for additional information about the intern process. Mr. Capella gave a brief overview of the Operation War Fighter (OWF) program. He shared we are investigating other intern programs to supplement the workforce with the help of NIST and the Department.

Additionally, Dr. Gaddam asked about the metrics to backfill a position. Mr. Capella stated the current process to approve a hire, if the position is in the budget, resides with him and the CFO. The ability to process the hire is provided through NIST HR who also has competing demands. He estimated that it takes approximately 3 months to fill the position. Both Mr. Strickland and Ms. Shaw echoed the hiring timeline. Ms. Shaw stated after the hire, it can take up to six months for the new team member to be fully engaged. Mr. Strickland shared recent hires met the 60 day window after the initial paperwork was completed. Mr. Capella mentioned the risk with a slow hiring process, sharing that candidates may find other opportunities. Dr. Gaddam asked if the Board could help by amplifying the vacancy announcements within their networks. Mr. Capella appreciated the offer and would share the vacancy announcement from USAJobs with the Board.

Dr. Gaddam asked about the Twitter presence. Mr. Strickland responded this is the focus of one of the interns. Further, NTIS has continued to highlight specific themes, collections, and scientific work in social media. Dr. Gaddam became a Twitter follower and will share content within his community.

Next, Mr. Burciaga echoed his appreciation for all the work performed by NTIS. In particular, he noted the measurement updates. He offered that he also would be happy to re-Tweet. He was thrilled over the traction that data science was getting.

In his experience, Mr. Burciaga stated that he has seen data science eclipse by infrastructure. He shared there are three four areas:

1. Platform as a Service or "insights as a service." He asked how NTIS could shift and plan for platform as a service.

2. NTRL and finding ways to monetize. He suggested scraping of the reports to enhance the current offering providing a quick query labelling this as "Information/ Insights as a Service" as an offering. Also, exploration of JVP with NTRL

3. Leveraging Production OTA as an opportunity. Greg shared we have OTAs in Title 15 and it is a means to execute. Mr. Capella shared we would explore as it may provide value.

Ms. Zavala recognized some of the positive trends since the last meeting, specifically sharing congratulations on the employee survey scores - noting it was a huge turnaround. From an operational perspective, noting the marketplace is focused on Artificial Intelligence (AI) and Machine Learning (ML) capabilities but NTIS could enhance offerings with an AI trust assessment capability and/or ML operations insight. These services could enrich the customer experience by strengthening the bond with existing customers. Mr. Capella shared we would explore further.

The final area was recognition. She mentioned that the presentation highlighted several projects. Ms. Zavala advised that awards should become part of the standard operating procedure (SOP). In addition to awards sharing the work in repository such as ACT-IAC Innovation Inventory would create greater visibility to NTIS as well as the customer.

Finally, she commented on the OPD's work stating she was hard pressed to find additional areas of focus. Ms. Zavala shared the team was doing an excellent job.

Ms. Walsh congratulated NTIS on all the milestones. She reinforced the points made by Ms. Zavala, adding NTIS should anticipate future demand on AI regulations or a future EOs. She emphasized how NTIS could support agencies with transparent and ethical AI frameworks. Dr. Gaddam added NTIS should also include privacy. Mr. Capella agreed that it is exactly on point sharing his background with neural nets and credit scoring. He stressed the importance of ensuring there are no biases and a fair and equitable use of these tools and data.

Review Feedback and Action Items:

- Ms. Zavala proposed meeting with NTIS to discuss approaching the Chief Data Officers (CDO) Council and another meeting with USDA CDO Ted Kaouk. Meeting will be scheduled with updates provided at the next FACA meeting.
 Status: Closed. Ms. Shaw shared this was complete; however, will continue to work on accessing the CDO Council.
- Mr. Burciaga offered to assist with the review collateral materials. Current materials will be provided to the Board.
 Status: Closed. Ms. Shaw shared this was complete; however, will continue to share any new materials.
- 3. Mr. Burciaga asked if NTRL has a future road map for the evolution over the next 3-5 years. Mr. Strickland will share with the Board the 3-year plan once completed. **Status:** In Progress. Mr. Strickland shared the NTRL team started working on the draft and will continue to build on the roadmap. He recognized the offer of Dr. Gaddam and Mr. Burciaga to assist with the social media efforts.
- 4. Mr. Burciaga recognized the efforts of the data science team sharing the difference between the June report and the end of year, noting the growth was approximately 500

percent. The data subscription services showed a sharp decline, and he was interested in the background. Ms. Patterson shared that this is in part due the allocation methodology and will research further. Updates will be provided to the Board.

