

**National Technical Information Service (NTIS)
Advisory Board Meeting Minutes
June 6, 2022
Virtual meeting**

Attendance

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

NTIS senior staff participants included Mr. Greg Capella, Acting Director; Ms. Elizabeth Shaw, Associate Director, Office of Program Development (OPD); Mr. Wayne Strickland, Associate Director, Office of Program Management (OPM); Dr. Chakib Chraibi, Acting Associate Director, Office of Data Services (ODS); Ms. Leigh Anne Levesque, Office of the Chief Information Officer (OCIO); and Ms. Andrea Patterson, Deputy Financial Officer, Office of the Financial Officer (OCFO).

Welcome/Opening Remarks

Ms. Shaw in the capacity of the Designated Federal Officer (DFO) opened the meeting with introductions as well as an overview of the establishment and purpose of the AB. Ms. Shaw called the meeting to order, turning it over to Mr. Capella and Dr. Gaddam.

Mr. Capella, Acting Director welcomed everyone to the meeting and provided a synopsis of the upcoming updates. He turned the meeting over to the chairperson, Dr. Gaddam. Dr. Gaddam introduced the other AB members, Ms. Zavala and Mr. Burciaga. He thanked the former Board member, Claire Walsh for her work on the Board during the past three years. Mr. Capella then briefly reviewed the agenda:

NTIS ADVISORY BOARD (Virtual) National Technical Information Service <i>Register Through the WebEx Link:</i> https://ntis.webex.com/ntis/j.php?RGID=r9b852607bb219ac7bff825087e2d00b9	
Monday, June 6, 2022	
AGENDA	
I. NTIS Mission and Operational Update	
1:00 PM	Call to Order and Introductions of Board Members <ul style="list-style-type: none"> • Elizabeth Shaw, Designated Federal Officer • Greg Capella, Acting Director/Deputy Director • Dr. Ajit Gaddam, Advisory Board Chair
1:30 PM	NTIS Update <ul style="list-style-type: none"> • Greg Capella, Acting Director/Deputy Director
1:50 PM	Legal Update

	Jeffrey Harrington, Senior Attorney
2:00 PM	Operations of the Service and Lines of Business Overview <ul style="list-style-type: none"> • Greg Capella, Acting Director/Deputy Director • Elizabeth Shaw, Associate Director, Office of Program Development • Wayne Strickland, Associate Director, Office of Program Management • Dr. Chakib Chraibi, Acting Associate Director, Office of Data Services • Greg Capella/Leigh Anne Levesque, Chief Information Officer (A) • Andrea Patterson, Deputy Chief Financial Officer
2:50 PM	10-minute break
II. Discussion with Board Members	
3:00 PM 4:00 PM	Advisory Board Discussion with NTIS <ul style="list-style-type: none"> • 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	

* Speakers will be selected on a first-come, first-serve basis. Each speaker will be limited to five minutes. Questions from the public will not be considered during this period.

Director's Overview

Mr. Capella shared that NTIS should have a positive net of approximately \$200k. The IT Department is focused on two paths of upgrades. One focus is on the underlying infrastructure being rebuilt for the highest revenue projects at NTIS. He shared that contractors were brought in to analyze the business requirements seeking more modern technologies within the cloud. It will be a universal platform for three different products.

The second initiative is migrating our existing physical infrastructure into the cloud. Since the last meeting, we closed the Denver back-up center. Prior to migrating the current infrastructure to the cloud, we found some applications are based on technologies that are not supported by the cloud. This is requiring the NTIS team to upgrade some applications prior to the migration. We are planning to have the migration completed by the summer of 2023.

NTIS has been successful with providing new solutions and adding new workstreams from the initial base of work. We are seeing a market slowdown with new adoptions and hoping that as agencies are coming back into the office that we may see additional activity. There are other indicators that point to additional business likely by the end of the year. Investments and potential new business and retained earnings support no concern for our financial health.

Department of Commerce (DOC) has a general policy of no more than 2 days of telework per week. NTIS has requested a waiver to this policy. To date, no DOC bureau has heard back from their request for a waiver. NTIS has felt the team was successful with maximum telework and is looking forward to the outcome from the waiver request.

Mr. Capella provided an update of the current staffing positions sharing that NTIS filled the Associate Director for Program Development position with Wayne Strickland. Allison McCall retired leaving a vacancy with the CIO position. He shared NTIS plans to advertise for the CIO position very soon. One developer in the OCIO team is leaving and NTIS is bringing in a systems administrator that will offset a contractor. As shared earlier Denver back-up site is closed. The Shawnee site is moving to the cloud.

The DOC HQ provided a data scientist at no cost to us for a 4-month period. This work exchange will also provide DOC will more information on NTIS and share how the Department may best use NTIS. Additionally, there are plans to advertise for the Associate Director, Data Services.

Mr. Capella shared there are two positions that NTIS is looking to increase the grade level. Also, there are plans to bring in a non-competitive hire.

Revenue continues to grow strong from the current customers. New opportunities are maturing and hoping to see them make an impact this FY. Feedback has been favorable, so it is believed that NTIS will likely capture additional revenue this FY.

A new overhead model was implemented to assist with cost recovery. Overhead surcharges were adjusted as part of this effort. We are still migrating off the legacy financial system. NTIS hopes to retire those legacy systems as some of them are no longer patchable.

There are forty-three active Joint Venture Partners (JVP). NTIS continues to advertise for new partners. The applications are being reviewed in real time. There are a number of partners that have been rejected, Mr. Capella estimates that it could be as much as 50%.

