RECENT DEVELOPMENTS

TRUMP'S DEREGULATION RECORD: IS IT WORKING?†

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Donald Trump has completed almost three years in office and has declared that his

- † This Article draws strongly from a report commissioned by the American Council on Capital Formation (ACCF) Center for Policy Research (accf.org, Washington, DC) in early 2019. The report was originally published online by ACCF in March 2019. John D. Graham & Keith Belton, *Trump's Deregulatory Record, AMERICAN COUNCIL ON CAPITAL FORMATION (Mar. 13, 2019), http://accf.org/2019/03/13/new-report-trumps-deregulatory-record/. The contents have since been updated and expanded for this Article's publication in the Administrative Law Review. The authors are fully responsible for the content of this Article and that of the report. These findings do not necessarily represent the views of ACCF, the O'Neill School of Public and Environmental Affairs, or the *Administrative Law Review*. Special thanks are extended to the numerous experts in regulatory policy—listed in the Appendix—who answered questions, offered useful perspectives, and/or provided useful information for this report. We also appreciate the comments of the diligent peer reviewers—listed in the Appendix—and the *Administrative Law Review*s* editorial team (Leah Regan and many others) whose critiques have helped strengthen the quality of the report.
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- ** Professor, O'Neill School of Public and Environmental Affairs, Indiana University, Bloomington, Indiana. Acknowledgements: This report was commissioned by the American Council on Capital Formation (ACCF) Center for Policy Research (accf.org, Washington, DC), and has been updated and expanded for publication in the *Administrative Law Review*. The authors are fully responsible for the content of the report. The findings do not necessarily represent the views of ACCF, the O'Neill School of Public and Environmental Affairs, or the *Administrative Law Review*. Special thanks are extended to the numerous experts in regulatory policy—listed in the Appendix—who answered questions, offered useful perspectives, and provided useful information for this report. We also appreciate the comments of the diligent peer reviewers—listed in the Appendix—whose critiques have helped strengthen the quality of the report.

tenure will be marked by deregulation. Thus, it is timely and appropriate to consider what the Administration has and has not accomplished on deregulation, why Trump's Administration has not accomplished more regarding deregulation, and what additional steps might be required to accomplish this agenda. This study examines the impact of deregulatory policies, the flow of new regulations, and deregulatory initiatives blocked by the Administration's legally unsound effort to delay or suspend completed rulemakings in violation of the Administrative Procedure Act (APA). Without offering any normative stance on Trump's deregulatory agenda, this study presents a series of seven key findings and provides—presuming deregulation remains a priority—recommendations for the Administration.

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INTRODUCTION

Donald Trump displays a determination to go down in history as a deregulator.¹ This is surprising because no other post-World War II President—with the possible exception of Ronald Reagan—has exhibited such public commitment to this issue.²

Both Democratic and Republican presidents have been interested in controlling the rulemaking process.³ Let us consider first the Democratic and then the GOP presidents in the post-Watergate era.⁴

Jimmy Carter was a pioneer of efforts to deregulate the airlines and railroads, but he also expanded regulation of the energy sector, supported extensive environmental regulation, and intensified occupational regulation of cotton dust and other toxic substances.⁵ He was a champion of efforts to streamline regulation—implementing the Paperwork Reduction Act that

- 1. See John W. Miller, Donald Trump Promises Deregulation of Energy Production; Republican Presidential Nominee Vows to End 'All Unnecessary Regulations', WALL ST. J. (Sept. 22, 2016), https://www.wsj.com/articles/donald-trump-promises-deregulation-of-energy-production-1474566335 ("Donald Trump promised sweeping deregulation of U.S. gas, oil[,] and coal production as part of an 'America-first energy' plan Mr. Trump promised to end 'all unnecessary regulations, and a temporary moratorium on new regulations not compelled by Congress or public safety."); Read Donald Trump's Economic Speech in Detroit, TIME (Aug. 8, 2016), http://time.com/4443382/donald-trump-economic-speech-detroit-transcript/ (remarking that "overregulation is costing our economy" trillions of dollars annually and that federal agencies during his Administration must eliminate regulations that are unnecessary, "do not improve public safety," and "needlessly kill jobs"); see infra Part I(A) (defining deregulation).
 - 2. See infra notes 27–28 (discussing Reagan's task regulatory task force).
- 3. See CORNELIUS M. KERWIN & SCOTT R. FURLONG, RULEMAKING: HOW GOVERNMENT AGENCIES WRITE LAW AND MAKE POLICY 118–25 (5th ed. 2018) (stating that one system of rule-making stems from the White House, because Presidents—including Carter, Reagan, the Bushes, and Clinton—realized "that their grip on the course of domestic public policy hinged to a considerable extent on their ability to influence the thousands of rules that put programs into action").
- 4. For a historical argument that there were precursors to regulatory reform in the Johnson, Nixon, and Ford administrations, see Jim Tozzi, *OIRA's Formative Years: The Historical Record of Centralized Regulatory Review Preceding OIRA's Founding*, 63 ADMIN. L. REV. (SPECIAL Ed.) 37, 39 (2011) (contending that the beginnings of regulations can be traced back to President Johnson's regulations).
- 5. On airline deregulation, see Stephen G. Breyer, Regulation and Its Reform 317, 339, 342 (1984) (highlighting the Airline Deregulation Act of 1978 as part of President Carter's regulatory reform—including President Carter's appointment of economist and deregulation expert Alfred Kahn to the chairmanship of the Civil Aeronautics Board). See generally Robert E. Litan & William D. Nordhaus, Reforming Federal Regulation 68–69, 75–78 (1983) (discussing the Carter Administration's regulatory tendencies and the case of the Occupational Safety and Health Administration (OSHA) cotton dust standard).

