U.S. Department of the Interior
FY 2022 - 2026 Capacity Assessment

Maturity for Building Evidence

The [Foundations for Evidence-Based Policymaking Act of 2018](#) (Evidence Act) sets expectations that Federal agencies will improve decision-making by using the best available evidence. The Department of the Interior (DOI or the Department) continues to develop its evidence building capabilities, including assessing evidence, building maturity, and identifying current capabilities from which improvements in the upcoming years can be based. DOI is challenged to consistently assess the use of evidence across a widely distributed and diverse organization in which entities operate independently, differ in their missions and vocabularies around evidence, and vary in approaches, resources, capabilities, and perceptions of the purpose and use of evaluation and evidence.

To help characterize an agency's capacity for using evidence in their operations and decision-making, maturity models are described and used in assessments. DOI's maturity model for evidence defines capability levels with a scale consisting of five levels of increasing maturity from "Initiating" to "Innovating." Table 1 (below) describes characteristics of organizations that are operating at each of the following defined levels for a given outcome.

- Level 1 – Initiating: The activity may or may not achieve its purpose.
- Level 2 – Managed: The previously described activity is now implemented in a managed fashion (planned, monitored, and adjusted) and its work products are appropriately established, controlled, and maintained.
- Level 3 – Established: The previously described Managed activity is now implemented using a defined process that can achieve its outcomes.
- Level 4 – Predictable: The previously described Established activity now operates within defined limits to achieve its outcomes. Quantitative management needs are identified, measurement data are collected and analyzed, and corrective action is taken to address root causes of variation.
- Level 5 – Innovating: The previously described Predictable activity is now continually improved to respond to change aligned with organizational goals and requirements.

Table 1. Characteristics of the maturity levels of evidence, evaluation, and learning.

Level 1 – Initiating	Level 2 - Managed	Level 3 - Established	Level 4 - Predictable	Level 5 - Innovating
- Absence of evidence building activities - Lack of agreement regarding learning priorities - No current/ centralized list of evidence building activities - Uncertainty regarding stakeholders	- Partial leadership support - Engaged stakeholders - Limited strategies for conducting and using evaluations - Common lexicon	- Institutionalization of capacity building activities - Inclusive stakeholder engagement - Range of evidence building activities implemented - Results shared/ disseminated	- Support for building knowledge about/ capacity to use evaluation - Cross cutting activities with result shared externally - Consistency across evaluation activities - Prioritization of studies focused on effectiveness of key programs	- Evaluation activities directly support Learning Agenda and Annual Evaluation Plan - Evidence informs daily operations to support continuous improvement - Budget requests are built on sound evidence - Forward looking evaluation plans that reflect evaluation needs, capacity, activity, and results

As an essential component of implementing the Evidence Act and building maturity across the Department, DOI completed an initial capacity assessment over a two-month period in 2021. DOI's capacity assessment consisted of:

1. A survey of evidence leads in the DOI bureaus and offices; and
2. An independent assessment by DOI's Evaluation Officer team in the Office of Planning and Performance Management.

These two approaches were intended to establish a baseline of evidence capability and capacity. From this, the Office of Planning and Performance Management developed an evidence capacity maturity model and a plan that could improve DOI's evidence capacity over the next four years in alignment with the FY 2022-2026 DOI Strategic Plan.

Existing Knowledge of Current Evidence Capacity

Methods and Results

The Department assessed evidence and evaluation capacity from two perspectives. First, the Office of Planning and Performance Management asked the evidence leads within bureaus and offices to complete an organizational self-assessment. The evidence leads responded to a survey questionnaire to provide their perspective on their organization's evidence-building capacity. The survey included a Likert scale rating and as well as an option to provide a qualitative response to each question. This allowed each responding organization to include additional context on what would be needed to improve their evidence capacity in a specific area.

Each responding organization's evidence lead rated their organization's capacity by their level of agreement with the statements provided. The survey used a standard Likert numerical scale from one to five, where one signifies low to no agreement with a capability statement and five signifies strong agreement with a capability statement. Decimal responses were accepted. The below scores reflect cross-DOI ratings from 14 DOI entities on seven capability areas. Not all organizations responded to each capability statement. In those cases, aggregate ratings reflect fewer number of respondents. The average, self-reported "evidence capacity" score across the seven areas (with no weighting of one area over another) was 3.11. This rating is limited as it only indicates the evidence leads' perception of their own bureau or office capacity and not a holistic independent assessment of DOI's evidence capacity.