Mr. Burciaga congratulated NTIS on the net revenue projections noting it was turning in the positive direction. Mr. Capella shared that much of this due to some of the cost reductions. The largest project appears to inadvertently underrun from the projections. Mr. Burciaga asked about the metrics for the JVP efforts seeking how many are new; how many are rejected; and how many are renewals. Mr. Capella

Dr. Gaddam focused on the challenges of the workforce. He shared the option of outsourcing to specialty providers who can focus on specific areas may be something that could be explored. Mr. Capella shared the government, in general, takes longer to hire than the commercial world. As NTIS has hiring actions in, we are trying to offset by backfilling with contractors. The exception with the cloud effort, Mr. Capella shared we did not have the expertise so deliberately brought in contractors to assist. We intend to hire feds to move into the cloud positions once completed.

Ms. Zavala inquired about the migration and training of the federal staff. She asked once the NTIS team is trained could this be a skill that could be leveraged to assist other agencies. Mr.

Capella shared that that the growth in the cloud and security will help NTIS; however, it may not be a product line without additional investigation.

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 management structure. However, NTIS filled the Associate Director, Office of Program Management. Dr Chraibi is still acting as the Associate Director, Data Service. The CIO position is vacant. The NTIS Director position is vacant with NIST as the hiring authority. NIST was waiting for their Director's vacancy to be filled prior to posting for the NTIS position. Mr. Capella also shared that NIST hired another lawyer and complimented the level of support from the NIST legal team.

No new FEVs scores; however, Mr. Capella thought the new survey will be coming out soon. He provided recipients would have a 6-to-8-week period to complete. The FEVs Survey will be an opportunity to see how well we are going in terms of leadership, staff, goals and the general the general health of the organization. NTIS plans to provide an update at the next FACA meeting.

Next Ms. Shaw, Associate Director, Office of Program Development (OPD), described the organization structure which has remained unchanged since the last meeting. She shared the overview of the current customer engagement manager's portfolio. Generally, each Engagement Manager's portfolio is aligned to specific agencies; however, there is some overlap due to focus on the current administration's initiatives of Economy, COVID, Energy and Equality. These initiatives are an integral part of the OPD strategy that cut across multiple agencies. In addition, Ms. Patricia Gresham's work in OPD includes managing the Office of Personnel Management project. The PM work is normally managed by Mr. Strickland's team; however, due to resource constraints, the OPD team members have been the project managers (PM) on several NTIS projects.

Based on the historic information, the OPD is looking at realigning the agency assignments for the next Fiscal Year (FY). Focusing on the agencies with the greatest need and funding in the data innovation space.

Ms. Shaw shared the goal of OPD is to identify agencies that could benefit from NTIS' solutions then have further discussions with the agency stakeholders. There has been substantial growth with the number of meetings, but the concern is moving into the next stage. She shared, there is continued outreach to include surveys. The response from the surveys has not been as great as the previous year.

The new business sources include GAO and OIG reports; events and panel discussions; specific 504/508 titles; news articles; congratulatory messages; COVID, equality, economy and energy platforms; cyber and zero trust work; quantum computing events; previous and current agency contacts; award recipients, and agencies from the previous Lines of Business (LOB). She provided an example of the targeted COVID outreach where 15 messages netted a meeting with the SBA.

As of mid-May 2022, the OPD team reached out to 527 agency contacts with 64 confirmed meetings in 30 weeks. This equates to more than 2 meetings per week. It is a substantial increase when compared to the Same Period Last Year (SPLY) at 46 meetings.

Another facet of the OPD work is sharing the value proposition of NTIS. There were several agencies that wanted to know the difference between the Joint Venture Partner Authority (JVPA) and Other Transaction Authority (OTA). The OPD team has in development a competitive analysis to help position the NTIS solutions against other offerings. One area within the OTA is the ability to do Operations and Maintenance (O&M) that is not available through the JVPA. Federal Acquisitions Regulations (FAR) has shown to resonate with the agencies as it is a known source to obtain services.

The creation of collateral materials has become part of the work of the OPD team. Ms. Shaw shared a new collateral piece, “Success through Collaboration” that outlined roles and responsibilities as an agency elects to work with NTIS. This piece is in addition to the competitive analysis support material and a new PowerPoint slide deck.

The OPD team has attended /participated in over 30 customer events to include training. Ms. Shaw shared the OPD reached out to attendees from past events. She shared it was not a great source of leads and has received some response. The research for the competitive analysis has been a robust effort that included data gathering from e-mails, review of publicly available information and phone calls.

Ms. Shaw gave an overview of the past survey results sharing that 40% did not have a current need. About 30% had concerns over the \$1M threshold. She shared there have been efforts to work with agencies at a lower threshold with the hopes of building further from the initial work. For FY 22, only one survey was returned.

Meeting with potential customer agencies requires a need from them. The OPD team has reviewed and reached out to contacts within Request for Information (RFI) focused on data and innovation. We have a concerted effort with awards outreach. She shared the awards could assist with branding and awareness of NTIS as well as recognizing the efforts of the customer agency.

Ms. Zavala shared she was impressed with the OPD work and the customer engagement program. She highlighted specific efforts to include the assets, data tracking and competitive research analysis. She asked about the rating of the pipeline. Ms. Shaw shared she started with the probability that had mixed results. Mr. Capella has asked for a new naming convention of “Likely,” “Very Likely,” or “Not Likely,” which has been recently implemented. Ms. Zavala shared ACT-IAC as an Innovation Inventory navigator that should be integrated into the process. Ms. Shaw shared that case studies should be included in the Innovation Inventory.