created the Office of Information and Regulatory Affairs (OIRA) within the Office of Management and Budget (OMB).⁶ Carter also issued the first presidential executive order promoting cost-effectiveness analysis in the rule-making process and gave professional economists a stronger voice in regulatory deliberations.⁷

Bill Clinton—through Executive Order (EO) 12,886 (which is still in effect)—modernized the centralized process of federal regulatory oversight established by President Reagan. Clinton's EO focused OIRA's limited oversight resources on significant rulemaking activities and promoted interagency coordination to improve regulatory quality. Some progressives objected that Clinton's EO 12,866 was "[s]imilar to the requirements in the [Reagan] order it replaced." However, a close reading of the two EOs reveals that the Clinton EO replaced the quantitative cost-benefit test in the Reagan EO with a new "benefits-justify-costs" test that authorizes consideration of qualitative factors, such as distributional equity. Despite opposition from a conservative Congress, Clinton championed tighter regulation

^{6.} See Joseph Cooper & William F. West, Presidential Power and Republican Government: The Theory and Practice of OMB Review, 50 J. Pol. 864, 870 (1988) (noting that President Reagan established "OMB" [Office of Management and Budget (OMB)] review"); see also Donald R. Arbuckle, Obscure but Powerful: Who Are Those Guys? 63 ADMIN. L. REV. (SPECIAL ED.) 131, 131–34 (2011) (discussing the Office of Information and Regulatory Affairs' (OIRA's) position within OMB); Cass R. Sunstein, The Office of Information and Regulatory Affairs: Myths and Realities, 126 HARV. L. REV. 1838, 1838–39, 1847–48 (2012) (discussing OIRA's origins).

^{7.} See Exec. Order No. 12,044, 3 C.F.R. pt. 100–01 (1978–1979), 43 Fed. Reg. 12,661 (Mar. 23, 1978) ("direct[ing] each Executive Agency to adopt procedures to improve existing and future regulations"); see also Phillip J. Cooper, The War Against Regulation: From Jimmy Carter to George W. Bush 16 (2009) ("Carter was largely responsible for changing the character of the discussion and policymaking efforts on regulation such that economists came to occupy a central if not dominant importance."); W. Kip Viscusi, Fatal Tradeoffs: Public and Private Responsibilities for Risk 255 (1992) (discussing the roles of the Council on Wage and Price Stability and the Regulatory Analysis Review Group).

^{8.} Exec. Order No. 12,866, 3 C.F.R. pt. 100–01 (1993–1994), 58 Fed. Reg. 51,735 (Oct. 4, 1993) ("The objectives of this Executive Order are to enhance planning and coordination with respect to both new and existing regulations; to reaffirm the primacy of Federal agencies in the regulatory [decisionmaking] process; to restore the integrity and legitimacy of regulatory review and oversight; and to make the process more accessible and open to the public."); see CORNELIUS M. KERWIN, RULEMAKING: HOW GOVERNMENT AGENCIES WRITE LAW AND MAKE POLICY 228–29 (3d ed. 2003) (examining Clinton's Office of Management and Budget review program).

^{9.} See COOPER, supra note 7, at 77.

^{10.} In defense of the "benefits-justify-costs" test, see John D. Graham, Saving Lives through Administrative Law and Economics, 157 U. PA. L. REV. 395, 432–34 (2008).

of tobacco, air pollution, and commercial activity in national forests.¹¹

Barack Obama used executive power to stimulate retrospective review of existing regulations. He also strived, in the context of trade negotiations, to accomplish more regulatory cooperation between the U.S. and the European Union. Additionally, Obama began to introduce and incorporate evidence from the emerging field of behavioral economics into both regulatory analysis and decisionmaking. When the Republicans captured a majority of the House of Representatives in 2010, President Obama relied less on legislation and more on executive power—especially regulation—to advance his progressive policy ideals. His second term included a suite of major regulations aimed at curbing greenhouse gas emissions in the U.S. economy. 14

It should not be surprising that modern Democratic presidents have not made deregulation a signature theme as federal regulation is seen as a crucial tool for protecting rights, advancing public well-being, and accomplishing the policy initiatives of the Democratic Party. Presidents Carter, Clinton, and Obama used rulemaking power, including OIRA, to advance their policy agendas. While those same Presidents did initiate some retrospective

