



FOR THE STANDARD APPLICATION PROCESS (SAP)

Report for Phase 2 of the SAP

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Standard Application Process Phase 2 – Lessons Learned Report

Executive Summary

The 2018 Foundations for Evidence-Based Policymaking Act (also referred to as the Evidence Act) reauthorized and expanded the Confidential Information Protection and Statistical Efficiency Act (CIPSEA 2018), establishing federal statistical agencies as integral to expanding evidence building in the United States. The Evidence Act (CIPSEA 2018) mandates that the Director of the Office of Management and Budget (OMB) establish a Standard Application Process (SAP) by which members of the public may apply to access confidential data for evidence building. The SAP Portal, available at www.researchdatagov.org, is the technical implementation of CIPSEA 2018: it is a web portal connecting applicants seeking data with a catalog of confidential data assets owned by federal statistical agencies and units.

Phase 2 of the SAP began in 2021 and concluded in December 2022. During Phase 2, three interagency working groups executed project work:

- Implementation working group
- Policy working group
- Stakeholder Engagement working group

A subcommittee of the Inter-agency Council on Statistical Policy (ICSP) served as the SAP Executive Subcommittee, providing project oversight and executive guidance. The National Center for Science and Engineering Statistics (NCSES) was designated by OMB as the Program Management Office (PMO).

Phase 2 milestones and successes include the following:

- Launch of the SAP metadata catalog, SAP application system, and SAP agency reviewer portal
- Development and release of the SAP Policy (M <u>23-04</u>)
- Development of an informational "About SAP" webpage
- Development of an informational "What is the SAP?" video
- Interagency consensus and coordination in developing the SAP Portal technical requirements
- Development of a common application form and metadata specifications
- User testing of the application portal and reviewer dashboard
- A scalable governance framework that maximized agency resources and efficiency
- Establishment of a fully dedicated SAP PMO to provide central project coordination and support

Recommendations for future improvements include:

- To integrate SAP stakeholder engagement efforts within a larger ICSP communications approach
- To expand the scope of stakeholder outreach and engagement
- To expand the use of the SAP beyond recognized federal statistical agencies and units
- To maintain the efficiencies of the SAP Governance Framework into Phase 3
- To develop a more formal change management process for SAP Portal improvements
- To develop a more thorough requirements management process
- More robust tracking of requirements, change requests, and action items

Background

The Evidence Act (CIPSEA 2018) mandates the establishment of a standard application process by which members of the public may apply to access confidential data for evidence building. The term "confidential data" means any information that is collected under a confidentiality pledge or other statutory requirement necessitating the protection of those data from public disclosure. The SAP Portal is not a new data repository or warehouse; confidential data assets will continue to be stored in secure data access facilities owned and hosted by the federal statistical agencies and units. The Portal provides a streamlined application process across agencies, reducing redundancies in the application process.

In 2019, the Census Bureau was designated by OMB to develop a pilot SAP portal, which served as a proof of concept. Phase 1 of the SAP involved the development of the pilot portal through the collaboration of seven federal statistical agencies and units. The Phase 1 Lessons Learned Report was prepared in 2020.

In 2021, NCSES was designated by OMB as the SAP PMO. As the PMO, NCSES was charged with facilitating the collaboration of the sixteen federal statistical agencies and units to develop and launch a metadata catalog, application portal, and reviewer portal. The technical development of the SAP Portal was performed by a contractor (the University of Michigan Inter-university Consortium for Political and Social Research, ICPSR). NCSES selected the contractor and monitored contractor performance.

The SAP Portal replaces numerous agency-specific applications for confidential data with one common application form. It also provides a central portal for data-owning agencies to review applications and record final determinations. The steps to discover and apply for access to confidential data are outlined below.

- Data Discovery: Individuals begin the process of accessing restricted use data by discovering
 confidential data assets through the SAP data catalog, maintained by federal statistical agencies
 at www.researchdatagov.org. Potential applicants can search by agency, topic, or keyword to
 identify data of interest or relevance. Once they have identified data of interest, applicants can
 view metadata outlining the title, description or abstract, scope and coverage, and detailed
 methodology related to a specific data asset to determine its relevance to their research.
- SAP Application Process: Applicants must create an account and follow all steps to complete the application at www.researchdatagov.org. Applicants begin by entering their personal, contact, and institutional information, as well as the personal, contact, and institutional information of all individuals on their research team. Applicants provide information about their proposed project, including project title, duration, funding, and timeline. Applicants must demonstrate a need for confidential data, outlining why their research question cannot be answered using publicly available information.
- Submission for Review: Upon submission of their application, applicants will receive a
 notification that their application has been received and is under review by the data owning
 agency or agencies (in the event where data assets are requested from multiple agencies). In
 accordance with CIPSEA 2018 and the SAP Policy (M 23-04), agencies will approve or reject an
 application within a prompt timeframe. In some cases, agencies may determine that additional
 clarity, information, or modification is needed and request the applicant to "revise and
 resubmit" their application.