Table 2: Bureau evidence and evaluation capacity ratings

Capacity Survey Question*	Avg.
1. Our organization uses evaluations to support better management and improve decision making.	3.21
2. Our organization has the right resources (people, processes, technologies) in place to benefit from the use of evidence building activities.	3.07
3. Our organization uses a variety of evaluation types.	3.26
4. Our organization values evidence and is making progress towards becoming a data-driven organization.	3.31
5. Our organization is able to assist staff and program offices in using evaluations and data in day-to-day operations.	2.96
6. Our organization has an effective communication and reporting capability to review and disseminate findings.	3.50
7. Our organization measures outcomes, not just outputs.	2.83
Overall DOI Capability	3.11

*DOI developed the capacity survey statements in consideration of the criteria factors for capacity specified in the Evidence Act.
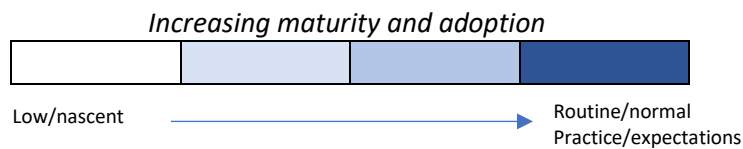
The second method of capacity assessment was the Evaluation Officer's judgment of evidence capacity. The Evaluation Officer tasked a third-party contractor to conduct deep dive research and analysis of the organization, asking open ended questions to learn more about processes relating to programming decisions, annual budget formulation, and communication from leadership. The analysts worked with the bureaus to review materials, including evaluations, and sought examples of how information was used in planning, decision-making, and the culture of evidence building in each organization. The Evaluation Officer's analyst assessment considered the information gleaned in these interviews, used the same scoring criteria, applied a consistent definition and standard for activities (i.e., evaluation), and

provided an independent score of DOI's coverage, quality, methods, effectiveness, and independence in the use of statistics, evaluation, research, and analysis as required by the Evidence Act. The Evaluation Officer and analyst reviewed the findings and determined a rating assessment from the observations, notes, and materials.

Table 3 summarizes the Evaluation Officer's assessment. A white box indicates the observation that either the area was low or nascent at the DOI or that the Evaluation Officer and analyst were unable to make an accurate determination. The light blue to dark blue boxes indicate the observation that there is a higher level of maturity or adoption on that characteristic. Many of the DOI organizations have robust capacity for research and analysis but are weaker in the use of statistics and evaluation.

Table 3. The Evaluation Officer's assessment of DOI's baseline capacities.

	Coverage	Quality	Methods	Effectiveness	Independence
Use of Statistics	(white)	(light blue)	(light blue)	(white)	(light blue)
Use of Evaluation	(white)	(dark blue)	(medium blue)	(white)	(medium blue)
Use of Research	(dark blue)	(dark blue)	(medium blue)	(dark blue)	(light blue)
Use of Analysis	(dark blue)	(light blue)	(medium blue)	(dark blue)	(light blue)

Increasing maturity and adoption

(white)	(light blue)	(medium blue)	(dark blue)

Low/nascent → Routine/normal Practice/expectations

Synthesis

The results of the assessment provide key insights into the evidence capacities – and gaps – for the Department of the Interior.

First, the self-assessment responses indicate that DOI organizations self-assess their capacity to use evidence and conduct evidence-building as variable, but moderate overall. The strongest average response was on the Department's value of evidence and desire to become better at using it. This is an excellent result that is foundational for progress. The lowest average score was for the focus on outputs rather than outcomes. Recognition of this challenge is a critical first step in developing a strategy to rectify it.

Second, the assessment by the Evaluation Officer team indicates that the maturity level is highly variable across categories. In conducting the deep dive interviews, it became clear that indeed, organizations were using information to make decisions and doing so across the breadth of the Department's mission and operational activities. However, there was a challenge in demonstrating, at the highest program levels, how evidence is used to affect strategic and programming decisions, resource allocations, or program or project improvements. The concept of evaluation, particularly "significant" or program-level evaluation, and hallmarks of quality evaluation, fell short of the Evidence Act standards. Some organizations viewed evaluation being annual management program review for cost and schedule needs for the coming year. Similarly, there was little evidence of using performance information to make decisions about program or project implementation, realignment, expansion, or potential rescoping or termination. Other organizations appeared to align the idea of evaluation with scientific study and publishing results (e.g., species disease in a specific area) as evaluation. Still others inspected facilities, updated policies, released surveys, held focus groups, and conducted other like operational activities. All

this work is important, and all are forms of evidence needed to make day to day decisions, demonstrate performance, or enable compliance with Federal requirements. However, the Office of Planning and Performance Management's Analyst found little evidence of evaluation and statistics, as a systematic and holistic review of evidence to assess effectiveness, equity, alignment to goals, coverage, and impact. Few used independent third parties, though there were some instances of program reviews, issues analysis, or process evaluations (often mandated) by external Federal organizations, the National Academies, or cross-cutting issues identified and assessed (with accompanying recommendations) by the Office of the Inspector General or Government Accountability Office.