- 11. See Steven P. Croley, Regulation and Public Interests: The Possibility of Good Regulatory Government 163–212 (2008) (discussing rules and regulatory initiatives of the Clinton Administration regarding the Environmental Protection Agency's (EPA's) oversight of ozone and particulate matter, the Food and Drug Administration's (FDA's) regulation of tobacco, and the Forest Service's protection of national forests through its "roadless" rule).
- 12. See Exec. Order No. 13,610, 77 Fed. Reg. 28,469, 28,469 (May 14, 2012) (stating agencies should review existing regulations and modify or streamline them given the development of technology); Exec. Order No. 13,579, 76 Fed. Reg. 41,587, 41,587 (July 14, 2011) (stating regulatory "decisions should be made only after consideration of their costs and benefits (both quantitative and qualitative)"); Exec. Order No. 13,563, 76 Fed. Reg. 3821, 3822 (Jan. 18, 2011) (authorizing retrospective analyses of "outmoded, ineffective, insufficient, or excessively burdensome [regulations]").
- 13. See generally Benjamin Wallace-Wells, Cass Sunstein Wants to Nudge Us, N.Y. TIMES MAG. (May 13, 2010), https://www.nytimes.com/2010/05/16/magazine/16Sunstein-t.html (discussing the Obama Administration's use of behavioral economics to serve as evidence for EPA regulations governing carbon production and reporting requirements).
- 14. JOHN D. GRAHAM, OBAMA ON THE HOME FRONT: DOMESTIC POLICY TRIUMPHS AND SETBACKS 230–36 (2016) (articulating that the "release of the 'President's Climate Action Plan' in the first year of his second term" was the beginning of a series of major regulatory actions attempting to curb greenhouse gas emission taken by the Obama Administration).
- 15. See Elena Kagan, Presidential Administration, 114 HARV. L. REV. 2245, 2276, 2281–82 (2001); see, e.g., CASS R. SUNSTEIN, SIMPLER: THE FUTURE OF GOVERNMENT 7–8 (2013) (discussing the historic and contemporary efforts of presidential administrations to streamline regulatory processes and advocating for simplicity, effectiveness, and efficiency within our system of government).

review of existing regulations, extensive deregulation was neither intended nor accomplished.¹⁶

It is more surprising, perhaps, that Donald Trump's deregulatory stance is notably different from the stances of previous Republican presidents. Consider the regulatory positioning of George W. Bush (Bush 43), George Herbert Walker Bush (Bush 41), and Ronald Reagan.

After the tragic events of September 11, 2001, Bush 43 worked with Congress to create a large new cabinet agency, the Department of Homeland Security.¹⁷ Bush 43 expressed particular concerns about regulatory burdens imposed on small businesses and manufacturing, and he opposed regulation of greenhouse gases through the Kyoto Protocol. Bush 43 successfully launched some deregulatory initiatives in the energy and environmental arenas, but some were blocked by federal judicial decisions.¹⁸ Bush 43 was a

^{16.} See Joseph E. Aldy, Learning from Experience: An Assessment of the Retrospective Reviews of Agency Rules and the Evidence for Improving the Design and Implementation of Regulatory Policy, HARV. KENNEDY SCH., NAT'L BUREAU ECON. RES. 9-10 (Nov. 17, 2014), https://scholar.harvard. edu/files/jaldy/files/aldy_retrospective.pdf (stating that since the Carter Administration, presidents, including Obama, have enacted retrospective review regulations); SUSAN DUDLEY, GEORGE WASHINGTON UNIV. REGULATORY STUDIES CTR., A RETROSPECTIVE REVIEW OF RETROSPECTIVE REVIEW, 1-2 (May 7, 2013) (demonstrating that regulation grows despite previous Presidents' deregulatory policies); Sofie E. Miller, Learning from Experience: Retrospective Review of Regulations 4-6 (Nov. 2014) (unpublished manuscript) (on file with George Washington Univ. Regulatory Studies Ctr.), https://regulatorystudies.columbian.gwu.edu /sites/g/files/zaxdzs1866/f/Retrospective%20Review%20in%202014_MillerS_11_3.pdf (assessing the continued creation of regulations that call for retrospective review); see also Richard Morgenstern, Retrospective Analysis of U.S. Federal Environmental Regulation, 9 J. BENEFIT-COST Analysis 285, 286 (2018), https://www.cambridge.org/core/services/aop-cambridge-core /content/view/891E36D3DBCEB79C969278488E5E1897/S2194588817000173a.pdf/ret rospective_analysis_of_us_federal_environmental_regulation.pdf (presenting key results of the Regulatory Performance Initiative and offering policy lessons derived from those findings); Connor Raso, Assessing Regulatory Retrospective Review under the Obama Administration, BROOKINGS INST. (June 15, 2017), https://www.brookings.edu/research/assessing-regulatory-retrospect ive-review-under-the-obama-administration/ (answering whether review regulations actually "[r]esult[] in meaningful regulatory streamlining or [merely] a symbolic exercise"); Jonathan B. Wiener & Daniel L. Riberio, Environmental Regulation Going Retro: Learning from Hindsight, 32 J. LAND USE & ENVTL. L. 1, 22–24 (2016) (assessing additional regulations regarding retroactive review in the context of environmental regulations); see, e.g., infra Section E (determining whether these agendas are in fact deregulation effects or contrarily regulatory agendas).

^{17.} See COOPER, supra note 7, at 93 (explaining that President George W. Bush's (Bush 43's) dramatic expansion of regulatory power on homeland security distracted the public from his numerous deregulatory activities).

^{18.} See, e.g., John D. Graham, Bush on the Home Front: Domestic Policy

proponent of "smarter regulation" through use of science and economics. ¹⁹ His administration's 2003 OMB Circular A-4 on "Regulatory Analysis" continues to guide Cabinet agencies on performing regulatory impact analyses. ²⁰

Bush 41 was certainly not a deregulator. A cover story of the *National Journal* described him as "The Regulatory President."²¹ His Administration championed vast new federal regulatory programs to enhance urban air quality, protect the rights of the disabled,²² and address world climate change by stimulating and signing the United Nations Framework Convention on Climate Change.²³ The Bush Administration promoted market-based approaches to regulation, especially in air pollution control.²⁴ Nonetheless, in his single term, Bush 41 launched the Quayle Council on Competitiveness in an attempt to lessen the burden of regulation in a variety of areas.²⁵

Trump's deregulatory bent bears some resemblance to the early positioning of Ronald Reagan.²⁶ Reagan's first two years in office had a theme of "regulatory relief"—inspired by a campaign platform—and managed by a 1981

TRIUMPHS AND SETBACKS 203–04 (2010) (discussing the exemptions that would allow the refineries operational flexibility); see also Matthew Dalton, Court Overturns Bush Clean Air Act Exemption in Loss for Power Industry, WALL ST. J. (Mar. 18, 2006) (giving power plants and petroleum refineries more liberty in expanding facilities).

