



Artificial Intelligence in Retrospective Review of Agency Rules

Committee on Regulation

Draft Recommendation for Committee | March 8, 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 encouraged regulatory agencies to cultivate a culture of retrospective review, and urged agencies
5 to establish plans to conduct retrospective reviews periodically.¹ The Conference has also
6 recognized, however, that agencies often have limited resources available to conduct
7 retrospective reviews. To encourage agencies to undertake retrospective reviews despite resource
8 limitations, the Conference has identified opportunities for agencies to conserve resources, for
9 example by taking advantage of internal and external sources of information and expertise.²

10 New technologies may offer additional opportunities for agencies to conserve resources
11 and conduct more robust retrospective review in a cost-effective manner. Most significantly,
12 algorithmic tools, including those that use artificial intelligence (AI) techniques, may enable
13 agencies to automate some tasks associated with retrospective review. The use of such tools may
14 also help agencies identify issues that they otherwise might not detect. Several agencies have
15 already begun experimenting with the use of algorithmic tools to conduct some tasks in service
16 of retrospective review or similar functions.³

¹ See 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); Recommendation 95-3, *Review of Existing Agency Regulations*, 60 Fed. Reg. 43,108 (Aug. 18, 1995).

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

³ Catherine M. Sharkey, *Algorithmic Retrospective Review of Agency Rules* (Mar. 1, 2022) (draft report to the Admin. Conf. of the U.S.).



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17 Although algorithmic tools hold out the promise of lowering the cost of completing
18 governmental tasks and improving the quality, consistency, and predictability of agencies'
19 decisions, government agencies' use of algorithmic tools also raises important concerns.⁴
20 Statutes, executive orders, and agency policies highlight many such concerns,⁵ and, in a prior
21 Statement, the Conference described concerns about transparency (especially given the
22 proprietary nature of some AI systems), harmful bias, technical capacity, procurement, data
23 usage and storage, privacy, security, and the full or partial displacement of human decision
24 making and discretion that may arise when agencies rely on AI tools.⁶ Agencies must also
25 consider practical challenges, including potentially high startup costs associated with developing
26 or procuring algorithmic tools, development of internal capacity and expertise, staffing and
27 training needs, and ongoing maintenance and oversight.

28 The Conference recognizes that agencies may be able to leverage algorithmic tools to
29 more efficiently, cost-effectively, and accurately identify rules that are outdated or redundant,
30 contain typographic errors or inaccurate cross-references, or might benefit from elaboration or
31 clarification. (Because agencies have only recently begun using algorithmic tools to support
32 retrospective review, this Recommendation does not address the potential use of those tools to
33 perform more complex tasks—such as identifying rules that may need to be modified,
34 strengthened, or eliminated to better achieve statutory goals or reduce regulatory burdens—for
35 which the potential risks and benefits are still unclear.) At the same time, the Conference
36 recognizes important concerns regarding agencies' use of such tools, including those highlighted
37 above. This Recommendation offers best practices for agencies to implement algorithmic tools in

⁴ 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.).

⁵ *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).

⁶ Admin. Conf. of the U.S., Statement #20, *Agency Use of Artificial Intelligence*, 86 Fed. Reg. 6616 (Jan. 22, 2021).



38 a way that accords with applicable legal requirements and promotes accuracy, efficiency,
39 transparency, and accountability.

RECOMMENDATION

- 40 1. Agencies should assess whether they can use algorithmic tools (including those enabled
41 by artificial intelligence (AI)) to more efficiently, cost-effectively, and accurately identify
42 rules that are outdated or redundant, contain typographic errors or inaccurate cross-
43 references, or might benefit from elaboration or clarification.
- 44 2. When agencies contemplate using an algorithmic tool to support retrospective review,
45 they should consider whether it would be most efficient, cost-effective, and accurate to
46 develop a new tool in-house, implement a tool developed and made available by another
47 agency, or procure a tool from a commercial vendor or contractor. In making this
48 determination, agencies should assess whether there is an existing tool that meets their
49 needs and, in so doing, consult with other agencies that have experience using
50 algorithmic tools to support retrospective review. If there is no such tool, agencies should
51 consider whether they have sufficient in-house expertise and capacity to develop an
52 adequate tool.
- 53 3. Agencies should ensure that personnel who use algorithmic tools to support retrospective
54 review have adequate training on the capabilities and risks of those tools and sufficient
55 technical expertise to make informed decisions based on the output of such tools.
- 56 4. To promote transparency and build internal expertise, agencies should, when developing
57 or selecting an algorithmic tool to support retrospective review, ensure that the source
58 code for the tool is publicly available and interoperable with other government systems.
59 If agencies use an algorithmic tool that is not open-source, they should ensure that key
60 information about the tool's development, operation, and use is available to agency
61 personnel and the public.
- 62 5. When agencies publish retrospective review plans and descriptions of specific
63 retrospective reviews, as described in Recommendation 2021-2, *Periodic Retrospective*
64 *Review*, they should disclose whether, and if so, explain how, they plan to use or used



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- 65 algorithmic tools to support retrospective review. Additionally, when agencies
66 incorporate retrospective reviews in their Learning Agendas and Annual Evaluation
67 Plans, as described in Recommendation 2021-2, they should include information about
68 the use of algorithmic tools.
- 69 6. Agencies should maintain their regulations in a format that facilitates the effective use of
70 algorithmic tools in retrospective review, for example by including relevant metadata.
 - 71 7. Agencies should also develop their own internal evaluation and oversight mechanisms for
72 algorithmic tools used in retrospective review, both for initial approval of a tool and for
73 regular oversight of the tool. Agency considerations should include risk management and
74 regular monitoring responsibilities.
 - 75 8. The Office of Management and Budget should provide guidance on the acquisition and
76 use of algorithmic tools to support retrospective review.
 - 77 9. The General Services Administration should continue to explore options for using
78 algorithmic tools to support retrospective review and share its findings and capabilities
79 with other agencies.
 - 80 10. Agencies should consider piloting new algorithmic tools to test and measure their
81 effectiveness for purposes of retrospective review.