Artificial intelligence (AI) techniques are changing how government agencies do their work. Advances in AI hold out the promise of lowering the cost of completing government tasks and improving the quality, consistency, and predictability of agency decisions. But enhanced agency use of AI also raises important issues, such as: how agencies might best design algorithms; the risk that agencies’ adoption of AI will create or exacerbate undesired biases; the appropriate spheres of human and AI decisionmaking in administrative processes; the compatibility of AI decisionmaking with foundational administrative law concepts like transparency, accountability, and reasoned decisionmaking; and the need for adequate oversight of AI decisionmaking.

Throughout its existence, the Administrative Conference has addressed similar questions about agencies’ operations and processes. Consequently, many of the Administrative Conference’s past recommendations may help agencies in deciding how to make the best use of AI. But AI also presents agencies with new questions, or requires agencies to address existing questions in materially distinct contexts. That is why the Administrative Conference has developed this Statement. It offers a framework for agencies to use in thinking through some of the important questions presented by agencies’ uses of AI. The Statement draws on a pair of reports commissioned by the Administrative Conference, as well as the input of AI experts from

government, academia, and the private sector whose shared experiences suggest some pervasive
issues in agency use of AI.

The Statement highlights some of the important issues confronting agencies in their use
of AI. It identifies principles agencies should consider and apply in deciding when to use AI,
what type of AI to use, and how to develop, implement, and maintain a given AI technique.
Because agencies use AI in myriad and diverse ways, this Statement does not delve into specific
AI techniques. Instead, it focuses on broad considerations that should inform a wide variety of
agency uses of AI.

The considerations addressed in this Statement implicate law, policy, procurement,
finances, human resources, and technology. It is important, therefore, that agencies involve
officials from all relevant offices in formulating responses to the considerations addressed in this
Statement.

Further, many of the considerations addressed in this statement are interrelated. For
example, accountability, judicial review, and searches for biases in an agency’s AI all depend to
a large extent on transparency about the AI technique and how agency personnel interact with it.
Although this Statement addresses considerations separately for purposes of exposition, agencies
should be mindful about the extent to which addressing one consideration might affect others.

With these overarching principles in mind, the Administrative Conference believes that
the following, non-exhaustive set of considerations can provide a useful starting point for
agencies interested in making greater or different use of AI tools.

Transparency

It is important that agencies take transparency concerns seriously in developing and
deploying AI. The appropriate level or nature of transparency in an agency’s AI systems will

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2 In performing government functions, agencies will likely use both standalone AI techniques as well as AI
techniques embedded in commercial products. Agencies may have significantly less control over the design,
development, and, to some extent, use of embedded AI technologies, and thus different considerations may apply to
such technologies.
inevitably depend on context, including any applicable laws and policies governing disclosure of
information. For example, when an agency deploys AI in adjudication, the need to give regulated
parties a full explanation of the decisionmaking process may require a high degree of
transparency from the agency regarding how the AI functions. By contrast, when an agency uses
AI to make or assist in making enforcement decisions, the agency’s legitimate interest in
preventing gaming or adversarial learning by regulated parties could militate against the
agency’s publicly providing too much information (or specific types of information) about the
AI’s processes. Agencies should be sensitive to such context-based distinctions in evaluating
transparency in an AI.

Among other things, agencies should carefully consider to whom they should be
transparent and for what purposes. For instance, depending on the nature of its operations, an
agency might prioritize transparency to the public, courts, or its own officials. And the agency
might prioritize transparency in the service of various goals, such as legitimizing its AI tools,
facilitating internal and external review of its AI-based decisionmaking, or ensuring the smooth
coordination of its activities. Different types of AI are likely to serve some of these concerns
better than others, something agencies should bear in mind when thinking about whether and
how to employ particular AI techniques.