- 19. Graham, *supra* note 10, at 399–401 (2008); *see* Curtis W. Copeland, Cong. Research Serv., RL32397, Federal Rulemaking: The Role of the Office of Information and Regulatory Affairs 18–19 (June 9, 2009) (describing OIRA's return to the roll of gatekeeper during the Bush Administration).
- 20. Office of Mgmt. & Budget, Exec. Office of the President, No. 03-25606, Circular A-4, Regulatory Analysis, 68 Fed. Reg. 58,336 (Oct. 9, 2003), https://www.federalregister.gov/documents/2003/10/09/03-25606/circular-a-4-regulatory-analysis [hereinafter "OMB Circ. A-4"].
- 21. Jonathan Rauch, *The Regulatory President*, NAT'L J. 2902, 2905 (1991); *see also* BARRY D. FRIEDMAN, REGULATION IN THE REAGAN-BUSH ERA: THE ERUPTION OF PRESIDENTIAL INFLUENCE 167 (1995) (noting Bush's rise as "The Regulatory President").
 - 22. COOPER, supra note 7, at 47.
- 23. UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (UNFCCC) SECRETARIAT, Let's Celebrate the 25th Anniversary of the Climate Convention (June 19, 2017), https://unfccc.int/news/let-s-celebrate-the-25th-anniversary-of-the-climate-convention.
- 24. Fred Krupp, *Statement: The Environmental Legacy of President George H.W. Bush*, ENVTL. DEF. FUND (Dec. 1, 2018), https://www.edf.org/media/environmental-legacy-president-george-hw-bush (discussing Bush 41's environmental legacy).
- 25. Philip J. Hilts, At Heart of Debate on Quayle Council: Who Controls Federal Regulations? N.Y. TIMES (Dec. 16, 1991), https://www.nytimes.com/1991/12/16/us/at-heart-of-debate-on-quayle-council-who-controls-federal-regulations.html (noting the Quayle Council's mandate to ensure regulation did not have an anticompetitive and therefore harmful impact on American business).
- 26. The concerns progressives express about Trump's deregulatory stance are similar to the concerns they expressed about President Reagan's program of regulatory relief. See

Presidential Task Force on Regulatory Relief.²⁷ The Task Force had some significant achievements, especially in the highly-depressed auto sector.²⁸ However, Reagan lost a key effort to repeal the automobile airbag regulation in the Supreme Court.²⁹ The administration's deregulatory focus waned as the economy recovered, and the Task Force was disbanded in 1983.³⁰

A well-kept secret is that Reagan also had numerous pro-regulation activities, especially in the environmental arena. His Administration accelerated the phase out of lead in gasoline, phased out chlorofluorocarbons under the Montreal Protocol (an international agreement), added stricter air quality standards for particulate matter, and supported the highly prescriptive 1984 Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act.³¹

- Susan J. Tolchin & Martin Tolchin, Dismantling America: The Rush to Deregulate 39–71 (1983).
- 27. The Task Force on Regulatory Relief was created by executive order and granted oversight of agencies' major rulemakings. *See* Exec. Order No. 12,291, 3 C.F.R. pt. 100–01 (1981–1982), 46 Fed. Reg. 13,193 (Feb. 17, 1981) (creating the Task Force).
- 28. The Reagan Task Force on Regulatory Relief conducted 119 reviews of "inherited rules." By August 1983, the Administration had taken final action to revise or eliminate seventy-six of the rules. Partial or formal proposals were in process for twenty-seven others; the remainder were still under review. See Presidential Task Force on Regulatory Relief, Reagan Administration Regulatory Achievements 5 (Aug. 11, 1983) (discussing the Task Force's review of the inherited regulations and labeling 119 as questionable); Viscusi, supra note 7, at 266–69 (highlighting in Table 14-6 Reagan's regulatory relief for the car industry); see also James C. Miller, The Early Days of Reagan Regulatory Relief and Suggestions for OIRA's Future, 63 Admin. L. Rev. (Special Edition) 93, 97 (2011) (stating that the Task Force was the "perfect match" because of its expertise in "regulatory activity" and its cost-benefit analysis skills).
- 29. See Motor Vehicle Mfr. Ass'n v. State Farm Ins., 463 U.S. 29, 57 (1983) (holding that the agency is responsible for explaining its decision in repealing airbag standards).
- 30. See VISCUSI, supra note 7, at 251 ("[T]he deregulation effort did not even last through the first Reagan term."); see generally Michael Fix & George C. Eads, The Prospects for Regulatory Reform: The Legacy of Reagan's First Term. 2 YALE J. ON REG. 293 (1985) (discussing how Reagan's second term was characterized differently from first term regarding his regulatory relief policies).
- 31. See George M. Gray et al., The Demise of Lead in Gasoline, in The Greening of Industry: A Risk Management Approach 17–42 (John D. Graham & Jennifer Kassalow Hartwell eds., 1997) (examining the histories of the lead-phaseout regulations); James K. Hammitt & Kimberly M. Thompson, Protecting the Ozone Layer, in The Greening of Industry: A Risk Management Approach 43–92 (John D. Graham & Jennifer Kassalow Hartwell eds., 1997) (analyzing the histories of chlorofluorocarbon regulations); William L. Rosbe & Robert L. Gulley, The Hazardous and Solid Waste Amendments of 1984: A Dramatic Overhaul of the Way America Manages its Hazardous Wastes, 14 Envil. L. Rep. 10,458, 10,458–59 (1984) (discussing Reagan's amendments that effectively created major overhaul for the EPA); U.S.