Dr. Gaddam asked if we have or can measure the social media engagement/outreach. LinkedIn, key words and social media postings are a few areas for consideration. In the age of COVID, Dr. Gaddam felt the digital outreach opportunities are an important part of the outreach strategy. Another area the RSA, cyber security event is another type of outreach by securing a booth sharing information on how to work with NTIS and JVP.

Mr. Burciaga reinforced the importance of a physical presence at conferences. He stressed the importance of using the event to design and present workshops. One of the topics shared as a potential workshop was “How to work with Government.” He congratulated the team in making the outreach to include making phone calls asking about a NTIS front door. Ms. Shaw asked about exemplars for the front door concept and will reach out to Mr. Burciaga for additional

information. He recognized the award program and the follow-up efforts as important steps that were generated and supported by the AB. Ms. Zavala shared this storefront/front door could be reinforced with Podcasts.

Dr. Gaddam shared his willingness to assist with the R&D labs similar to the introduction to Carnegie Mellon University.

Jeffrey Harrington, Senior Attorney, DOC provided the annual ethics briefing for the FACA Board. The most important takeaway of the presentation was to know what areas of law is covered and when to give the attorneys a call. He shared the status of the AB members is they are Special Government Employees (SGE) sharing they work for less than 130 days a year. He shared the contact information for their office. The backbone of the ethics rules is the conflict-of-interest rules based on personal relationships or finances. Additionally, Mr. Harrington provided information on bribes, gifts and travel. He thanked the OB for completing the 450 financial disclosure forms. He completed the discussion with a request of the OB members in attendance from Ms. Shaw.

Mr. Strickland, Associate Director, Office of Program Management (OPM), shared that he was very excited to be the new OPM AD. He described the OPM organization chart, sharing the different functional areas for Program Management and Data Transformation and Access (DTA). He shared there were some vacancies with program management and an IT project manager who left NTIS for another federal agency . He stated OPM has had a great deal of success adding interns to their team. In particular, Mr. Strickland was pleased with the Operation War Fighter (OWF) program. The library support for the National Technical Reports Library (NTRL) program was supported by an intern from the University of Denver.

Project management work has culminated in a new relationship with the Department of Commerce. Through this effort, the PM's focus on Project Life Cycle Management resulted in more involvement with the Project Management Improvement Accountability Act and the DOC. It has been successful relationship with NTIS establishing a community of practice for Program Management with the larger DOC bureaus. Additionally, the relationship has resulted in PM training to include the prerequisites for FAC-PM certification.

Mr. Strickland shared the overview of the National Technical Reports Library (NTRL) stating this it is not a revenue generator but a statutory mandate. Since 2016, NTIS has ensured the NTRL is available at no-cost and in the most cost-effective manner available. It is not as commercialized due to the constraints set for the with the full and open access.

The NTRL 3-year plan is still progressing. Mr. Strickland reported the OPM team accomplished many of the deliverables but had challenges due to staffing, COVID, skillsets, and lesson learned. The migration of the NTRL has been slow allowing the OPM's IT PM to working closely with the CIO team. He shared the OPM team is seeking how to grow the NTRL by taking a project approach to this effort that includes developing a project charter.

The internship program with the Fairfax County Public Schools (FCPS) was on pause due to the COVID restrictions, and safety of the participants; however, we have started to re-integrate FCPS back into the program. The set-up has been completed and will be available to start in the Fall. He shared Greg Guthrie is the program manager for this pilot program.

Mr. Strickland provided NTIS has made progress into the content of the NTRL. By the end of May approximately 18,000 new documents were added to the NTRL. He noted this was a substantial increase as a result of the collaboration between the OPM and OCIO teams. This increase reflects the large backlog added into the collection that is now available to the public. He noted the NTIS team is seeking ways to sustain the collection through a more automated means. The interns played an integral role with defining the future of the NTRL along with the federal agencies and federal labs that provide content. Moving forward the OPM team will take a more proactive approach when working with the agencies and labs to encourage greater participation.

Mr. Strickland shared the OPM is evolving from product management to program management to now project management. As part of this effort, there has been a focus on training. The intern helped the team appreciate the value of library science sharing common experiences within the library community. The aforementioned contributes to the development of the NTRL 3-year plan.

The Limited Access Death Master File (LADMF) was shared as another statutory mandate. Updates to the LADMF were shared. He shared OPM simplified the process and focused on the customer experience with the 5 steps:

1. Review
2. Pay
3. Submit
4. Order
5. Renew

The OPM team is targeting more proactive interactions with the customers providing an example of outreach to the federal agencies prior to the agreement end dates. The customer interactions are changing to reflect the needs of the agencies as well as the users of the information.

Mr. Strickland closed out with an overview of a few select projects. He shared the USAID Presidential Malaria Initiative (PMI) has 6 additional projects initiating from the initial project. Typically, additional projects emanate from the original base of work – the USAID PMI experience. The PMI project showcasing the solutions provided by NTIS has global impact. The Department of Education FSA project considered to be a “1.5” project dealing with accessibility for the visually impaired. This project was impacted by COVID and deferment of student loans. He shared the OPM team that the project is looking to extend with a 3-5 year agreement. The Social Security Administration’s (SSA) Special Notice Option (SNO), NTIS’ largest project averaging 2 million notices a year for the past 12-years. Both Department of Ed and SSA’s volumes have declined recently impacting the revenue projections.