Transparency in AI can enhance accountability by yielding more reliable, verifiable, and
trustworthy agency decisionmaking processes. To that end, in choosing and using AI techniques,
agencies should be cognizant of the degree to which a particular AI technique is interpretable
and understandable by agency experts and explainable to appropriate stakeholders, including the
general public. At the same time, however, agencies should be aware that there may exist
tradeoffs between explainability and accuracy in AI. The appropriate balance between
explainability and accuracy will depend on the agency’s unique circumstances, including its
priorities when it comes to transparency.

It is also important for agencies to think about how they will explain decisions made by
their AI techniques. Technologies for explaining AI decisionmaking processes—commonly
called “explanatory AI” or “xAI”—are rapidly evolving. Different types of xAI offer different
ways of explaining certain AI techniques and some of those ways of explaining AI techniques may be more useful than others, depending on the technique involved and the level of explanation required. In deciding what type of AI techniques to employ, therefore, agencies should carefully consider the extent to which different techniques can be explained, and be mindful of the fact that the tradeoff between explainability and accuracy may often militate in favor of choosing simpler AI models.

In thinking about transparency issues in AI, agencies should also consider questions about intellectual property when procuring or using AI. When an agency’s AI technique relies on proprietary technologies or algorithms that the agency does not own, intellectual property protections can limit the agency’s and the public’s access to information that may allow it to understand or explain the AI technique. For that reason, agencies should work with outside providers to ensure they can use a given AI technique in a transparent and explainable fashion. Because intellectual property limitations can adversely affect an agency’s ability to be transparent about the AI techniques it uses, agencies may wish to consider adopting a preference for non-proprietary technologies, except when there is a clear and well-documented case that the advantages of using such technologies outweighs the costs in lower transparency and public credibility that may accompany reliance on proprietary technologies.

Judicial Review of AI Applications

Those who are affected by agency uses of AI may file lawsuits challenging the agency’s actions. For instance, when an agency adopts an AI technique that narrows the discretion of agency personnel or fixes or alters the legal rights and obligations of people subject to the agency’s action, affected people or entities might allege that the AI technique is a legislative rule and might sue the agency if the agency neglected to put the rule through the notice and comment processes the Administrative Procedure Act (APA) ordinarily requires for legislative rules. Determining whether an AI technique operates as a legislative rule—that is, whether it has the “force of law” by virtue of narrowing agency officials’ discretion or affecting the legal rights and obligations of regulated parties—may require analysis of the technical system and the interface design and policies guiding the system’s use by agency personnel. If such an analysis shows that

Commented [A4]: A commenter makes the following suggestion:

“Principles on the Review of AI Decisions should not be limited only to judicial review. While the adjudication/litigation context is important, in most circumstances, reviews of AI systems/use will be conducted by internal and external government entities. For instance, OIG, GAO, and congressional oversight and reviews are, in many respects, more prevalent and more detailed. While briefly touched on in the AI Audit section below, the reviews conducted by these entities typically go beyond traditional concepts of auditing, and operate more as an oversight role that impacts agency operations, sometimes more so than litigation.”
the AI technique might operate with the force of law, agencies should treat choices surrounding the AI technique as they would the formulation of a substantive rule, by prioritizing the need for technical expertise, public input, and reasoned, thoroughly-documented decisionmaking.

If, on the other hand, the agency’s analysis shows that the AI technique is merely being used to support, but not constrain, agency actions, the agency might elect not to treat the AI technique as a legislative rule, and might instead treat it as a manifestation of internal agency procedure and management. Before making that determination, agencies should ask themselves whether the AI technique operates within the zone of discretion left by the rule, and whether it leaves the substance of the rule intact. To the extent an agency can answer those questions in the affirmative, it is concomitantly less likely that litigation demanding compliance with notice and comment requirements will succeed. Even when an AI technique does not operate as a legislative rule, however, prioritizing the need for technical expertise, public input, and reasoned, thoroughly-documented decisionmaking will often be advisable.