Taking his two terms into account, Reagan's most important accomplishment in regulatory policy was a procedural innovation: He issued EO 12,291 to establish the OIRA-led federal interagency review process, including costbenefit analysis of regulations.³² Under this process, all proposed and final rules must be cleared by OIRA before the regulatory agency publishes them in the *Federal Register*. This process has been largely retained by all of his Oval Office successors, and a growing literature documents the influence of OIRA.³³

Some commentators object to President Trump's focus on deregulation and wish that he would have taken a more nuanced stance on federal regulatory policy.³⁴ This report does not address the merits of whether a different campaign position or presidential stance on regulatory policy should have been taken. In assessing Trump's record, we have not evaluated the economic, public health, social, and environmental impacts of Trump's deregulatory agenda. Thus, we take no stance as to whether the agenda as a whole (or any specific deregulatory action) is good for the United States or the world.

The goal of this report is to determine whether the Trump Administration is accomplishing deregulation. In the field of presidential studies, this question

ENVIL. PROTECTION AGENCY, Table of Historical Particulate Matter (PM) National Ambient Air Quality Standards (NAAQS), EPA.Gov, https://web.archive.org/web/20190710170842/https://www.epa.gov/pm-pollution/table-historical-particulate-matter-pm-national-ambient-air-quality-standards-naaqs (listing standards from 1971 to 2013).

- 32. Exec. Order No. 12,291, 3 C.F.R. pt. 100–01 (1981–1982), 46 Fed Reg. 13,193, 13,193–94 (Feb. 17, 1981); see also Christopher C. DeMuth & Douglas H. Ginsburg, White House Review of Agency Rulemaking, 99 HARV. L. REV. 1075, 1081–82, 1085 (1986) (discussing the evolving nature of regulatory review by OMB and its cost-benefit standard).
- 33. See Alex Acs, Policing the Administrative State, 80 J. Pol. 1225, 1225 (2018) (noting how the administrative state effectuates policy changes and how Congress performs oversight of the agencies); Lisa Schulz Bressman & Michael P. Vandenberg, Inside the Administrative State: A Critical Look at the Practice of Presidential Control, 105 MICH. L. REV. 47, 49–50 (2006) (describing the dynamic between OIRA and the White House regarding their influence on the rulemaking process); Steven Croley, White House Review of Agency Rulemaking: An Empirical Investigation, 70 U. CHI. L. REV. 821, 821–22 (2003) (investigating presidential efforts in controlling agencies to develop policy); Simon F. Haeder & Susan Webb Yackee, Presidentially Directed Policy Change: The Office of Information and Regulatory Affairs as Partisan or Moderator?, 28 J. Pub. Admin. Res. & Theory 475, 475–76 (2018) (noting the impact of OIRA on regulatory policy and its scope of influence); William F. West, The Institutionalization of Regulatory Review: Organizational Stability and Responsive Competence at OIRA, 35 PRESIDENTIAL STUD. Q. 76, 76–77 (2005) (discussing staffing bureaucrats in agencies to create more centralized forms of management).
- 34. See generally Heidi Shierholz & Celine McNicholas, Understanding the Anti-Regulation Agenda: The Basics, ECON. POL'Y INST. (Apr. 11, 2017), https://www.epi.org/publication/understanding-the-anti-regulation-agenda-the-basics/ (understanding the agenda by considering its benefits).

is one of presidential effectiveness, not one of presidential virtue or policy desirability.³⁵ President Trump has finished over three years in office, so it is timely and appropriate to consider what he has and has not accomplished on deregulation, why he has not accomplished more deregulation, and what additional steps might be required to accomplish his agenda.

The report is organized as follows. Part I(A) defines deregulation, considers how President Trump and his close advisors use the term, and clarifies which facets of deregulation this report covers. Part I(B) explores why Trump advocates for deregulation based on his own words and those of his close advisors. Part (I)(C) describes Trump's new "two-for-one" policy of deregulation and critiques some of the early accounting that the Trump Administration has publicized. Part (I)(D) argues that the Trump Administration needs new tools to measure changes in human freedom, which is the non-economic value that appears to be central to the Trump agenda. Part (I)(E) explores the complications in distinguishing regulation from deregulation. Part (I)(F) covers Trump's regulatory budgeting initiative and the challenges of practical implementation. Part II reports the results of our assessment, organized into seven key findings, and Part III summarizes six recommendations for the administration, accepting the premise that deregulation is an administration priority. We stress that we offer no normative stances on Trump's deregulatory agenda, as we have not assessed the potential impacts on economic, social, public health, or environmental outcomes.

I. THE TRUMP DEREGULATION AGENDA

A. What Is Deregulation?

Merriam-Webster defines "deregulation" as "the act or process of removing restrictions and regulations." This definition seems consistent with the common-sense way that President Trump is using the term, but there are some related terms worthy of clarification.