Mr. Burciaga recognized and applauded the work with the FCPS. He asked for clarification on the microfiche effort of digitizing or digitalizing. An example of the former is burning to a computer with digitalizing is importing the data. Mr. Strickland shared the effort is digitizing. Mr. Burciaga shared step 2 is digitalizing and asked about the timeline for this step. For a variety of reasons, there is no timeline associated with step 2 of this effort. Mr. Burciaga shared this is a microcosm of a larger opportunity over the next 10 years. Mr. Strickland shared the OPM team will review opportunities within the realm of digitalizing. Mr. Capella provided that many of the documents are technical containing graphics and would require more than Optical Character Reader (OCR) technology.

In reviewing the background of the LADMF, Mr. Burciaga estimated 35 agencies had access with roughly a total of 165 current users. He asked if there should be more of an effort to increase the number of users. Mr. Strickland stated the number fluctuates with approximately 250 users currently. There are also 3rd party providers that represent a host of other users. Mr. Capella clarified that the states no longer are required to contribute their data to the LADMF. Further, sharing the value of the LADMF has been marginalized by the bifurcation. Mr. Burciaga asked Mr. Capella about the cost of LADMF certification. Mr. Capella provided the attestation process could be costly when you involve legal or accounting firms.

Dr. Chraibi, Acting Associate Director, Data Service (ODS) began his presentation by describing the role of the data services office. He stated the role is to support NTIS' core mission by assisting federal agencies in their quest to harness data as a strategic asset and leverage innovative technologies to achieve their mission outcome. ODS supports several agency projects as a technical advisor and data science expert. The current ODS organization chart was shared noting several vacancies that will be filled soon starting with the Associate Director position. NTIS and DOC have joined forces to assist with cross-training, knowledge expansion and skills enhancements by adding Ms. Ola Olude as an intern on a 4-month detail with NTIS. Ms. Olude is working toward operationalizing DOC's newly established AI Center of Excellence as such, understanding the NTIS model will prove valuable to her efforts.

In collaboration with OPD, OPM and senior leadership, Dr. Chraibi has been involved with initial meetings/communications to potential agencies as well as with ongoing projects. ODS has an integral role in promoting and communicating the NTIS value proposition.

In the current federal landscape, COVID has placed pressure on federal agencies to accelerate their digital transformation, enhance technology and leverage data capabilities to optimize resources. In the effort to fully utilize data as a strategic asset, the "north star" is the Federal Data Strategy introduced in June 2019 by OMB. The strategy supports a coordinated approach to federal data leadership to include data use, data management and data governance.

Dr. Chraibi shared Gartner research estimates over 85% of data science projects fail. Some of the failures can be attributed to solving the wrong problem, applying the wrong process, using siloed data infrastructures, lack of/poor transparency and skill shortage. He shared the NTIS solutions are strongly grounded in designed thinking requiring agency involvement to meeting the objectives and goals. Involvement of internal and external parties is critical to developing a clear pathway to solutions that are human centered and user focused that address the real issues at hand.

A listing of the projects ODS has been supporting was shared to include Department of Labor, Health and Human Services, as well as the USAID PMI mentioned previously. Additionally, ODS has been working to expand the JVPs through the review and response of the submissions from the Federal Register Notice seeking new JVPs. This effort includes working with approximately 42 volunteers across the federal government in support of the review process. To date, there have been about 219 reviews with 92 organizations in review as potential JVPs.

Mr. Capella made a few additional points, that 17 of the prior 31 JVPs came back. Of the 14 JVPs that did not apply some indicated they plan to submit later. The 26 new partners are indicated on the chart. The FRN is still open, so he asked that if there was awareness of potential new organizations to share accordingly.

An overview of the DOC Data Strategy was shared by Dr. Chraibi. The 5 strategic goals in the strategy are:

1. Data Governance
2. Data Access
3. Data Ethics
4. Data Skills
5. Data Collaboration

He provided an overview of each of the strategic goals, sharing that he was asked to lead Data Ethics strategic goal. Then he shared the status of the action plan for each of the goals. Dr. Chraibi completed this review with an in-depth report on the Data Ethics strategy to include purpose, objectives and strategy. Within the draft Data Ethics framework, there are 4 pillars of:

1. Privacy and Confidentiality
2. Fairness and Inclusiveness
3. Transparency and Accountability
4. Safety and Security

Dr. Chraibi shared other major public sector initiatives. They include the Federal Data Strategy; Office of Personnel Management's release of occupational series for data scientists; Technology Modernization Fund (TMF); Multiple Executive Orders and the establishment of the National Artificial Intelligence Advisory Committee. He noted NTIS participated in the creation of the occupational series initiative.

He shared multiple trends in data within the public sector. Some of the data trends include, leveraging data as a strategic asset; advancing equity in data; enhancing data ethics and responsible AI; enhancing public trust; implement zero trust; and harnessing data efforts for efficiency and effectiveness.

There were no additional questions so proceeded with the CIO presentation. Ms. Shaw introduced Leigh Levesque from the OCIO.

Ms. Levesque shared she is currently monitoring CIO operations in the absence of the Chief Information Officer. She shared Mr. Capella is the current leader of the OICO. She expressed that NTIS will be advertising for a CIO soon. She introduced Mr. Bilal Baisa as the CISO, and Mr. Pad Hosmane as Manager for Production (A). Further, she updated that Mr. Hosmane will be leaving NTIS within a month, leaving another vacancy within the OCIO.

Ms. Levesque updated the AB on the efforts surrounding cloud migration to include completion of the cloud migration for the NTIS.gov website and NTRL website. She shared the decommissioning of the Denver site was complete and currently migrating the legacy systems in the data center to AWS disaster recovery. By next quarter, the OCIO team hopes to have most of the remaining on-prem systems in the AWS cloud.