- Appeals Process: In the event of an adverse determination, the applicant will be provided justification through the SAP Portal detailing the determination. The SAP Portal will provide the applicant with the option to submit an appeal for reconsideration by the data-owning agency or agencies. Applicants can also file an appeal for noncompliance with SAP Policy.
- Access to Restricted Use Data: In the event of a positive determination, the applicant will be
 notified that their proposal has been accepted. The positive or final adverse determination
 concludes the SAP Portal process. In the instance of a positive determination, the data-owning
 agency (or agencies) will contact the applicant to provide instructions on the agency's security
 requirements that must be completed to gain access to the confidential data.

Lessons Learned Sessions and Feedback

Lessons learned sessions were held December 2022 through January 2023. Written feedback was also provided by some members. This feedback has also been incorporated into this report.

Sessions were held with the following groups:

- SAP Executive Subcommittee (Phase 2 steering committee)
- Implementation Working Group (an interagency working group)
- Stakeholder Engagement Working Group (an interagency working group)
- SAP Technical Contractor (University of Michigan ICPSR)

Topics covered included the following:

- Successes of Phase 2
- Challenges and roadblocks encountered in Phase 2
- Suggestions for Phase 3
- Overall project scope
- Communication, documentation, and tracking
- SAP Portal Management
- Requirements identification and management

The questions asked during the Lessons Learned sessions are included below the summary for each group.

SAP Executive Subcommittee

In Phase 2, the Interagency Council on Statistical Policy (ICSP) formed a subcommittee tasked with providing executive oversight of the SAP. The subcommittee included ICSP members, executive staff, and working group chairs. Members were chosen by their agencies. The Subcommittee included six agencies and OMB:

- 1. Economic Research Service (Department of Agriculture)
- 2. Energy Information Administration (Department of Energy)
- 3. Environmental Protection Agency (Department of the Interior)
- 4. National Center for Science and Engineering Statistics (National Science Foundation)
- 5. Office of Management and Budget
- 6. Statistics of Income Division (Internal Revenue Service)
- 7. U.S. Census Bureau (Department of Commerce)

The Executive Subcommittee met biweekly in Phase 2. They provided executive oversight, guidance for subcommittees, and approval for key project decisions. The working group chairs reported to the Executive Subcommittee, which provided high-level awareness of the project. Additionally, the Executive Subcommittee designated some of their members as "Executive Champions" for each working group. The Executive Champions collaborated with the working group chairs on decisions that involved potential major changes to the project, such as large-scale changes to scope, time, or cost. The Executive Champions provided feedback and iterated with the working group chairs and the PMO.

Overall – what went well?

The Executive Subcommittee noted the following as successes in Phase 2:

- Flow of information from the working groups: The group noted that regular updates received from the working groups were critical and helped keep the Executive Subcommittee updated and on task.
- Division of labor between the working groups and the Executive Subcommittee: The group noted the success of a model that allows the working groups to be autonomous and empowers them to handle most project decisions. The working groups worked fairly independently and reached out to the Executive Champions when facing major decisions or difficulties.
- Communication between the working groups: The PMO facilitated communication across the
 working groups and to the Executive Subcommittee. The PMO kept the working groups
 informed of complementary project activities (such as the ongoing development of the SAP
 Policy), which enhanced the group's effectiveness.
- Additional Roles of the Executive Subcommittee: The Executive Subcommittee saw one of their
 roles as "clearing the path" and absorbing some external input, so that those doing the day-today work are not discouraged. The Executive Champions made sure to translate high-level vision
 into actionable input for the working groups.