The new regulations adopted each year represent the "flow" of regulatory activity while the "stock" of regulations is the accumulated body of existing regulations.³⁶ The Trump Administration is concerned about flow and stock.³⁷

^{35.} Graham, Obama on the Home Front, *supra* note 14, at 27–65 (discussing how Presidents can be effective in policy decisions when there is legislative gridlock in Congress).

^{36.} On the importance of the "stock" versus "flow" distinction, see Bridget C.E. Dooling, *Trump Hit the Regulatory Brakes, But Hasn't Found Reverse Gear*, HILL (Aug. 30, 2018), https://thehill.com/opinion/white-house/404249-trump-hit-the-regulatory-brakes-but-hasnt-found-reverse-gear.

^{37.} Some commentators use a narrower definition of "deregulation," such as the removal of existing regulations through administrative rulemaking. Stuart Shapiro, *Trump's Deregulatory Record*

This report focuses on three aspects of Trump's deregulatory agenda. First, has the Administration curbed the flow of new regulations, thereby slowing the growth of the stock of regulation? Second, has the Administration worked with the Republican-majority Congress to repeal or scale back the existing stock of regulations? Finally, using executive power, has the Administration repealed or revised existing regulations to be less burdensome or intrusive?

In this report, we do not include other aspects of deregulation such as easier access to permits for economic activity (adjudicatory activity), removal of quasi-regulatory guidance, issuance of more permissive guidance to regulatees, and relaxed enforcement activities against potential violators. There is extensive press activity suggesting that the Trump Administration is implementing all of these softer facets of deregulation.³⁸ We do not address them in this report, in part because there is no centralized federal database on such actions and because it is relatively easy for a new administration to reverse each of these softer forms of deregulation.³⁹

B. Why Trump Favors Deregulation

Prior to Trump's presidency, the predominant view on federal regulation was that Congress should provide the Executive Branch with broad regulatory authority, and then allow the expert regulatory agencies to determine the appropriate number and how regulations should be designed, implemented, and enforced.⁴⁰ This view of the modern administrative state extends back to President Franklin D. Roosevelt—the expansion of regulatory

Doesn't Include Much Actual Deregulation, CONVERSATION (May 10, 2018), https://theconversation.com/trumps-deregulatory-record-doesnt-include-much-actual-dere gulation-96161.

- 38. See, e.g., Eric Lipton & Hiroko Tabuchi, Driven by Trump Policy Changes, Fracking Booms on Public Lands, N.Y. TIMES (Oct. 27, 2018), https://www.nytimes.com/2018/10/27/climate/trump-fracking-drilling-oil-gas.html (finding that a central component of the Trump Administration's plan is to work closely with the gas and oil industry to promote more domestic energy production); Laurent Belsie, Trump's Deregulation Drive is Epic in Scale and Scope. And Yet..., CHRISTIAN SCI. MONITOR (Jan. 5, 2018), https://www.csmonitor.com/Bus iness/2018/0105/Trump-s-deregulation-drive-is-epic-in-scale-and-scope.-And-yet (noting the major regulatory changes that the Trump Administration made were in the first year, including the reversal of net neutrality and the elimination of the ban on mandatory arbitration clauses used by banks).
- 39. For a recent article suggesting that most of Trump's "deregulation" is this easily reversible form, see Richard J. Pierce, Jr., Regulatory Reform under President Trump, 22 UTIL. L. REV. 68 (2018). See also Richard J. Pierce, Jr., Regulatory Reform Under Reagan and Trump, REG. REV. (July 30, 2018), www.theregreview.org/2018/07/30/pierce-regulatory-reform-reagan-trump/ (explaining that changes to softer forms of regulation do not have as many administrative procedural hurdles).
 - 40. James M. Landis, The Administrative Process, 1–2, 4–5 (1938). On the need

power to help escape the Great Depression⁴¹—and reflects the views of Woodrow Wilson concerning the expert function of public administration.⁴²

Congress had strong concerns about the growth of government and responded in 1946 with the Administrative Procedure Act (APA) to check the growing powers of federal agencies. The APA provides for standardized procedures in rulemaking, public comment opportunities, and independent judicial review.⁴³ Aside from the APA, the expansive view of the modern administrative state has carried the day for more than seventy years.⁴⁴

During the 2016 presidential campaign, candidate Donald Trump took a stark and distinctive stance on the modern administrative state. He advocated widespread deregulation of the U.S. economy. It was a central plank of his national economic and energy plans, as outlined in major speeches in Detroit, Michigan (August 8, 2016) and Pittsburgh, Pennsylvania (September 22, 2016).⁴⁵ He called for both a moratorium on new regulations and an

for delegation of power from Congress to expert agencies, see STEPHEN BREYER, ACTIVE LIBERTY: INTERPRETING OUR DEMOCRATIC CONSTITUTION 102–08 (2005). For a normative defense of broad delegation, see Edward H Stiglitz, *Delegating for Trust*, 166 U. Penn. L. Rev. 633, 637–40 (2018) (emphasizing expertise, transparency, and judicial supervision).