Currently, the primary focus of the OCIO team will be on the data transfer and access (DTA) initiatives to include SSA SNO and Dept of Ed. She shared the holistic approach to improvement that is focused on process improvement, workflows, as well as cloud migration. She shared the benefits of the holistic approach to include efficiencies and reduced error rates.

By June 2023, the OCIO team hopes to have all systems fully migrated to the cloud. This includes a development environment, test environment and back-up. The infrastructure development will be able to be used for other potential DTA customers. Continuous improvement will focus beyond processes to include intake, reporting, QA/QC, simplified workflows, manual intervention, and scalability. All of these changes required a renewed focus on skillsets and training.

Ms. Levesque reviewed steps from the last AB update. She shared this is very much a priority and the code that supports these systems is 12-years old. Ms. Levesque shared the steps to the DTA Innovation Initiative:

- Step 1. Organizational and IT Environment Discovery
- Step 2. End User Needs Analysis
- Step 3. Solution Development
- Step 4. Migration Planning
- Step 5. Automation
- Step 6. Build the Target Environment
- Step 7. Initiate Test Migrations
- Step 8. Cutover
- Step 9. Transition to Operations and Maintenance (O&M)

Finally, she finished the presentation with updates on the LADMF. The OCIO has targeted the move to the cloud by the end of the year. Several financial systems, security tools and base infrastructure will be moved over to the cloud.

Dr Gaddam complimented the efforts of the CIO team on the move to the cloud. Mr. Capella praised the CIO team for their efforts of maintaining the 12-year system while trying to upgrade the infrastructure. Pending no further comments, Ms. Shaw introduced Ms. Patterson for the OCFO update.

Ms. Patterson, the Deputy Chief Financial Officer, shared her organization's structure had not changed from the previous meeting. The NTIS OCFO team is responsible for providing the NTIS monthly reports and analysis of NTIS financial situation. She shared the OCFO team is still working on reporting out from the Commerce Business System (CBS) because the level of data needed is not readily available from CBS.

She shared a government-wide initiative for G-Invoicing. This is a long-term solution developed by Treasury to manage intergovernmental transactions. G-Invoicing will move from a paper-based agreements to an online application. This transition is slated for October 2022. Commerce transition to a new financial system will be delayed until 2025.

Based on the forecast, it was predicted NTIS will end the year with a positive net estimated at \$200K. Ms. Patterson shared there are several factors that may impact such as the impact of current work projections with the DTA projects. She hoped that we will achieve at least break-even for this FY.

The net cost by Line of Business as of March 31, 2022, is shown below. There was a revision to the allocation methodology for 2022 in order to cover more of the OH. She noted, the DTA works covers more of the OH than the other projects.

Line of Business		FY2020	FY21 March 2021	FY2021	FY22 March 2022
Data Science Innovation Services	Revenue	\$38,806,593	\$15,057,483	\$26,261,750	\$8,248,926
	Cost	\$37,188,881	\$14,680,135	\$25,859,350	\$8,002,696
	Net	\$1,617,712	\$377,348	\$402,400	\$246,230
Data Accessibility Services	Revenue	\$30,775,769	\$14,342,770	\$30,214,650	\$15,524,755
	Cost	\$29,168,292	\$14,215,040	\$29,613,251	\$14,298,483
	Net	\$1,607,477	\$127,730	\$601,399	\$1,226,272
Data Subscription Services	Revenue	\$5,911,872	\$1,481,863	\$2,666,519	\$1,090,768
	Cost	\$5,907,300	\$1,666,735	\$2,740,757	\$1,246,775
	Net	\$4,572	-\$184,872	-\$74,238	-\$156,007
Legacy Business	Revenue	\$4,032,343	-\$2,452	\$0	\$0
	Cost	\$3,068,362	\$30,030	\$34,632	\$0
	Net	\$963,981	-\$32,482	-\$34,632	\$0
Technical Clearinghouse (NTRL)	Revenue	-\$2,020	\$0	\$0	\$0
	Cost	\$1,920,343	\$761,779	\$1,541,938	\$708,390
	Net	-\$1,922,363	-\$761,779	-\$1,541,938	-\$708,390

Ms. Zavala asked if the cost included the anticipated filling of the open vacant positions. Ms. Patterson shared that that cost was covered in the projections. There were no additional questions, so we adjourned for a short break.

Mr. Capella moved into the AB discussion portion of the agenda. He stated this section will allow the Board to provide feedback on the current status and suggest areas where we could focus to further improve NTIS performance then introduced Dr. Gaddam.

Advisory Board Discussions/Recommendations for NTIS

The AB 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:

1. Ms. Zavala was encouraged and congratulated NTIS for their efforts to include but not limited to the outreach, organization, and migration of legacy systems to cloud.
2. For Dr. Chraibi, Ms. Zavala asked about the relationship between NTIS and the newly formed DoD Chief Digital and Artificial Intelligence office.

Dr. Chraibi shared there has not been any outreach from ODS yet but has plans to reach out. He shared his involvement with the ACT-IAC in an effort to support new opportunities. Ms. Zavala related to not only ethical but explainable AI. She congratulated Dr. Chraibi on his job with the data working groups and the importance of this role in advancing the NTIS solutions. He suggested another future role is in AI auditing.