Across the board, the Evaluation Officer determined that the use of evidence in decision making appeared strong at the day-to-day activity level, but DOI is less mature in overall capacity for use of information at higher project or program level and was especially weak in evaluation. This is not unexpected, as the emphasis on evaluation of programs and their associated products, services, delivery mechanisms, and such, is a relatively new requirement. In addition, evaluation has traditionally been associated with a high cost, long lead times to results, and not directly aligned to service delivery—attributes that conflict with the need to increase mission services despite flat budgets and decreased purchasing power. These findings are now driving DOI efforts at building awareness of the benefits of evaluation as a tool for enabling effective and equitable DOI mission delivery.

Combining the two streams of information, with a few caveats described below, we conclude that DOI's primary evidence capacity maturity gaps include:
1. Confusion over vocabulary around evidence, especially the term and use of program evaluation, confusion of the distinction between program audits and evaluations, and in different types of evidence.
2. Lack of skill in identifying mission or operational outcomes and evidence needs, building evidence, and how to use evidence to make decisions and drive change to meet those outcomes.
3. Lack of a broad, Department-wide capability for conducting or enabling evaluations. Independent, external evaluation is conducted only within some programs, some by engaged managers, or when mandated.
4. Lower awareness and capacity in methodologies, assessing the quality and utility of data, analyzing, and applying information, and in presenting or interpreting information. This gap exists even though knowledge of advanced analytics, statistics, fundamentals of research, and evaluation are evident in organizations, especially in scientific or analytical divisions within organizations. When conducted, the quality of evaluation and analysis appears to be high, but coverage across organizations is low.
5. Lack of strategic use of program evaluation to improve DOI programs.

The available evidence allows us to draw the preceding conclusions but are bounded by a few caveats. First, the sample size of self-evaluation was, due to capacity constraints, relatively small and focused on a select – though well-informed – sample of DOI. A broader survey of not just bureau evidence leads, but other users of evidence, across grades, occupational series, geographies, and other variables across DOI would provide additional insights that could alter our current interpretation. Second, to balance the depth of information gathered with capacity (time and resource) constraints, a relatively small set of questions were used in this initial assessment. Future assessments can broaden the set of questions and use a diversity of approaches (e.g., surveys, structured focus groups, and others) to get into details that will build the broad suite of evidence that DOI needs. Regardless of these caveats, the data provided critical information to begin charting the course to mature evidence capacity at DOI.

Maturing Evidence Capacity

Given the results and conclusions of this initial assessment, DOI can begin to chart a path forward for maturing our evidence capacity across the Department. This initial path includes three core steps: refined data, capacity building, and relationship building.

Refined Data

The baseline capacity self-assessments described above provided insights into overall strengths and weaknesses in conducting and benefitting from evidence building activities across DOI. However, as noted above, DOI could benefit from a more formal and strategically designed survey to benchmark DOI's progress against a standard Federal evidence and evaluation maturity model. A more robust and methodologically sound survey by informed respondents across the Department could be used to identify strengths, weaknesses, opportunities, and threats associated with the use of evidence and evaluation. This assessment would establish a baseline for measuring future improvements and assist DOI in understanding the state of current evidence building practices and in discovering, describing, and assessing the DOI evidence-building infrastructure.

Through a future, Department-wide survey, DOI could assess statistics, evaluation, research, and analysis work to better:

1. determine if evidence-building processes are supporting the decision-making needs of DOI and how they contribute to achievement of DOI strategic goals;
2. determine to what degree DOI policy and strategy guidelines are being met;
3. determine to what degree evidence-building activities conform to recognized standards, when applicable;
4. benchmark evidence-building process improvements against a DOI maturity model; and
5. provide a roadmap for future improvements in evaluation capacity to support DOI's Learning Agenda and Annual Evaluation Plan.

Capacity Building

To strengthen evidence building and evaluation capacity with a heavy emphasis on enabling program evaluation of the Department's programs and projects, DOI will require a dedicated evaluation specialist. The FY23 Budget includes funding for both an evaluation specialist and evaluation fund, to be overseen by the independent (to the implementing bureaus and offices) evaluator. The evaluator who will assist organizations with establishing an evaluation methodology, data and evidence needs for evaluation, and acquiring and overseeing qualified contracted evaluation services. By establishing a distinct fund, leadership can work with program offices to propose candidate activities for evaluation without diverting fiscal resources from ongoing operations, thus removing potential cost and skills barriers.