- 41. Cass Sunstein, Free Markets and Social Justice 319–322 (1997).
- 42. Wilson, a political scientist, had in mind a science of public administration. Donald F. Kettl, The Politics of the Administrative Process 47–50 (5th ed., 2012) (finding that Wilson believed that public administration could be a neutral element in governments and that a uniform administration system could be applied to every type of government). For a contemporary critique of Wilson's view, see Michael W. Spicer, In Defense of Politics in Administration: A Value Pluralist Perspective 2–5 (2010).
- 43. CORNELIUS M. KERWIN & SCOTT R. FURLONG, RULEMAKING: HOW GOVERNMENT AGENCIES WRITE LAW AND MAKE POLICY 2–4 (5th ed. 2019) (critiquing Wilson's belief that public administration could be separated from politics).
- 44. See Richard B. Stewart, The Reformation of American Administrative Law, 88 HARV. L. REV. 1667, 1715–17 (1975) (explaining that the APA has an expansive view because it provides more protections to classes of interest). During the 1960s and 1970s, Congress delegated significantly more power to social regulatory agencies. CASS R. SUNSTEIN, AFTER THE RIGHTS REVOLUTION: RECONCEIVING THE REGULATORY STATE 24 (1990); see also Richard N. L. Andrews, Economics and Environmental Decisions, Past and Present, in ENVIRONMENTAL POLICY UNDER REAGAN'S EXECUTIVE ORDER: THE ROLE OF BENEFIT-COST ANALYSIS 43, 52–54 (V. Kerry Smith ed., 1984) (illustrating the dramatic expansion of health, safety, and environmental regulation starting around 1970 in Table 2.1).
- 45. Full Text: Donald Trump's Detroit Speech on his Economic Plan: Remarks as Prepared for Delivery, POLITICO (Aug. 8, 2016), https://www.politico.com/story/2016/08/full-text-donald-trumps -detroit-speech-on-the-ecnomic-plan-226793; Coral Davenport, Donald Trump in Pittsburgh, Pledges to Boost Both Coal and Gas, N.Y. TIMES (Sept. 22, 2016), https://www.nytimes.com/2016/09/23/us/politics/donald-trump-fracking.html; Tom Fontaine, Trump Woos Oil, Gas

explicit process of review and repeal of unnecessary regulations, which some advisors referred to as "deconstruction of the administrative state." ⁴⁶

Trump elaborated on his case for deregulation after he took office. Specifically, on December 14, 2017, President Trump offered his most in-depth public remarks on deregulation.⁴⁷ He re-emphasized the economic rationale for deregulation, describing it as part of his economic plan and thus as a way to liberate entrepreneurs and enhance prosperity. Interestingly, he also offered a more philosophical and quasi-constitutional rationale for deregulation that was rooted in a defense of individual liberty and democracy. His remarks indicated that President Trump views regulation as an economic threat—instead of as a tool for advancing public welfare and protecting rights—and deregulation as "regaining our independence, reclaiming our heritage, and rediscovering what we can achieve when our citizens are free to follow their hearts and chase their dreams."⁴⁸

The Trump Administration's quasi-constitutional rationale is important because it suggests that the Administration might be inclined to remove or scale back some regulations, even if it cannot be shown that those acts of deregulation have tangible cost savings that justify the foregone benefits of regulation.⁴⁹ In this respect, the Trump Administration is not defending liberty on solely utilitarian grounds, as was common in the foundational writings of English philosophers Jeremy Bentham and John Stuart Mill.⁵⁰

Regulation is seen by the Trump Administration as an *intrusion* on the freedoms of private citizens and enterprises.⁵¹ Trump's perspective is closely connected to a conservative legal philosophy that is gaining favor within the

- 46. Philip Rucker & Robert Costa, Bannon Vows a Daily Fight for "Deconstruction of the Administrative State," WASH. POST (Feb. 23, 2017), https://www.washingtonpost.com/pol itics/top-whstrategist-vows-a-daily-fight-for-deconstruction-of-the-administrative-state/2017/02/23/03f6b 8da-f9ea-11e6-bf01-d47f8cf9b643_story.html?noredirect=on&utm_term=. 95389d4b7732.
- 47. Donald Trump, President, Remarks by President on Deregulation at The White House (Dec. 14, 2017), https://www.whitehouse.gov/briefings-statements/remarks-president-trump-deregulation/.
 - 48. Id.
- 49. OIRA has stated explicitly that it is not sufficient for a proposed regulation to have benefits that merely exceed costs. Regulatory actions "should have benefits that substantially exceed costs." OIRA, INTRODUCTION TO THE FALL 2018 REGULATORY PLAN 5 (2018), https://www.reginfo.gov/public/jsp/eAgenda/StaticContent/201810/VPStatement.pdf [hereinafter OIRA FALL 2018].
- 50. See, e.g., John Stuart Mill, On Liberty 9 (1859); Robert Paul Wolff, The Poverty of Liberalism 5–7 (1968).
 - 51. OIRA FALL 2018, *supra* note 49, at 1.

Industry in Pittsburgh Visit, TRIBLIVE (Sept. 22, 2016), https://archive.triblive.com/local/pittsburgh-allegheny/trump-woos-oil-gas-industry-in-pittsburgh-visit.