3. Mr. Burciaga posed the question on the left and right lateral limits for responsible or ethical AI framework.

Dr. Chraibi responded that the current work is the initial step and part of the foundational efforts. At this point, it is focused on awareness and guidance. He shared AI and ethics is not a new concept. Increased data usage and AI work will help with problem solving. The steps forward stem from data ethics to responsible AI to audit projects and compliance. Compliance is one of the goals at the DOC's AI Center of Excellence (COE). The COE's had

goals to share AI projects focusing on reusability and ethical use of AI. Mr. Burciaga shared the DOD Cybersecurity Maturity Model Certification (CMMC). Following the CMMC model, for consideration is an Analytics Maturity model certification or Ethical AI certification.

Mr. Burciaga asked if there is a mechanism for a call for studies recognizing that the data science resources are extremely limited. He did note, the potential available of data scientist resources available from the 43 JVPs. Further, he asked about scaling, succession planning, and corporate knowledge outside Dr. Chraibi.

Dr. Chraibi acknowledged the concerns sharing the JVPs provided insights through presentations on their data science capabilities. He supported the idea of the “storefront” suggestion it could be enhanced through the creation of whitepapers to share expertise. Mr. Burciaga acknowledged the storefront but re-emphasized the need for succession plans.

4. Mr. Burciaga thanked NTIS for adopting some of the AB’s suggestions then posed a question for Mr. Strickland regarding the 3-year plan. He challenged Mr. Strickland to develop a NTRL 3.0. What are the NTRL features, functions or capabilities that could be shared as future releases over the next 3-years? Mr. Burciaga brought forth an earlier idea of Analytics Maturity Model Certification for consideration with the NTRL. These types of efforts would make the NTRL a more valuable enterprise supporting what “good, better and best” looks like.

Mr. Strickland responded that the OPM will start exploring the implementation of additional features. He noted that look at the future state vice present state will be incorporated as the team moves forward. He shared that he may reach back for additional thoughts on the NTRL.

5. Dr. Gaddam shared examples of cloud migration and ask how we can showcase NTIS capabilities that does not introduce a bias and is compliant with the law and regulations. He asked Dr. Chraibi how we might position NTIS’s solutions to other agencies?

Dr. Chraibi agreed, sharing another DOC bureau, NIST is working on the framework for risk management related to AI. The framework is currently in a draft version and evolving nicely. Once completed, this will provide a framework for approaching risk management. Additionally, there is a group, comprised of public and private organizations to include nonprofits working on responsible AI with expertise in auditing.

6. Dr. Gaddam’s final question was regarding the acceleration of the cloud migration and asked if there are any disaster/worst case scenario, security “playbooks.”

Ms. Levesque stated for the LADMF, there is a process to report any data breached or data leakage. She deferred to Mr. Bilal Baisa who shared the process is two-fold where we inherit policies and procedures from the Department. The DOC then reports up to DHS. This process is for confirmed and unconfirmed breaches and insure they are documented. Mr. Capella shared we have taken extra precautions with a layered set of security.

7. Mr. Burciaga asked for insights on the challenge for talent. He has seen a strong tilt in academia toward the “blue collar AI workforce. The demand is the base of the skills to include data engineers, data operations, data labelling, and data automation. As we look to

scale out are we reaching out to academia to include schools that are developing the data associate programs? Perhaps consider capstone projects that could provide funnels for new talent.

Dr. Chraibi reinforced this effort as significant then highlighting his background from academia. He expressed that utilizing students in an internship has significant benefits both for the student and the agency. Dr. Chraibi shared his experience with reverse curriculum and how it creates a lot of excitement for the students allowing them to start solving problems immediately. He felt that this type of program is not a good fit for the current business model as a consulting and advising role. NTIS will keep evolving and we can watch for student opportunities. He referenced the OPM work on the data service position descriptions as a more target way to hire recent graduates.

Mr. Burciaga felt there are clear opportunities with community colleges citing examples with DOD feeling strongly that DOC can be leading the nation in the area. He offered introductions to some of the colleges to include Miami Dade College and Purdue. He reinforced the eagerness of academia to support the public sector as well as this work is pro bono. He felt strongly that the certificate programs offered at these colleges have operations or data operation programs that would fit nicely into a certificate program as a capstone.

Mr. Strickland weighed in with the current efforts with library science intern sharing there were some logistical challenges with training, time, security and virtual formats. He said the OPM team will add those colleges to the list moving forward. Additionally, providing they utilize interns from the OWF program.

Ms. Zavala agreed with Mr. Strickland about the planning efforts to bring in an intern. She shared her company has 120 summer interns coming in with her responsible for 2 of them. She reinforced the importance of planning, adding the professors are often a good source to engage and organize a capstone project.

Ms. Shaw shared her outreach to locally based colleges to include Northern Virginia Community College, Marymount University and VA Tech specifically noting the data degree/certificate programs. She posed an opportunity by asking agencies to provide their problems so that the college students could assist with a solution. Mr. Burciaga thought the idea may have some merit as a clearing house that could eventually be added to the NTRL supporting NTIS status in data brokerage. Looking at the Minimum Viable Product then could move to the JVP for scaling and further testing.

Review Feedback and Action Items:

1. Ms. Zavala suggested NTIS explore offerings of AI trust assessment capability and ML operations insight.
Status: Ongoing. Dr. Chraibi is leading the initiative for developing a data ethics framework at DOC. The Working Group is multi-disciplinary with representatives from across DOC and bureaus. The objective is to develop a practical data ethics framework/playbook providing awareness and guidance for ethical, responsible, and equitable data practices to truly reflect DOC mission and values while achieving mission outcome.