Status: Closed. Ms. Patterson completed this action and provided the methodology in January.

5. Mr. Burciaga asked if there was any thinking toward an NTIS hack-a-thon. He felt that the large trove of data available coupled with the JVP could the basis for the quarterly or semi-annual hack-a-thon. This may be excellent incubator. This recommendation could allow NTIS to sponsor the "problem du jour" at one of the agencies. NTIS will explore and provide an update at the next FACA meeting.

Status: In Progress. Mr. Capella shared we did not have bandwidth at this time.Dr. Gaddam and Mr. Burciaga shared NTIS should explore focusing on cyber

specialization and cloud. Further consideration to an IT lead for a Center of Excellence (COE) on automation analytics and AI as well as cyber and cloud. He shared IT should consider having a person lead the COE and supporting the ODS team. NTIS will investigate the feasibility of a lead for the COE structure.

Status: In Progress. Dr. Chraibi stated we are investigating further opportunities.

7. Mr. Burciaga recommended focusing on awards and applying for them. Nominations could bring NTIS recognition. NTIS should investigate further and incorporate awards into their processes.

Status: In Progress. Ms. Shaw shared we are working to strengthen the process.

- 8. Ms. Zavala shared she was a judge from a submission standpoint and offered to help with the process. Dr. Gaddam asked about speaking engagements process and identifying potential speakers. Ms. Zavala recommended the ACT-IAC Innovation Inventory could be incorporated into the project methodology where success stories could be published increasing visibility. NTIS will investigate and provide an update. Status: Closed. Dr. Chraibi provided he has shared the Innovation framework and several projects with ACT -IAC and will continue to do so.
- 9. Mr. Burciaga's organization focus included the impact of telework. He asked that NTIS consider how post-COVID changed how NTIS operates. He suggested NTIS looks at provided data for platforms as a JV opportunity Analytics as a Service; Insights as a Service and Platform as a Service. NTIS will investigate and provide an update. Status: In Progress. Mr. Capella shared that these are ongoing discussions with the Department and OPM.
- 10. Mr. Burciaga recommended the OPM team meet to whiteboard actions with the goal of determining measurable results. He reviewed Slides 22 and 23 recommending what happened as an outcome but shared we did not quantify as "man hours", "lives saved" or "dollar and cents." He offered to participate. NTIS will schedule the meeting to include the Board members.

Status: In Progress. Mr. Strickland has been participating in workforce groups and learning some of the tools within the DOC bureaus.

- Mr. Burciaga recommended NTRL as a Service and NTRL as a governance service. NTIS will investigate and provide an update.
 Status: In progress. Will add to item 3
- 12. Dr. Gaddam focused on the post-COVID actions at NTIS. Post-COVID represents a tremendous opportunity for talent acquisition absent the geographical restrictions. He recommended seeking talent to include new college hire to augment the current staff. NTIS will investigate further and provide an update. Status: In Progress

13. Mr. Burciaga shared the largest opportunity should be in the NTRL and data subscription comparing the opportunity to Netflix and iTunes. Mr. Burciaga offered another session to assist with this initiative. NTIS will schedule a session to investigate and explore further.

Status: In Progress.

Action Items and Recommendations for the Next Meeting

New Items:

- 1. Ms. Shaw stated she would be coordinating the minutes of the meeting internally, and then with Dr. Gaddam.
- 2. Mr. Capella asked for assistance with getting the "marquee customer." Dr. Gaddam shared he and the board will assist with ideas in this area.
- 3. Mr. Burciaga ask if moving forward we could include a column of Same Period Last Year (SPLY) in the OCFO presentation.
- 4. Mr. Capella offered to send all vacancy announcement on USA Jobs to the Board.
- 5. Mr. Burciaga suggested we investigate further Platform as a Service or "insights as a service."
- 6. Mr. Burciaga suggested we investigate finding ways to monetize the NTRL using scraping of reports as a value-add naming it as "Information/ Insights as a Service" as an offering.
- 7. Mr. Burciaga suggested exploring the role of the JVP with the NTRL.
- 8. Mr. Burciaga suggested leveraging Production Other Transaction Authority (OTA) as an opportunity.
- 9. Ms. Zavala suggested NTIS explore offerings of AI trust assessment capability and ML operations insight.
- 10. Ms. Zavala suggested developing an award SOP.
- 11. Ms. Walsh asked that NTIS anticipate future demand on AI regulations or a future EOs. She emphasized how NTIS could support agencies with transparent and ethical AI frameworks. NTIS will research further.