Agency use of AI techniques might also lead to litigation in cases where parties affected by an agency’s use of an AI technique allege that the AI technique violated their rights to procedural due process. Courts would analyze such challenges under the three-part balancing framework set forth in Mathews v. Eldridge, which inquires after (1) “the private interest that will be affected by the official action;” (2) “the risk of an erroneous deprivation of such interest through the procedures used, and the probable value, if any, of additional procedural safeguards;” and (3) “the Government’s interest, including the function involved and the fiscal and administrative burdens that the additional or substitute procedural requirement would entail.” Some AI techniques will fare well under that framework, particularly when they deliver more accurate decisionmaking at lower costs to agencies. Even if an AI technique does not violate people’s rights to due process as a matter of law, however, the concerns that animate due process—like reasoned decisionmaking, transparency, and predictability—will often be highly relevant, as a policy matter, to agencies’ decisions about employing different AI techniques.

3 424 U.S. 319, 335 (1976).
Agency uses of AI may also result in lawsuits alleging violations of the APA’s prohibition on agency actions that are “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” In adjudicating such lawsuits, courts will consider whether the AI decision “relied on factors on which Congress has not intended [the agency] to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” Complying with that standard will presumably require that agencies be able to (1) articulate what the relevant factors are, (2) demonstrate that the AI technique is designed to take them into account, and (3) that the AI technique accounts for the relevant factors in a way that is reasonable under the circumstances.

Performance Evaluation and Oversight

Because AI is developed by fallible humans, flaws in AI techniques are inevitable, especially as the techniques become more complex. In evaluating and overseeing their AI techniques, however, agencies should not necessarily let the discovery of defects dissuade them from continuing to use the techniques. Agencies should be mindful that the relevant evaluation is always a comparative one; the ultimate question is whether the AI technique fares better than human decisionmakers.

To identify and correct for flaws in their AI techniques, agencies should rely on a variety of evaluation and oversight mechanisms, both internal and external. Among these, agencies should ordinarily prioritize methods that address the types of systematic errors that sometimes plague AI techniques.

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6 The extent to which courts do or ought to probe agencies’ rationales in relying on something like an AI technique is the subject of considerable debate. This Statement does not purport to address that debate, save for acknowledging that it exists.
Among external evaluation and oversight mechanisms, litigation may not be especially effective at correcting the sorts of systematic errors that are common in different AI techniques. To be sure, some litigants may challenge the use of an AI technique across a whole class of cases, and such litigation might serve as an important external check on systematic flaws in AI. But many litigants will only seek relief in the form of a remedy in their individual cases, so that those lawsuits may not be an especially effective check on systematic errors. Moreover, traditional administrative law doctrines can make it difficult for litigants to obtain review many types of agency decisionmaking that might be plagued by systematic errors. Deferential standards of review limit the extent to which courts can require agencies to use particular methods for making decisions. And doctrines about agencies’ enforcement discretion effectively hive off most enforcement decisions from judicial review. Consequently, when it comes to correcting systematic errors resulting from AI techniques, agencies should look beyond judicial review in individual cases.

That may be particularly so given that many considerations relating to agencies’ uses of AI that are not cognizable on judicial review may nevertheless implicate important administrative law considerations, such as reasoned decisionmaking, fairness, and providing an opportunity to be heard. By employing rigorous and thoughtful evaluation and oversight of the selection and application of chosen AI techniques, agencies can build public support for themselves and their uses of AI techniques and increase perceptions of such techniques as legitimate and fair.

Regular evaluation and oversight of AI techniques, throughout the techniques’ lifespans, is especially important. Agencies should account for the need for such evaluation and oversight early on, even during the procurement process, so that they can negotiate agreements that allow them to avoid the intellectual property issues that might make it difficult for agencies and others to evaluate and oversee AI techniques. Once an agency has procured an AI system, it should establish a plan for regularly evaluating the AI system, particularly if the system or the circumstances in which it is deployed are liable to change over time. For instance, if an agency’s AI technique uses unlocked models—that is, models that continuously update themselves—the
consequence will be a dynamic algorithm, constantly changing over time. With AI techniques based on unlocked models, review and explanation of the algorithm’s functioning at one stage of development or use may quickly become outdated due to substantive changes in the algorithm’s underlying models. These changes can operate in two directions: they can cause problems or eliminate them. For the agency to know how its AI technique is functioning, however, regular evaluation and oversight is imperative so that the agency can become aware of deficiencies in the technique before those deficiencies create widespread problems.