2. 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
Status: Ongoing. Tied to item 1.
3. Mr. Burciaga asked if NTRL has a future road map for the evolution over the next 3-5 years. 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.
Status: Ongoing. Mr. Strickland shared the NTRL team is continuing to draft the plan. He shared NTRL must be viewed as cost-recovery opportunity.
4. Mr. Burciaga asked if there was any thinking toward a NTIS hack-a-thon. This may be excellent incubator.
Status: Ongoing. Mr. Capella shared NTIS does not have the bandwidth at this time and would like to revisit once the Associate Director, Data Services is selected. Mr. Burciaga thought that this may be a good project for the JVP; however, Mr. Capella shared we could only do this if we paid them.
5. 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: Ongoing. Dr. Chraibi shared NTIS had a person on detail working to establish and operationalize a COE for the DOC. As part of the detail, we will look at the role NTIS may have in support of the DOC COE.
6. Mr. Burciaga suggested an organization focus to include 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: Ongoing. Mr. Capella shared NTIS applied for a waiver to continue telework allowing access to nation-wide resources. The platforms we are exploring with our customers and JVPs but would need funding for this effort.
7. Mr. Burciaga recommended the OPM team meet to whiteboard actions towards the direction of quantified results such as 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: Ongoing. Mr. Strickland shared the NTRL team is looking to add more content to the NTRL and is evaluating additional cost reductions: 1) Automation options ingesting new content both current and legacy; 2) Eliminate technology challenges that create content processing backlog; 3) Redefine partnerships with commercial database industry. He wants to ensure NTIS is in compliance with OMB’s A-123.
8. 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: Complete. Mr. Capella felt the opportunity to telework represents a tremendous opportunity. He reiterated the request for a waiver to increase the telework options. NTIS will seek out college hiring and other programs especially in light of the opportunities presented by potentially expanded widening remote work options.

9. 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: Ongoing. Mr. Strickland shared the focus on the NTRL is to reduce the cost. A recommendation was made to close this effort and was agreed.

10. Dr. Gaddam shared the Board has strong alumni relationships that could be leveraged so NTIS will reach out to obtain the contacts.

Status: Ongoing. The NTRL team is drafting a Project Charter document. Mr. Strickland shared there will be a Microsoft Project spreadsheet developed for tracking project progress. Additionally, the team will develop and outreach campaign for the federal science community as well as recommendations for commercial and academic referrals from Board Members.

11. Mr. Burciaga shared he was available to help evaluate some of the upscaling platform. He agreed with the importance of training the workforce and thought there was value in training as well as communication. The FBI is an example of an agency using these platforms and he will provide contacts to NTIS for further investigation.

Status: In Progress. Mr. Burciaga felt this had been addressed earlier. Dr. Chraibi agreed. CDGB Madskills Working Group has been evaluating different learning platforms to recommend to DOC and bureaus., including Udemy for Business, Percipio/SkillsSoft, and DataCamp. Moving forward, we will consider this action closed.

12. Mr. Burciaga recommended that we work with Dr. Chraibi to hire practice leads in specific fields such as data engineering and operations, automation, cyber-analytics and supply chain analytics. He suggested that Dr. Chraibi look at chapter and sections to help with the ODS organization.

Status: In Progress. This is a long-term objective. Dr. Chraibi confirmed with Mr. Burciaga that this was addressed in earlier conversations.

13. The State Department is asking for help with partnerships. Dr Gaddam reiterated to “follow the money” and provided there appears to be many potential cyber opportunities.

Status: Complete. Ms. Gills shared there was no additional traction with the Office of Global Partnership (GP) program advancing U.S. foreign policy goals and objectives, while providing businesses and organizations with opportunities to create jobs, promote economic prosperity, and advance business ties and dialogues in specific regions.

14. Mr. Burciaga suggested the SBA and the registry of the hub zone certified could be valuable for the JVP program.

Status: In Progress. Mr. Caldwell reached out to Mr. Burciaga; however, will re-send the message.

15. Mr. Burciaga was willing to share thoughts on additional organizations for promoting the JVP program.

Status: In Progress. Mr. Caldwell suggested the timing is good to solicit additional ideas and will reach out to Mr. Burciaga.

16. The Board for any companies that may be willing to help with digitization. Mr. Burciaga shared the Board could assist asking for Mr. Strickland to follow-up.
 Status: In Progress. Mr. Strickland shared there has not been a lot of work focused on digitization. Processing legacy tangible content will be on hold during the COVID pandemic period; onsite work is being limited for safety concerns. He referenced the work with FCPS.
17. Mr. Capella offered to send all vacancy announcements on USA Jobs to the Board.
 Status: Complete. Will continue to provide updates. Ms. Cari Lawson shared 24 actions with the Board. Will continue to provide updates.

A summary overview of the recent activities was shared:

Item #	Actions	Actions
1	Actions Completed	3
2	In Progress	5
3	Ongoing	9
4	Total	17

Action Items and Recommendations for the Next Meeting

New Items:

- Ms. Zavala suggested exploring positioning NTIS case studies in the ACT-IAC Innovation Inventory.
- Dr. Gaddam asked if we have or can measure the social media engagement/outreach. Linked-in, key words and social media postings are a few areas for consideration. In the age of COVID, Dr. Gaddam felt the digital outreach opportunities are an important part of the outreach strategy.
- Dr. Gaddam suggested outreach through events such as RSA, cyber security event as another type of outreach. Securing a booth would allow sharing information on how to work with NTIS and JVP.
- Mr. Burciaga suggested adding a “front door” to access information on NTIS. He shared he could assist with exemplars for the front door concept. As part of this concept, Dr. Chraibi would like to explore adding whitepapers.
- Dr. Gaddam shared his willingness to assist with the R&D labs similar to the introduction to Carnegie Mellon
- Mr. Burciaga suggested a step 2 adding digitalizing to the initial FCPS work.
- Mr. Burciaga shared the DOD Cybersecurity Maturity Model Certification (CMMC) suggesting NTIS consider Analytics Maturity model certification or Ethical AI certification.
- Mr. Burciaga brought forth an earlier idea of Analytics Maturity Model Certification for consideration with the NTRL. Further asked for consideration in the NTRL plan include

NTRL features, functions or capabilities that could be shared as future releases over the next 3-years.