Items in Progress Updates for the next meeting:

12. Mr. Burciaga asked if NTRL has a future road map for the evolution over the next 3-5 years. Mr. Strickland will share with the Board the 3-year plan once completed. Combining the previous item 11 to this effort "Mr. Burciaga recommended NTRL as a Service and NTRL as a governance service. NTIS will investigate and provide an update."

Status: In Progress. Mr. Strickland shared the NTRL team started working on the draft and will continue to build on the roadmap. He recognized the offer of Dr. Gaddam and Mr. Burciaga to assist with the social media efforts.

13. Mr. Burciaga asked if there was any thinking toward an NTIS hack-a-thon. He felt that the large trove of data available coupled with the JVP could be the basis for the quarterly or semi-annual hack-a-thon. This may be excellent incubator. This recommendation could allow NTIS to sponsor the "problem du jour" at one of the agencies. NTIS will explore and provide an update at the next FACA meeting. **Status:** In Progress. Mr. Capella shared we did not have bandwidth at this time.

- 14. Dr. Gaddam and Mr. Burciaga shared NTIS should explore focusing on cyber specialization and cloud. Further consideration to an IT lead for a Center of Excellence (COE) on automation analytics and AI as well as cyber and cloud. He shared IT should consider having a person lead the COE and supporting the ODS team. NTIS will investigate the feasibility of a lead for the COE structure.Status: In Progress. Dr. Chraibi stated we are investigating further opportunities.
- 15. Mr. Burciaga recommended focusing on awards and applying for them. Nominations could bring NTIS recognition. NTIS should investigate further and incorporate awards into their processes.

Status: In Progress. Ms. Shaw shared we are working to strengthen the process. Ms. Zavala shared she was a judge from a submission standpoint and offered to help with the process.

16. Mr. Burciaga's organization focus included the impact of telework. He asked that NTIS consider how post-COVID changed how NTIS operates. He suggested NTIS looks at provided data for platforms as a JV opportunity – Analytics as a Service; Insights as a Service and Platform as a Service. NTIS will investigate and provide an update.

Status: In Progress. Mr. Capella shared that these are ongoing discussions with the Department and OPM. potential speakers.

17. Mr. Burciaga recommended the OPM team meet to whiteboard actions towards the direction of quantified results. He reviewed Slides 22 and 23 recommending what happened as an outcome but shared we did not quantify as "man hours", "lives saved" or "dollar and cents." He offered to participate. NTIS will schedule the meeting to include the Board members.

Status: In Progress. Mr. Strickland has been participating in workforce groups and learning some of the tools within the DOC bureaus.

- 18. Dr. Gaddam focused on the post-COVID actions at NTIS. Post-COVID represents a tremendous opportunity for talent acquisition absent the geographical restrictions. He recommended seeking talent to include new college hire to augment the current staff. NTIS will investigate further and provide an update. Status: In Progress
- Mr. Burciaga shared the largest opportunity should be in the NTRL and data subscription comparing the opportunity to Netflix and iTunes. Mr. Burciaga offered another session to assist with this initiative. NTIS will schedule a session to investigate and explore further. Status: In Progress.

Member Wrap up Discussion and Public Comments

Mr. Capella asked if anyone from the public had any comments. After hearing none, he turned the meeting over to Ms. Shaw and Dr. Gaddam for the closing. Dr. Gaddam shared his appreciation and thought this was another fantastic meeting. He shared he is looking forward to meeting in person. Ms. Shaw stated she planned to get the notes out in the next 2-3 weeks. She shared NTIS will look for dates in the October/November timeframe for the next meeting.

Board Governance/Administration

The minutes will be shared coordinated internally, and then with Dr. Gaddam. Absent no additional comments the meeting was closed.

Adjournment

I hereby certify that, to the best of my knowledge, the foregoing minutes are accurate and complete.

Ajit Gaddam 6/24/2021 Dr. Ajit Gaddam Chairman National Technical Information Service Advisory Board

Mr. Gregory Capella Director (A) National Technical Information Service

These minutes will be formally considered by the Council at its next meeting, and any corrections or notations will be incorporated in the minutes of that meeting.