The Evaluation Officer continues to collaborate with the Chief Data Officer and Statistical Official to seek other means of strengthening a culture of evidence-based decision making. In addition, in coordination with the Statistical Official and Chief Data Officer, the new evaluator will work to ensure that evaluation data are transparent, open, and meets a high bar for statistical integrity and that evaluations are conducted in compliance with DOI's Evaluation Policy.

An evaluator will help assess evidence across DOI mission areas, including cross-cutting, cross-organizational outcomes and impacts such as climate change mitigation and response, economic development, diversity, equity, inclusion, and accessibility efforts, environmental justice, and balancing current land and water resource needs with stewardship and conservation. The evaluation specialist will:

- Identify evaluation requirements and opportunities for key programs and initiatives in the FY 2022-2026 DOI Learning Agenda;
- Assess and mature evaluation capability across the Department;
- Develop, coordinate, and conduct Department-wide evidence and evaluation trainings;
- Assist bureaus and offices in establishing their own evaluation policies, programs, and budget requirements for evaluation;
- Assist in developing requirements and solicitations and contracts for external evaluation;
- Help DOI organizations apply evaluation recommendations and findings to program management, project management, and risk management; and
- Work with the Statistical Official and Chief Data Officer to ensure data are available and can be organized to support evaluation and other statistical analyses.

Relationship Building

DOI's Evaluation Officer will continue close collaboration and relationship-building with staff in bureaus and offices to increase working knowledge of evidence and the value placed on evidence in decision making, and to support a culture where evidence-based decision making is a routine and standard practice. The Evaluation Officer will also continue efforts to broaden staff and leadership understanding of terminology in the evaluation field, knowledge building about forms of evidence, how each form of evidence can be applied across a project or program life cycle, and how evidence use benefits program managers. The Evaluation Officer will assist in developing bureau, office, and special action teams to develop coordinated evidence-building plans. The Office of Planning and Performance Management will further build on the established relationships with leaders of cross-cutting initiatives and Administration priorities and initiate conversations with organizations that have not been traditionally involved in performance and evidence-building conversations. DOI recognizes that leadership support for evaluation work is a crucial component to successfully building an evidence culture, and the Evaluation Officer will continue to engage in conversations with decision makers across the organization to advocate for evaluation work as tool that will help DOI perform.

DOI Current Evaluations and Analysis

The FY 2022-2026 DOI Learning Agenda identifies current evidence building activities. Evaluation work will follow the standards outlined in DOI's Evaluation Policy and OMB guidance M-20-12 for relevance and utility, rigor, independence and objectivity, transparency, and ethics, and the Evaluation Officer and Departmental offices may play a role in leading or supporting evaluations, particularly when they require cross-bureau coordination. The following is a list of Administration priority areas with planned evidence building and planned evaluations for FY 2022-2026.

Diversity, Equity, Inclusion, and Accessibility: DOI is conducting evidence building activities on visitors to public lands and barriers to accessing public lands; grants programs across DOI and specifically grants to tribes, tribes accessing grants, tools/mechanisms to distribute, educate, and share awareness of grants; and contracts to businesses and individuals from underserved communities. These address the Executive Order 13985 on DEIA, and results will inform DOI programs, policies, and regulations to better achieve DEIA outcomes. DOI has some demographic and population data that could be used in the evidence building, but with the demographic limitations for tribes, visitors, grantees, and contractors DOI will need to conduct extensive stakeholder outreach, surveys, and other data gathering.

Invasive Species, Wildland Fire, and International Species Conservation: DOI will evaluate the effectiveness of measuring outcomes of invasive species control, wildland fire recruitment, training, and retention strategy effectiveness, and the impact of DOI financial assistance on international species conservation. Congress and the public have shown great interest in achieving better outcomes in these areas and these evaluations will build on other evidence-building activities to address these issues. The evaluations will provide insight into where outcomes are best met and how to better allocate and direct resources.

Climate and Sustainability: The DOI Climate Action Plan and Sustainability Plan lay out a path to support people, communities, and cultural resources, build healthy watersheds and water supplies, conserve biodiversity and ecosystems, ensure the health of coastal and marine resources, and maintain the DOI infrastructure and facilities while reducing DOI's negative impact on the climate and planet. DOI will evaluate the effectiveness in select areas to look at the outcomes being achieved, leading practices, and where there are limitations. While many of these areas are currently being stood up and planned, evaluations will look at pilot programs and other new efforts to determine effectiveness. Data will come from these efforts and future data and evaluations will be planned.

Bipartisan Infrastructure Law: The Department is also assessing the need for establishing evaluation requirements and resources in assessing outcomes, effectiveness, alignment, outcomes, and impacts of the Bipartisan Infrastructure Legislation (BIL). The Evaluation Officer and team continues to coordinate with the BIL program manager and leadership team on the topic.