Overall – Challenges and Issues

The group discussed the following as areas needing further thought in Phase 3:

- SAP stakeholder engagement efforts should be integrated within a larger ICSP
 communications approach: The Executive Subcommittee noted that communications efforts
 should be integrated across the ICSP. This "system-wide" (i.e., Federal) communications
 apparatus would add value across the government, and SAP-related communications would be
 integrated within this larger effort.
- **Promoting the SAP across the federal government**: The group noted the achievements of Phase 2 (Portal launch, policy, and outreach efforts). The SAP has relevance to multiple ICSP efforts, and creating awareness of the SAP should be a priority for Phase 3. One member of the Executive Subcommittee suggested creating a "brand manager" or single point person for the SAP in Phase 3.
- **PMO Empowerment**: The group noted that early in Phase 3, the PMO will need clear guidance and expectations from the SAP Governance Board. The PMO should then have a high degree of empowerment to exercise judgment and work out details.
- Managing intra-project and inter-project efforts: The SAP is a complex effort that encompasses several moving parts. At the same time, executives must look beyond the immediate project to

consider how the SAP intersects with related efforts, including the National Secure Data Service (NSDS) and the forthcoming Access and Trust regulations. The Executive Subcommittee noted that the future Governance Board should have a two-fold purpose:

- Within-project oversight: This entails a focus on SAP operations. It includes oversight of the working groups, input on major decisions, and executive guidance of project work.
- O Broad vision across the Federal data ecosystem: This includes a focus of efforts beyond the SAP project and how they relate to the SAP. The larger vision will evolve – the NSDS and Access and Trust regulations are nascent at this stage but will become more clearly defined in the future. Likewise, how these efforts intersect and integrate with the SAP will evolve. One specific item noted by the Subcommittee is that the tiers of approval for the SAP (outlined in M 23-04) should align with the tiers in the forthcoming Access Regulation. A more structured approach to capture and document this alignment may be needed in the future.

Suggestions for the Future

The Subcommittee provided specific suggestions for the SAP Governance Board, which is slated to be stood up in March 2023.

- **Open discussion in meetings**: The group noted that some of their meetings were fairly structured in order to address priorities, and that there was not always sufficient time to expand on topics. Future meetings would ideally allow time to foster debate and open discussion.
- Early big picture thinking: The group noted that the project benefitted from their members'
 willingness to go beyond meeting the minimum statutory requirements and invest resources in
 developing an optimal product for end users. The overall effort benefitted from people's
 willingness to think big early on. The group emphasized that this should remain a priority for the
 Governance Board.
 - The group noted that the Governance Board may need support to estimate capacity in light of existing resources. Long-term budget needs need to be defined in a future phase.
- Division of labor: The Executive Subcommittee noted that the division of labor from Phase 2 should be maintained into Phase 3. Project work should be handled by the PMO and the working groups. The Executive Subcommittee emphasized that the PMO is where all project work is integrated, and it provides central coordination. The PMO's work should focus on managing work effectively, while the Governance Board's responsibility is defining the long-term vision of the SAP.
- **Two-way flow of information**: In addition to the above point, a two-way flow of information is needed to allow the PMO and the working groups to be effective and to ensure the Governance Board remains updated. This includes check-ins between the PMO and the Governance Board.
- Updated list of stakeholders and related efforts: The group noted that revisiting and compiling
 an updated list of stakeholders and related efforts would be helpful to Phase 3. Examples cited
 included NAIRR (National Artificial Intelligence Research Resource) and its final report. The
 group noted that a "map" of stakeholders and related efforts would be a helpful resource for
 the new Governance Board.

Decision-making

The group emphasized the effectiveness of the Executive Champion model and how it allowed for timely decision-making. They recommended that the Governance Board should consider their approach to decision-making early in Phase 3, including the use of Executive Champions.

The group further noted that the Governance Board is slated to meet less frequently (quarterly rather than biweekly), and thus planning an approach to timely decision-making has increased relevance. The Executive Subcommittee mentioned that they spent significant time early in Phase 2 developing their decision-making model, which included specifying which decisions could be made by Executive Champions and which needed to be raised to the full Subcommittee. The group emphasized that building trust and a common understanding of priorities was key to this effort, and that Phase 3 should build in time to replicate this.

SAP Governance Framework

Communicating the SAP, and its value as a public service, across the Federal government is both a challenge and a priority. Additional related efforts, such as the NSDS, are an extension of what has already been accomplished with the SAP. Efforts like the NSDS, the forthcoming Access and Trust Regulations, and the SAP are connected.

Portal Development

- **Project nomenclature**: There was confusion surrounding the different phases of the SAP and how to distinguish phases 1 and 2. Identifying this confusion and clarifying the project phases earlier on would have been helpful.
- Project reports: Visual milestones and project timelines were helpful to the Executive Subcommittee. More comprehensive tracking (i.e., of all project deliverables) would be helpful. Reports to the executive group should enable an understanding of where the project is headed and relevant timelines.