**Evaluation and oversight of agencies’ uses of AI will often be internal, but it is important** that agencies also consider how they can effectively solicit external input about their AI. In addition to providing agencies with a more diverse set of perspectives for identifying potential problems with the AI, external evaluations and oversight of agency AI uses can also help legitimize those uses in the eyes of both those who are affected and those who will conduct oversight reviews of the agency’s work. Agencies might obtain such evaluations by contracting for them. Alternatively, agencies could submit their AI techniques to public comment and thereby obtain outside input on them.

In evaluating their uses of different kinds of AI, agencies should beware that AI systems can affect how agency staff do their jobs, particularly as staff grow to trust and rely on the systems. Automation bias, the tendency of non-experts to be overly deferential to decisions made by computers, is a well-documented problem, particularly in circumstances where agency decisionmakers face heavy workloads. In addition to evaluating and overseeing their AI technologies, therefore, agencies should pay attention to how agency staff uses those technologies and whether the technologies might be impairing staff’s performance of other job functions. Along the same lines, agencies should consider how AI might affect their staffing needs.

Agencies should ensure that they have plans for evaluating their AI techniques and that officials at the agency respond to what is learned from the evaluation. The Administrative Conference recognizes that the resource implications for implementing life-cycle AI evaluation are potentially substantial. However, given the increasing importance of AI to a wide range of

Commented [A6]: A commenter suggests that what’s missing before this paragraph is guidance about internal quality assurance systems distinct from procured AI — ideally something similar to the range of quality assurance / quality improvement programs in the human context. The commenter cites a piece co-authored by one of the project consultants. See https://www.stanfordlawreview.org/print/article/due-process-and-mass-adjudication/

What’s important, the commenter points out, is that we have an internal administrative and internal due process to make sure that AI systems are developed and maintained and benchmarked. The statement might make that point by including a paragraph about internal oversight that integrates the next paragraph (about the sociotechnical dimension in this) before external oversight.
Agencies, such investments are critical to enabling AI to meet challenges now and in the future. Agencies should take care to allow sufficient time, resources, and structure to ensure that reviews of AI uses are adequate.

**Unintended Bias**

As with human decisionmaking, AI techniques can be biased. Although AI can help agencies identify and reduce the impact of human biases, it can also unintentionally create or exacerbate those biases by encoding and deploying them at scale. In deciding whether and how to deploy an AI technique, therefore, agencies should carefully evaluate whether the technique is likely to create or exacerbate unintended biases more than the human decisionmaker it might replace. In conducting that evaluation, agencies should also be cognizant that biases have different consequences in different contexts, meaning the consequences of certain types of AI-related biases will be different depending on the nature of the decisions the AI is tasked with making.

Unintended biases can creep into an AI tool or system in several ways, including:

- Using training data that includes biased human decisions or reflects historical or social inequities;
- Defining an AI technique’s target variable and the associated class labels in ways that reflect biases;
- Developing models that reflect biases, such as in the choice of attributes an AI technique observes and folds into its analysis;
- Using flawed data sampling, in which groups are over- or under-represented in training data; and
- Applying an AI technique in one setting even though it was trained on data from a materially different setting.

Biases from these and other sources can propagate over time through feedback loops, whereby the use of a biased AI technique creates more biases, which are then reflected in the data the technique uses to make future decisions. In seeking out biases in AI techniques, agencies...
should be mindful of the interdependence of AI and the models, metrics, and data that underpin it.

There may be some cases where identifying biases in given AI techniques is especially difficult, for instance when protected attribute information is not directly available. In such cases, rather than abandoning attempts to identify and mitigate biases, agencies should try to make use of other available methods, such as record linkage or imputation. In deciding which alternative methods to attempt, agencies should be mindful of their obligations to explain their decisionmaking regarding AI—to courts, Congress, and the public.