- Ms. Zavala and Mr. Burciaga felt there are clear opportunities with community colleges for interns to work on capstone projects as well as data work citing examples with DOD.
 - Mr. Burciaga thought the idea may have some merit as a clearing house that could eventually be added to the NTRL supporting NTIS status in data brokerage.
- Mr. Burciaga thought the idea may have some merit as a clearing house that could eventually be added to the NTRL supporting NTIS status in data brokerage.

Items in Progress Updates for the next meeting:

1. Ms. Zavala suggested NTIS explore offerings of AI trust assessment capability, EO and ML operations insight. Combining items 1 and 2 from the last meeting. The effort is in progress with Dr. Chraibi as lead.
2. 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. This effort is in progress. Mr. Strickland shared the NTRL team is continuing to draft the plan. He shared NTRL must be viewed as cost-recovery opportunity.
3. Mr. Burciaga asked if there was any thinking toward a NTIS hack-a-thon. This may be excellent incubator. The status is in progress. Updates will be predicated on selecting a new AD for data services.
4. Mr. Burciaga recommended that we work with Dr. Chraibi to hire practice leads in specific fields such as data engineering and operations, automation, cyber-analytics and supply chain analytics. He suggested that Dr. Chraibi look at chapter and sections to help with the ODS organization. The status is in progress. This is a long-term objective and should be linked to the hiring of the new AD for data services
5. 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. The status is in progress with Dr. Chraibi assisting with the DOC COE.
6. Mr. Burciaga shared the DOD Cybersecurity Maturity Model Certification (CMMC) suggesting NTIS consider Analytics Maturity model certification or Ethical AI certification. (new)
7. Mr. Burciaga suggested an organization focus to include the impact of telework. He asked that NTIS consider how post-COVID changed how NTIS operates. Dr. Gaddam focused on the post-COVID Staffing to include augmenting staff with new college hires. The status is in process. Mr. Capella will update the results of the waiver request to the DOC.
8. Mr. Burciaga recommended the OPM team meet to whiteboard actions towards the direction of quantified results such as quantify as “man hours”, “lives saved” or “dollar and cents.” He offered to participate. NTIS will schedule the meeting to include the Board members. The status is in progress with Mr. Strickland leading the updates.
9. Dr. Gaddam shared the Board has strong alumni relationships that could be leveraged so NTIS will reach out to obtain the contacts. The status is in progress with Mr. Strickland sharing the development of an outreach campaign. The OPM team will reach out to Dr. Gaddam for additional insights.

10. The Board for any companies that may be willing to help with digitization. Mr. Burciaga shared the Board could assist asking for Mr. Strickland to follow-up. The status is in progress with Mr. Strickland investigating further.
11. Mr. Burciaga suggested a step 2 adding digitalizing to the initial FCPS work. (new)
12. Mr. Burciaga brought forth an earlier idea of Analytics Maturity Model Certification for consideration with the NTRL. Further asked for consideration in the NTRL plan include NTRL features, functions or capabilities that could be shared as future releases over the next 3-years. (new)
13. Mr. Burciaga thought the idea may have some merit as a clearing house that could eventually be added to the NTRL supporting NTIS status in data brokerage. (new)
14. Mr. Burciaga suggested the SBA and the registry of the hub zone certified could be valuable for the JVP program. The status is in progress with Mr. Caldwell investigating further.
15. Mr. Burciaga was willing to share thoughts on additional organizations for promoting the JVP program. The status is in progress. Mr. Caldwell will take the lead to investigate further with the AB.
16. Ms. Zavala suggested exploring positioning NTIS case studies in the ACT-IAC Innovation Inventory. (new)
17. Dr. Gaddam asked if we have or can measure the social media engagement/outreach. Linked-in, key words and social media postings are a few areas for consideration. In the age of COVID, Dr. Gaddam felt the digital outreach opportunities are an important part of the outreach strategy. (new)
18. Dr. Gaddam suggested outreach through events such as RSA, cyber security event as another type of outreach. Securing a booth would allow sharing information on how to work with NTIS and JVP. (new)
19. Mr. Burciaga suggested adding a “front door” to access information on NTIS. He shared he could assist with exemplars for the front door concept. As part of this concept, Dr. Chraibi would like to explore adding whitepapers. (new)
20. Dr. Gaddam shared his willingness to assist with the R&D labs similar to the introduction to Carnegie Mellon. (new)
21. Ms. Zavala and Mr. Burciaga felt there are clear opportunities with community colleges for interns to work on capstone projects as well as data work citing examples with DOD.
 - Mr. Burciaga thought the idea may have some merit as a clearing house that could eventually be added to the NTRL supporting NTIS status in data brokerage. (new)

There were 17 due outs in progress from the past meetings with 5 closed, 2 combined and 10 new items making a total of 21 in progress and new items for discussion at the next meeting.

Member Wrap up Discussion and Public Comments

Ms. Shaw opened the floor to the public, asking if anyone from the public had any comments. After hearing none, Ms. Shaw turned the meeting over to Mr. Capella and Dr. Gaddam for the closing.

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.

Dr. Ajit Gaddam *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.