Implementation Working Group

In Phase 2, the Implementation Working Group (IWG) was responsible for technical implementation of the SAP Portal. The IWG had several significant achievements in Phase 2, including the following:

- Developed technical requirements for the SAP components outlined in the Evidence Act (CIPSEA 2018), including a Common Application Form, metadata specifications for the SAP metadata catalog, and Reporting and Tracking requirements.
- Guided development, testing, and public launch of the SAP metadata catalog.
- Uploaded metadata for over 1,000 confidential data assets, which enabled a searchable catalog of confidential data assets.
- Guided development, testing, and public launch of the SAP Portal. The SAP Portal began accepting applications from the public in December 2022.
- Provided input on documents required for SAP operating permissions, such as an SAP Portal Federal Register Notice, and completed a Common Form Information Collection Request.
- Provided input, feedback, and guidance to the technical contractor developing the SAP Portal (University of Michigan ICPSR).

The group met on a weekly basis. As needed, the IWG created subcommittees (generally 2-5 members) to handle detailed tasks. Over the course of Phase 2, the IWG created over 8 subcommittees.

The IWG included representatives from 16 Federal statistical agencies and units:

- 1. Bureau of Economic Analysis (Department of Commerce)
- 2. Bureau of Justice Statistics (Department of Justice)
- 3. Bureau of Labor Statistics (Department of Labor)
- 4. Bureau of Transportation Statistics (Department of Transportation)
- 5. Center for Behavioral Health Statistics and Quality (Department of Health and Human Services)
- 6. Economic Research Service (Department of Agriculture)
- 7. Energy Information Administration (Department of Energy)
- 8. Microeconomics Survey Unit (Federal Reserve Board)
- 9. National Agricultural Statistics Service (Department of Agriculture)
- 10. National Animal Health Monitoring System (Department of Agriculture)
- 11. National Center for Educational Statistics (Department of Education)
- 12. National Center for Health Statistics (Department of Health and Human Services)
- 13. National Center for Science and Engineering Statistics (National Science Foundation)
- 14. Office of Research, Evaluation, and Statistics (Social Security Administration)
- 15. Statistics of Income Division (Internal Revenue Service)
- 16. U.S. Census Bureau (Department of Commerce)

A Lessons Learned session was held with the IWG on January 9, 2023.

Overall - What went well?

The IWG noted that, overall, they achieved their core goals of developing technical requirements and overseeing SAP Portal development to a successful launch. The group highlighted the following areas as key factors in the success of Phase 2:

- Working together to achieve consensus: The group noted that federal statistical agencies and
 units are heterogenous and have a diverse set of needs and governing regulations. The group
 felt that, overall, their unique agencies' needs were heard, understood, and met to the extent
 possible. Key factors here were the agencies' willingness to be flexible and the PMO's
 commitment to listening and providing time and space for discussion.
- Coordination with other working groups and governance: The IWG felt they had clear and
 helpful coordination with the Policy and Stakeholder Engagement working groups. They
 remarked that having clearly defined roles for each working group freed them to focus only on
 technical implementation. The group also noted that governance was effective, particularly the
 Executive champions, Barry Johnson (IRS-SOI) and Tom Leckey (EIA). The Executive champions
 provided oversight while empowering the IWG to make decisions.
- Subcommittee structure: The IWG noted that subcommittees were highly effective in getting
 work done efficiently. Additionally, the small group setting allowed IWG members to get to
 know each other, which gave them a more in-depth understanding of each other's needs and
 allowed them to team build.
- **Communication**: The group reported that the PMO's handling of communication was helpful, thorough, and consistent; this allowed the group to have a good understanding of their

- timelines and the overall project status. The IWG also felt that the PMO served as an effective liaison between the technical contractor and the IWG. The IWG commented on the effectiveness of multiple lines of communication: meetings, emails, and meeting minutes.
- Virtual office hours: Towards the end of Phase 2, the PMO began holding regular office hours. These were staffed by the PMO, included the technical contractors, and were open to all IWG members. IWG members were invited to join and ask questions on any SAP-related topic. This allowed IWG members to ask questions and troubleshoot issues with the technical contractors. The IWG found this to be very helpful in resolving problems and getting a better understanding of the SAP Portal overall. [Note: The technical contractor, ICPSR, noted separately that the office hours were helpful to them in better understanding users' needs and agency-specific issues.]