It is possible that certain interventions that correct for systematic biases in AI techniques will lead to challenges on equal protection grounds. Despite those risks, agencies should work diligently to identify and mitigate unintended biases in the AI techniques they use. Doing so will require agencies and their personnel to stay up to date on developments in the field of AI, particularly on algorithmic fairness; establish processes to ensure that people with diverse perspectives are able to inspect the AI and its decisions for hints of unintended bias; test algorithms in regimes resembling the ones in which they will be used; and make use of technical and external tools, such as red teams and third-party audits, to supplement internal agency processes for evaluating bias risks in AI systems.

Technical Capacity and Contracting

Implementing AI techniques may help agencies conserve scarce resources. But it can also require a major investment of human and financial capital—both in procuring or developing an AI system and also in maintaining it. Agencies should carefully evaluate the short- and long-term costs and benefits of an AI before committing to it.

The costs of developing an AI tool will depend in part on whether the agency creates it internally or procures it from an external source. There are different benefits and drawbacks to each approach. The decision to buy an AI system from an external source might allow the agency to acquire a more sophisticated tool than it could design on its own, to acquire a tool in a more efficient timeframe, and to save some of the up-front costs associated with developing the
technical capacity needed to design an AI system. The decision to create an AI tool within the agency, by contrast, may yield a tool that is better tailored to the agency’s particular tasks and more compliant with the agency’s policy aims. Creating an AI system within the agency can also provide an impetus for the agency to develop internal technical capacity, which can yield benefits during the lifetime of the AI system and can also be exploited in other technological contexts.

The appropriate answer to the “make or buy” question regarding AI will ultimately depend on the agency’s unique circumstances. To ensure an informed decision, an agency should involve personnel from all of the relevant offices—including at least personnel involved in the agency’s legal, policy, procurement, financial, human resources, and technology offices—are consulted, because decisions about implementing or modifying a particular AI technique can have implications for all of those agency functions. The same is true with respect to decisions about how to structure agreements for procuring or modifying AI techniques. Agencies can minimize the risk of unforeseen problems by making sure that all of their affected units are heard in the course of making decisions about the agency’s uses of AI.

Because it takes a high level of technical sophistication to make an intelligent decision about whether to make or buy AI, agencies facing that choice should ensure they have access to the relevant technical expertise. Given the relative dearth of experts in the emerging field of AI as well as the field’s ongoing and rapid development, agencies should be prepared to expend the financial and human resources to make sure their decision about obtaining AI is well-informed by people with the requisite knowledge.

In some cases, agency personnel will, themselves, lack the skill to build an AI system that meets the agency’s needs. In those cases, agencies should consider other means of quickly expanding their technical expertise, including by relying on tools like the Intergovernmental Personnel Act, prize awards, or cooperative research and development agreements with private

Commented [A7]: Some commenters have suggested that this language is likely to become dated.
institutions or universities. Additionally, agencies should prioritize cultivating an AI-ready workforce, including through recruitment and training efforts that emphasize AI skills.

An agency that elects to purchase an AI tool from an external source rather than building it in-house should still invest in developing their internal capacity to make sound decisions about the type of AI the agency requires, how to integrate that AI system into the agency’s information technology resources, and how to maintain the system once operational. It is important, for example, that the agency personnel who negotiate the purchase agreement know enough about AI so that they can reasonably foresee what information the agency might need about the AI’s functioning in the future. Armed with such knowledge, agency personnel should make sure that any agreement they sign to procure AI allows them access to the information they will need to provide about the AI.

Agencies that are uncertain about whether they have the internal resources to make fully informed decisions about building or contracting for AI should avail themselves of other government offices that exist to help with such decisions.

Delegation and Accountability

Agencies that use AI may also confront issues involving purported delegations of agency authority. An agency that relies on an AI technique might, for instance, be thought of as delegating its own authority to the technique or to the designer of the technique. From a legal standpoint, such purported delegations seem unlikely to create legal difficulties. They are akin to an agency’s using a model or formula as a basis for decisions. So long as the agency can explain

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7 For example, the Food and Drug Administration’s Centers of Excellence in Regulatory Science and Innovation (CERSIs) are collaborations between FDA and academic institutions to advance regulatory science through innovative research, training, and scientific exchanges. They have yielded considerable AI-related benefits in the medical device field.

