



ADMINISTRATIVE CONFERENCE OF THE UNITED STATES

## Artificial Intelligence Algorithmic Tools in Retrospective Review of Agency Rules

### Committee on Regulation

#### Proposed Recommendation from Committee | April 12, 2023

1 Retrospective review is the process by which agencies assess existing rules and decide  
2 whether they need to be revisited. Consistent with longstanding executive-branch policy, the  
3 Administrative Conference has endorsed the practice of retrospective review of agency rules  
4 (including those that incorporate standards by reference), encouraged regulatory agencies to  
5 cultivate a culture of retrospective review, and urged agencies to establish plans to conduct  
6 retrospective reviews periodically.<sup>1</sup> The Conference has also recognized, however, that agencies  
7 often have limited resources available to conduct retrospective reviews. To encourage agencies  
8 to undertake retrospective reviews despite resource limitations, the Conference has identified  
9 opportunities for agencies to conserve resources, for example by taking advantage of internal and  
10 external sources of information and expertise.<sup>2</sup>

11 New technologies may offer additional opportunities for agencies to conserve resources  
12 and conduct more robust retrospective review in a cost-effective manner. Most significantly,  
13 algorithmic tools may enable agencies to automate some tasks associated with retrospective  
14 review. An algorithmic tool is a computerized process that uses a series of rules or inferences  
15 drawn from data to transform specified inputs into outputs to make decisions or support decision  
16 making.<sup>3</sup> The use of such tools may also help agencies identify issues that they otherwise might

<sup>1</sup> See, e.g., Admin. Conf. of the U.S., Recommendation 2021-2, *Periodic Retrospective Review*, 86 Fed. Reg. 36,080 (July 8, 2021); Admin. Conf. of the U.S., Recommendation 2017-6, *Learning from Regulatory Experience*, 82 Fed. Reg. 61,783 (Dec. 29, 2017); Admin. Conf. of the U.S., Recommendation 2014-5, *Retrospective Review of Agency Rules*, 79 Fed. Reg. 75,114 (Dec. 17, 2014); Admin. Conf. of the U.S., Recommendation 2011-5, *Incorporation by Reference*, 77 Fed. Reg. 2257 (Jan. 17, 2012); Recommendation 95-3, *Review of Existing Agency Regulations*, 60 Fed. Reg. 43,108 (Aug. 18, 1995).

<sup>2</sup> Admin. Conf. of the U.S., Recommendation 2014-5, *Retrospective Review of Agency Rules*, 79 Fed. Reg. 75,114 (Dec. 17, 2014).

<sup>3</sup> Algorithmic tools include, but are not limited to, applications that use artificial intelligence techniques.

Commented [RC1]: Proposed Amendment from Regulation Committee:

The Committee voted to replace the original title of this Recommendation (*Artificial Intelligence in Retrospective Review of Agency Rules*).

DRAFT April 28, 2023



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17 not detect. The General Services Administration (GSA) and several other agencies have already  
18 begun experimenting with the use of algorithmic tools to conduct some tasks in service of  
19 retrospective review or similar functions.<sup>4</sup>

20 Although algorithmic tools hold out the promise of lowering the cost of completing  
21 governmental tasks and improving the quality, consistency, and predictability of agencies'  
22 decisions, agencies' use of algorithmic tools also raises important concerns.<sup>5</sup> Statutes, executive  
23 orders, and agency policies highlight many such concerns.<sup>6</sup> In a prior Statement, the Conference  
24 itself described concerns about transparency (especially given the proprietary nature of some  
25 artificial intelligence (AI) systems), harmful bias, technical capacity, procurement, data usage  
26 and storage, privacy, security, and the full or partial displacement of human decision making and  
27 discretion that may arise when agencies rely on AI tools.<sup>7</sup> There are also practical challenges  
28 associated with algorithmic tools—including the potentially high startup costs associated with  
29 developing or procuring them, the need to develop internal capacity and expertise to use them  
30 appropriately, related needs in staffing and training, and the need for ongoing maintenance and  
31 oversight—which may lead agencies to rely on the algorithmic tools developed and used by GSA  
32 and other agencies.

33 The Conference recognizes that agencies may be able to leverage algorithmic tools to  
34 more efficiently, cost-effectively, and accurately identify rules (including those that incorporate  
35 standards by reference), that are outmoded or redundant, contain typographic errors or inaccurate  
36 cross-references, or might benefit from resolving issues with intersecting or overlapping rules or  
37 standards. Because agencies have only recently begun using algorithmic tools to support

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<sup>4</sup> Catherine M. Sharkey, *Algorithmic Retrospective Review of Agency Rules* (Mar. 1, 2022) (draft report to the Admin. Conf. of the U.S.).