Overall – Issues and Challenges

The IWG acknowledged that the SAP is a complex project and that there were multiple challenges in Phase 2. Many of the challenges were related to tracking (overall) and managing requirements. Challenges are detailed below:

- **Tracking**: The group noted multiple challenges around tracking.
 - o Issues: It was difficult to keep track of what issues had been reported to the technical contractor, what had not been reported to the technical contractor, and what the status of each issue was. Some members noted that resolution was unclear; they thought issues had been resolved, only to find out they had not. The group noted that the "Action items" table in the meeting minutes was helpful, but that this did not cover past action items (and did not track whether they were resolved or not).
 - To-do items for agencies: The group said it would be helpful to have a list of what agencies need to do and the deadlines for doing so. Additionally, the group would like information requests from the PMO to be consolidated to the extent possible; multiple emails during the week were difficult to track. The group also noted that due dates based on OMB guidance would have been helpful earlier in the process (in particular, for agencies that currently do not share data with external researchers).
- Change control: Similarly, the group found it difficult to keep track of what change requests had been submitted to the contractor and what the status of each change request was (pending, approved, in progress, completed, etc.).
- Requirements management and tracking: Early in Phase 2, IWG subcommittees developed written requirements for each of the major SAP components (Common Application, Reporting, Metadata Catalog, etc.). These requirements were submitted to the technical contractor. While the IWG found that their approach to developing the requirements was both efficient and effective [note: the contractor also commented that receiving detailed written requirements was helpful to their process], they pointed out that the requirements essentially "disappeared into a black hole" after they were delivered to the contractor. It would have been helpful to see updated versions of requirements as the contractors developed them and for any departure from the requirements to be documented. [Note: the contractor also said it would be helpful to maintain updated documentation for requirements as they were built out.]

- **Time to complete agency action items**: Some smaller agencies noted that, while communication was excellent, their agency needed more time to get approvals from leadership. Additional time to complete action items would be helpful for these agencies.
- Agency participation: One agency joined the IWG late in Phase 2. This agency suggested that the IWG (and the SAP Governance Board and PMO) ensure there is executive oversight to enforce agency participation. They noted that having alternate agency representatives could be another strategy to ensure an agency participates when the primary representative is unavailable.

The group further noted that communication with the technical contractor had at times been challenging. One example was given, which was that the contractor did not always seem sensitive to the fact that statistical agencies and units have statutory requirements that they are required to implement.

Suggestions for Phase 3

The group offered multiple suggestions for Phase 3.

- Watching recorded demos outside of meetings: In Phase 2, the IWG watched recorded demos from the technical contractor during their weekly meetings, followed by a live Q&A with ICPSR.
 The group noted that watching demos outside of the weekly meetings would allow more time for questions (and be more efficient overall).
- **Tracking**: The IWG suggested creating and maintaining spreadsheet trackers for some or all of the following:
 - Change requests: To track requests submitted by agencies and show the status of each request.
 - Issues: To track known issues and display the status of each item. (Note: there may be overlap in some cases between issues and change requests. The PMO will explore options for providing a clear and consolidated tracking spreadsheet, to the extent possible.)
 - To-do items for agencies: To list what agencies need to do and the deadlines for doing so.
- Requirements management: The IWG suggested implementing a system for requirements management; that is, documenting any changes made to requirements, recording any updates or changes made during development, and documenting any features or functionality not in place at initial release. An example here is in Phase 2: when the application system was released in the testing environment, it did not have the functionality both for text boxes and uploads for application fields. Since an agile approach is iterative in nature, it is to be expected that new features may represent an "MVP" (minimally viable product) that will be improved upon in future releases. However, the IWG noted that providing clear documentation would help with tracking and ensure they are able to provide focused feedback to the technical contractor.
 - More agile approach: In a similar vein, the IWG noted that while many aspects of the project were agile, some elements were more consistent with a waterfall approach. An example given was that the application and review systems were both delivered all at once, which the IWG found to be overwhelming. The IWG suggested more incremental releases, with the opportunity to view and provide feedback on smaller segments of the product (i.e., mockups and prototypes).

- Consolidated email communication: The IWG found the email communication to be excellent
 but pointed out that consolidating emails to the extent possible would be helpful (and easier for
 tracking purposes). The IWG noted that commenting on a SharePoint document reduces email
 traffic.
- **Program management plan**: During Phase 2, the PMO added full-time staff and developed project management processes in the middle of the project. The IWG suggested that having a plan in place to guide their movements would be beneficial.

Communication

The IWG commented that SharePoint was a valuable and helpful tool. They pointed out, however, that it has become difficult to navigate, with many files, including older versions of files. The PMO confirmed they are in the process of reviewing and clearing out the IWG document library.

The IWG noted that the meeting minutes were an excellent resource, but they do not lend themselves to searchability. A suggestion was made to combine meeting minutes into a searchable document once they are approved.

Portal Development

The IWG noted that the PMO was effective at keeping them informed of Portal development and that they appreciated seeing development timelines during the meetings.