8 Within the General Services Administration, for example, the office called 18F routinely partners with government agencies to help them build and buy technologies. Similarly, the United States Digital Service has a staff of technologists whose job is to help agencies build better technological tools. While the two entities have different approaches—18F acts more like an information intermediary and the Digital Service serves as an alternative source for information technology contracts—both models could be effective, if built out, in aiding agencies with obtaining, developing, and using different AI techniques.
how a model works and why the agency reasonably chose to use that model, such agency practices have never been thought of as implicating nettlesome delegation questions under the law. The same holds true for agency uses of AI techniques.

The more interesting delegation questions confronting agencies that use AI are ones the law does not yet resolve. In particular, agency uses of AI techniques can raise questions about the extent to which regulated parties are entitled to human decisionmaking, rather than computerized decisionmaking. While courts have yet to interpret the APA or other statutes to forbid computerized decisionmaking, values of transparency, accountability, and due process will, in some cases, weigh in favor of at least providing human oversight to check and confirm AI determinations.

A related type of delegation question involves internal and informal administrative law. When an agency creates or uses an AI technique, the effect of doing so can be to shift discretion around within the agency. In some cases, agency use of AI techniques can increase managerial control by systematizing and regularizing certain determinations. At the same time, agency use of AI techniques can also have the effect of increasing the power of agency technologists, particularly as the AI in question becomes more complex and less intelligible to non-experts. Agencies should be aware of these potential shifts of authority and, where appropriate, take steps to ensure that appropriate officials have the knowledge and power to be accountable for decisions that are made or aided by AI techniques.

Data Collection and Standardization

To enable their AI, agencies must collect or obtain data, often in vast quantities. In collecting and organizing that data, agencies should consider (1) whether they have the appropriate data set, meaning it reflects conditions similar to the ones the AI will address in practice; (2) whether the data is in a form that is usable without an excessive amount of labor, and (3) how the agency ensures that the data it collects is maintained and linked to the AI.

Agencies stand to benefit greatly from large and broad pools of data collected and stored in usable forms. To enhance the availability of such data, agencies may wish to consider...
collaborating to advance the [Federal Data Strategy], which encourages agencies to “[adopt or adapt, create as needed, and implement data standards within relevant communities of interest to maximize data quality and facilitate use, access, sharing, and interoperability.” Given agencies’ unique data needs, such collaboration in standardizing data will not always be practicable, but it is something to which agencies might aspire.

Privacy

Agencies have a responsibility to protect privacy when an AI system creates, collects, uses, processes, stores, maintains, disseminates, discloses, or disposes of personally identifiable information. Although this responsibility is not unique to AI, it adds an additional layer of analysis, which may impact the issues described above. In a narrow sense, it means complying with specific legal and policy requirements related to, for example, transparency, due process, accountability, and information quality and integrity, established by the Privacy Act of 1974, Section 208 of the E-Government Act of 2002, and other laws and policies.9 In a broader sense, it means recognizing and appropriately managing any privacy risks present in an AI system, especially those of a unique or heightened nature. Agencies should consider privacy risks throughout the entire system development life cycle and assess those risks, as well as associated controls, on an on-going basis. Office of Management and Budget (OMB) Circular A-130, Managing Information as a Strategic Resource (July 28, 2016), National Institute of Standards and Technology (NIST) Special Publication SP-800-37 revision 2, Risk Management Framework for Information Systems and Organizations: A System Lifecycle Approach for Security and Privacy (Dec. 2018), and related documents establish a Risk Management Framework for agencies to utilize when implementing an AI system.

Potential Projects for the Administrative Conference Regarding AI

9 See, e.g. 5 U.S.C. § 552(a)(e), (g), & (p); 44 U.S.C. § 3501 note.