<sup>5</sup> David Freeman Engstrom, Daniel E. Ho, Catherine M. Sharkey & Mariano-Florentino Cuéllar, *Government by Algorithm: Artificial Intelligence in Federal Administrative Agencies* (Feb. 2020) (report to the Admin. Conf. of the U.S.).

<sup>6</sup> See, e.g., AI Training Act, Pub. L. No. 117-207, 136 Stat. 2237 (Oct. 17, 2022); Exec. Order No. 14,091, *Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*, 88 Fed. Reg. 10,825 (Feb. 16, 2023); Exec. Order No. 13,960, *Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government*, 85 Fed. Reg. 78,939 (Dec. 3, 2020); Exec. Order No. 13,859, *Maintaining American Leadership in Artificial Intelligence*, 84 Fed. Reg. 3967 (Feb. 11, 2019).

<sup>7</sup> Admin. Conf. of the U.S., *Statement #20, Agency Use of Artificial Intelligence*, 86 Fed. Reg. 6616 (Jan. 22, 2021).



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38 retrospective review, this Recommendation does not address the potential use of those tools to  
39 perform more complex tasks—such as identifying rules that may need to be modified,  
40 strengthened, or eliminated to better achieve statutory goals or reduce regulatory burdens—for  
41 which the potential risks and benefits are still unclear and which may raise additional issues  
42 regarding agency decision making, including those highlighted above. This Recommendation  
43 offers best practices for agencies to acquire, use, and assess algorithmic tools for retrospective  
44 review in a way that accords with applicable legal requirements and promotes accuracy,  
45 efficiency, transparency, and accountability.

### RECOMMENDATION

- 46 1. Agencies should assess whether they can use algorithmic tools to more efficiently, cost-  
47 effectively, and accurately identify rules (including those that incorporate standards by  
48 reference), that are outmoded or redundant, contain typographic errors or inaccurate  
49 cross-references, or might benefit from resolving issues with intersecting or overlapping  
50 rules or standards.
- 51 2. When agencies contemplate using an algorithmic tool to support retrospective review,  
52 they should consider whether it would be most efficient, cost-effective, and accurate to  
53 develop a new tool in-house, implement a tool developed and made available by another  
54 agency, or procure a tool from a commercial vendor or contractor. In making this  
55 determination, agencies should assess whether there is an existing tool that meets their  
56 needs and, in so doing, consult with other agencies that have experience using  
57 algorithmic tools to support retrospective review. If there is no such tool, agencies should  
58 consider whether they have sufficient in-house expertise and capacity to develop an  
59 adequate tool.
- 60 3. Agencies should ensure that regulatory decision makers who use algorithmic tools to  
61 support retrospective review (a) have adequate training on the capabilities and risks of  
62 those tools and (b) carefully assess the output for further consideration.
- 63 4. To promote transparency and build internal expertise, agencies should, when developing  
64 or selecting an algorithmic tool to support retrospective review, ensure that the source



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- 65 code for the tool is publicly available and interoperable with other government systems.  
66 If agencies do not use an algorithmic tool that is open-source, they should ensure that key  
67 information about the tool’s development, operation, and use is available to agency  
68 personnel and the public.
- 69 5. When agencies publish retrospective review plans and descriptions of specific  
70 retrospective reviews, as described in Recommendation 2021-2, *Periodic Retrospective*  
71 *Review*, they should disclose whether, and if so, explain how, they plan to use or used  
72 algorithmic tools to support retrospective review. Additionally, when agencies  
73 incorporate retrospective reviews in their Learning Agendas and Annual Evaluation  
74 Plans, as described in Recommendation 2021-2, they should include information about  
75 the use of algorithmic tools.
- 76 6. When the analysis deriving from a retrospective review using an algorithmic tool will  
77 influence a new rulemaking, agencies should be transparent about their use of the tool  
78 and explain how the tool contributed to the decision to develop the new rule.
- 79 7. The General Services Administration should continue to explore options for developing,  
80 acquiring, and using algorithmic tools to support retrospective review and share its  
81 findings and capabilities with other agencies.
- 82 8. The Office of Management and Budget should provide guidance on the use of  
83 algorithmic tools to support retrospective review.
- 84 9. Agencies should share their experiences in using these tools and, to manage risk and  
85 monitor internal processes, consider developing their own internal evaluation and  
86 oversight mechanisms for algorithmic tools used in retrospective review, both for initial  
87 approval of a tool and, as applicable, for regular oversight of the tool.