The group reported that there were several instances where the technical contractor had clearly understood the requirements in a different way than the IWG intended. The IWG suggested specific measures to ensure that they and the contractor are aligned: a more agile approach (see above) as well as mockups and prototypes before a requirement is developed (i.e., to allow the IWG time to provide feedback).

Requirements identification

The IWG emphasized the importance of the subcommittees in developing Phase 2 requirements. This structure allowed subcommittees to handle the work efficiently while ensuring that the full IWG had visibility into the finalized requirement.

Requirements management

As stated earlier, the IWG noted that more tracking is needed here, specifically pointing out action items (which were recorded in the meeting minutes, but then the group would not receive updates for several weeks) and requirements (to show final decisions and implementation status).

Stakeholder Engagement Working Group

In Phase 2, the Stakeholder Engagement Working Group (SEWG) led and conducted stakeholder outreach. The group met on a biweekly basis. It had two standing subcommittees: one dedicated to agency engagement, one dedicated to web design and presentations. The subcommittees also met biweekly.

The SEWG had several achievements in Phase 2, including the following:

Developed an "<u>About SAP</u>" webpage

- Recruited participants for beta testing of the SAP Portal (over 50 test applications were submitted)
- Produced a Rollout package for agencies to use to announce Portal launch. This included a one-pager, suggested tweets, and email and newsletter templates.
- Developed a "What is the SAP?" video (This can be viewed on the webpage linked above.)
- Disseminated eblast emails with updates on the SAP

The SEWG included representatives from seven statistical agencies and units:

- 1. Bureau of Economic Analysis (Department of Commerce)
- 2. Bureau of Labor Statistics (Department of Labor)
- 3. Energy Information Administration (Department of Energy)
- 4. National Center for Science and Engineering Statistics (National Science Foundation)
- 5. Office of Research, Evaluation, and Statistics (Social Security Administration)
- 6. Statistics of Income Division (Internal Revenue Service)
- 7. U.S. Census Bureau (Department of Commerce)

A Lessons Learned session was held on December 15, 2022 to recap the successes and challenges of Phase 2.

Overall - What went well?

The group felt that they were successful in achieving their goals efficiently. Members commented that subcommittee meetings allowed them to handle detailed work effectively and that the meetings were well-organized, with clear agendas and helpful meeting minutes. They noted that having contractors with expertise in graphic design and communications [Aptive and Betah] brought substantial value to the group and the project.

Overall – What were the challenges or issues?

The group noted that defining the scope of stakeholder outreach needed further consideration in Phase 3, with a possibility to expand the scope. They noted that the SEWG in essence was tasked with disseminating two messages: using the SAP (i.e., individuals who already access or plan to access confidential data) and promoting the SAP in general (which might include targeting a new audience: individuals who may not be aware of the benefits of confidential data for their research or business). Other members commented that the same idea applied to agency outreach: in Phase 3, they might consider how the SAP will impact other [non-statistical] federal agencies.

The group noted that, in general, the group felt the SEWG handled challenges well and did not encounter major issues in Phase 2.

Scope

Defining an appropriate scope was a challenge in the beginning of Phase 2. Given the broad range of possibilities for stakeholder engagement, the group found it necessary to focus on achievable goals. In Phase 3, they will turn their sights to what was not in scope for Phase 2, pointing out a few examples: additional videos, user help and quick start guides, and canned presentations. As noted above, the group will also evaluate which groups of stakeholders they should target for outreach, keeping in mind

both data users and data providers. All reconsiderations of scope, however, will take place in light of OMB and ICSP priorities for the entire SAP project.

Clarifying the scope between the Implementation Working Group (IWG) and the SEWG was also highlighted as a consideration. While the purview of these two groups is clear, there were some instances of overlap in Phase 2 (e.g., disseminating sample text for agency website updates). The group noted that while overlap is not problematic, resources should be shared and clear updates given between the two groups. The SEWG should overall have visibility into all engagement efforts.

SAP Portal development (progress updates)

Most members felt that they were sufficiently aware of Portal development to be effective in their work on the SEWG. Several members of the SEWG also serve on the IWG, which oversees technical implementation of the SAP. These members were fully involved and kept updated on portal development. Other SEWG members noted that they generally felt informed through the updates given during SEWG meetings, although some mentioned that they had check-ins with colleagues or did additional legwork outside of meetings in order to be up-to-speed.

Meeting facilitators should continue to provide Portal updates in Phase 3.

Communication and Communication Tools

The biweekly meeting cadence was sufficient to handle SEWG topics. For Phase 3, the group may be able to reduce their cadence for some months when the workload is lower.

The group generally found the communication tools (SharePoint and email) helpful. They noted that over the course of Phase 2 SharePoint became more difficult to navigate as more items were added. Additionally, the volume of emails was at times overwhelming. The group suggests consolidating tasks and communication into fewer emails. SharePoint should also be organized to clearly label final versions and archive items that no longer need to be in the main folders.

Decision-making

While decision-making was generally handled smoothly and with timeliness, the group had some concerns about making decisions on behalf of agencies who were not represented in the SEWG. The group noted that the PMO should invite the IWG to share whether they had any concerns with the SEWG's decisions in Phase 2 and whether they would like the opportunity to weigh in on major engagement decisions in Phase 3.

SAP Portal Technical Contractor – University of Michigan ICPSR

In Phase 2, technical development of the SAP Portal was conducted by University of Michigan's Interuniversity Consortium for Political and Social Research (ICPSR), the development team. Technical development was managed by the National Center for Science and Engineering Statistics (NCSES, designated as the SAP PMO).

ICPSR and the SAP PMO (NCSES) met on a weekly basis to monitor the progress of the SAP Portal development.

Phase 2 milestones included the following:

- Development of the SAP Portal metadata catalog and metadata ingest system (by which agencies may upload metadata for their agency's confidential metadata assets).
- Development of the SAP Portal application system for receiving applications.
- Development of the SAP Portal review system for agencies to review submitted applications.

A Lessons Learned session was held on December 16, 2022 to recap the successes and challenges of Phase 2.

What went well in Phase 2?

The group felt user testing, office hour sessions, and receiving detailed Technical Requirement documents were critical to the project's success. User testing and office hours allowed the developer team to get valuable user feedback and information for improving the user experience and standardization across agencies. Collaborating to draft technical requirements provided the development team clarification and understanding of the agencies' needs.

What were some of the challenges on this project?

The high number of engaged stakeholders and their competing needs caused inevitable challenges. This led to many moving parts and having to adapt to new processes, team members, and how project communication was managed. The project evolved significantly during the two years of development in Phase 2, and the group noted the challenges inherent in creating a new portal and implementing (for the first time) a portal for all federal statistical agencies and units to receive applications for confidential data. Another challenge was that the SAP Policy was being developed at the same time as the system was being developed; this meant that complete legal requirements were not in place until the end of Phase 2. This required the team to stay agile and adapt when legal requirements impacted the functionality of the system.

What would you like to see done differently in Phase 3?

Using the policy and user feedback to frame decision making and having an established PMO for the portal development will be beneficial in Phase 3. Having an established PMO will allow for better planning, managing project documentation, and processes. One of the challenges previously mentioned was not having a finalized policy during Phase 2 development; in Phase 3 the policy can be used to inform portal development. Feedback from users and additional user testing will allow the development team to improve the usability of the system.

Requirements: What worked well, what were some of the challenges, and/or what could be done differently in Phase 3? (i.e., defining and managing requirements)

Collaborating to create the requirements was considered a success by the group. ICPSR being able to be involved in the process of creating the technical requirements and iterate on them was valuable for the portal development process. As previously mentioned, not having the policy to inform decision making during the requirements process was a challenge.

Design: What worked well, what were some of the challenges, and/or what could be done differently in Phase 3? (i.e., changes to the design, implementation, and user experience)

The group found the branding discrepancy (Research Data Gov/RDG vs Standard Application Process/SAP) to be a challenge in Phase 2, as well as decision making and finalizing designs. Providing mockups allowed the approval process of design towards the end of Phase 2 to work better.

Planning and Review: What worked well, what were some of the challenges, and/or what could be done differently in Phase 3? (i.e., prioritization, change requests, demos, and user feedback)

The group agreed that working with a prioritization list to determine priorities and prioritize tasks was helpful to overcome challenges when considering how the project was planned. Additionally, Trent's [ICPSR's Co-Principal Investigator] memos and beta testing were helpful for moving development along and understand the system's functionality.

Deployments: What worked well, what were some of the challenges, and/or what could be done differently in Phase 3? (i.e., timing, change requests, and communication)

Deployments improved over time as the project approached system release in December and users had greater familiarity with the system. Staying agile, using feedback forms, and scheduling were seen as helpful. Learning how to improve estimates with each deployment got better over time.

There were significant deployment challenges during beta testing, including the login process, which for agency testers required an incognito browser and which prevented users from accessing the system to test successfully on their first attempt. For the December release, the limited capability to support change requests for copy edits was a challenge; being able to accommodate changes with less lead time should be considered for Phase 3.

Communication: What should we start doing, stop doing, and/or continue doing in Phase 3?

For Phase 3 the group agreed that finding better ways to communicate and having different types of communication for different purposes are important. Considering ways to simplify how priorities are communicated and how approvals occur will improve the communication process and limit making decisions based on assumptions. Overall, there is room for improvement and for moving ICPSR and the PMO into better alignment on goals and priorities.

Project resources (tools): What tools should we start using, stop using, or continue using in Phase 3? (i.e., Smartsheet, Google Suite apps, MS Office apps)

Recommendations for improving the way project resources are used from the group included reconsidering the way SharePoint is used, whether there is a good alternative to SharePoint, and improving the way final versions of documents (i.e., technical requirements) are maintained and organized. As a group, maintaining the versioning of files and change control of documents could be improved in Phase 3.

Appendix

Below are the questions asked during the Executive Subcommittee Lessons Learned session.

- 1. What went well in Phase 2?
- 2. What issues or problems arose in Phase 2?
- 3. Share suggestions you have for the SAP Governance Board in Phase 3.
- 4. The SAP working groups have praised the Executive Committee's approach to decision-making, especially the Executive Champions. From your point of view, how was having Executive Champions helpful to decision-making? Overall, what factors were key for timely decision-making? What do you think could be useful for the Governance Board going forward?
- 5. The SAP is one of the flagship implementations of the Evidence Act, and its governance framework has been key in coordinating interagency engagement. What do you see as particular strengths of the SAP governance framework? What lessons have been learned from the SAP that can be applied to future interagency efforts like the NSDS?
- 6. Did you feel you were kept informed of SAP Portal development at an appropriate level? Were you sufficiently informed to provide updates to the ICSP and other stakeholders?

Below are the questions asked during the IWG Lessons Learned session.

- 1. Overall: What went well in Phase 2? Share 2-3 things you think went well.
- 2. *Overall*: What issues or problems arose in Phase 2? Share 2-3 problems or issues that stood out to you.
- 3. Overall: Share 2-3 suggestions you have for Phase 3.
- 4. *Communication*: What was most helpful to you in "keeping up" with IWG communication and tasks? What suggestions do you have for improving communication?
- 5. *Portal development*: Do you feel you were kept informed of portal development and progress? If so, what was helpful? If not, what do you think might be helpful?
- 6. Requirements identification: A key IWG achievement in Phase 2 was developing the technical requirements for a common application form. What helped the IWG be successful in this task? How could this process be improved?
- 7. Requirements management: In agile development, requirements are often defined in increasing detail as the project progresses, or the original requirements may be adjusted. In Phase 2, what was most helpful to you in keeping up with the current iteration of requirements? What else would be helpful?

Below are the questions asked during the SEWG Lessons Learned session.

- 1. What went well in Phase 2? Please share 2-3 examples.
- 2. What were some challenges that arose in Phase 2 for the SEWG?
- 3. How well was the scope for Phase 2 stakeholder engagement defined? What should the SEWG consider when revisiting its scope for Phase 3?
- 4. SAP Portal Development: Did you feel you had sufficient awareness of the SAP Portal and project for your work on stakeholder engagement? If so, what updates were helpful? What updates would be helpful to have in Phase 3?

- 5. Were the bi-weekly Thursday meetings helpful? What suggestions do you have for improvement? Were the subcommittee meetings helpful? How did you find the overall meeting cadence?
- 6. What communication tools (SharePoint, email, etc.) were most helpful? What other communication tools would be helpful?
- 7. What decision-making mechanisms were successful in Phase 2? Do you feel decision-making could be improved in Phase 3? What suggestions do you have?

Below are the questions asked during the University of Michigan-ICPSR Lessons Learned session.

- 1. What went well in Phase 2? Please share 2-3 examples.
- 2. What were some of the challenges on this project?
- 3. What would you like to see done differently in Phase 3?
- 4. Requirements: What worked well, what were some of the challenges, and/or what could be done differently in Phase 3? (i.e., defining and managing requirements)
- 5. Design: What worked well, what were some of the challenges, and/or what could be done differently in Phase 3? (i.e., changes to the design, implementation, and user experience)
- 6. Planning and Review: What worked well, what were some of the challenges, and/or what could be done differently in Phase 3? (i.e., prioritization, change requests, demos, and user feedback)
- 7. Deployments: What worked well, what were some of the challenges, and/or what could be done differently in Phase 3? (i.e., timing, change requests, and communication)
- 8. Communication: What should we start doing, stop doing, and/or continue doing in Phase 3?
- 9. Project resources (tools): What tools should we start using, stop using, or continue using in Phase 3? (i.e., Smartsheet, Google Suite apps, MS Office apps)