Federalist Society and conservative think tanks. President Trump's initial White House General Counsel, Donald McGahn, made a pointed claim to a sympathetic audience that "[t]he ever-growing, unaccountable administrative state is a direct threat to individual liberty."⁵²

The late Supreme Court Justice William Rehnquist started some of the modern questioning of the constitutionality of broad, vague delegations of power by Congress to the executive branch.⁵³ Prominent political conservatives note that agencies routinely adopt regulations that Congress would not enact on its own.⁵⁴ A related view is that federal judges, through the *Chevron* doctrine, are giving agencies too much discretion in the interpretation of ambiguous statutes.⁵⁵ In recent years, Rehnquist's reasoning about the non-delegation doctrine has been extended and expanded; however, many contest the late Justice Antonin Scalia's more nuanced view of the non-delegation doctrine.⁵⁶

Based on his remarks on December 14, 2017, it is not entirely clear whether President Trump is primarily concerned with protecting freedom or protecting democracy. We assume that Trump favors rejuvenation of the non-delegation doctrine primarily because Congress would likely enact fewer intrusions on freedom than regulatory agencies. It may be instructive that both of President Trump's appointees to the U.S. Supreme Court, Neil Gorsuch and Brett Kavanaugh, have expressed concerns about the immense powers of the modern administrative state.⁵⁷ Relatedly, the Trump Administration is working to ensure regulators do not exceed their statutory authority when issuing regulations

^{52.} Donald McGahn, White House Gen. Counsel, Speech at the Federalist Society 2017 National Lawyers Convention, C-SPAN (Nov. 17, 2017), https://www.c-span.org/video/?437462-8/2017-national-lawyers-convention-white-house-counsel-mcgahn.

^{53.} AFL-CIO v. Am. Petroleum Inst., 448 U.S. 607, 672–73 (1980) (Rehnquist, J. concurring).

^{54.} Christopher DeMuth, *Trump and the Revolt of the 'Somewheres*,' WALL St. J. (Mar. 1, 2019), https://www.wsj.com/articles/trump-and-the-revolt-of-the-somewheres-11551483212.

^{55.} Michael McConnell, Kavanaugh and the "Chevron Doctrine," HOOVER INST. (July 30, 2018), https://www.hoover.org/research/kavanaugh-and-chevron-doctrine. For a more sympathetic view of an enlightened Chevron doctrine, see Stephen Breyer, Active Liberty: Interpreting Our Democratic Constitution 102–08 (2005).

^{56.} See Whitman v. Am. Trucking Ass'n, 531 U.S. 457, 487 (2001) (Thomas, J., concurring) (agreeing with Justice Scalia and expressing broad constitutional concerns about delegation of power); David Schoenbrod, Power Without Responsibility 3, 12–19, 191 (1993); Philip Hamburger, Is Administrative Law Unlawful? 1–2 (2014); William K. Kelley, Justice Scalia, the Nondelegation Doctrine, and Constitutional Argument, 92 Notre Dame L. Rev. 2107, 2107–21 (2017).

^{57.} On Justice Gorsuch, see George Will, Gorsuch Strikes a Blow Against the Administrative State, NAT'L REV. (Apr. 22, 2018), https://www.nationalreview.com/2018/04/neil-gorsuch-supreme-court-decision-against-administrative-state/ (showing Justice Gorsuch pave a path

and OIRA expects agencies to implement the *best* reading of the statute, not merely a *reasonable* one.⁵⁸

We do not ask readers to agree with the quasi-constitutional argument Trump is making or to endorse the position that the non-delegation doctrine should be revived. There is already substantial legal literature defending Congress's broad delegations of power to the executive branch and questioning the constitutional significance of the non-delegation doctrine.⁵⁹ There is also some recent scholarship suggesting that the non-delegation doctrine, properly understood, is not nearly as dead as conservatives fear.⁶⁰

We nonetheless emphasize the Trump Administration's non-economic rationale for deregulation because it should help readers understand why the Trump Administration might favor deregulation in specific instances, even when regulated businesses, pro-business Republicans, and/or professional economists do not support deregulation. In this respect, the Trump Administration appears to be giving greater weight to the freedom considerations than the welfare-economic considerations that were the focus of some previous administrations.⁶¹

C. The "Two-For-One" Policy

If the deregulatory rationale is not solely about the economy, then some non-monetary metric is needed to ascertain whether the Trump Administration is reducing government intrusion into the lives of citizens and businesses.

for "restoration of constitutional order); on Judge Kavanaugh, see Robert Barnes & Steven Mußson, White House Counts on Kavanaugh in Battle Against 'Administrative State', WASH. POST. (Aug. 12, 2018), https://www.washingtonpost.com/politics/courts_law/brett-kavanaugh-and-the-end-of-the-regulatory-state-as-we-know-it/2018/08/12/22649a04-9bdc-11e8-8d5e-c6c5940 24954_story.html (explaining, amongst other things, that Justice Kavanaugh has ruled against the administrative state seventy-six times).

- 58. OIRA FALL 2018, *supra* note 49, at 1.
- 59. See, e.g., Keith E. Whittington & Jason Iuliano, The Myth of the Nondelegation Doctrine, 165 U. Penn. L. Rev. 379, 386–87 (2017) (describing the practice of delegated legislation as an inevitable and inextricable part of government intervention in the economic field); Eric A. Posner & Adrian Vermeule, Interring the Nondelegation Doctrine, 69 U. Chi. L. Rev. 1721, 1721–23 (2002) (calling the nondelegation doctrine a neurotic burden on constitutional law).
- 60. See generally Cass R Sunstein, The American Nondelegation Doctrine, 86 GEO. WASH. L. REV. 1181 (2018) (arguing that the non-delegation doctrine is extremely narrow, rather than "dead").
- 61. See, e.g., Sean Reilly, Wood-Heating Proposal Tests Rule-Busting Claims, E&E NEWS (Dec. 14, 2018), https://www.eenews.net/greenwire/2018/12/14/stories/1060109733 (highlighting the stance of the Trump White House on regulations, noting that "rollbacks would only be pursued when the expected gains outweighed the costs"); Graham, supra note 10, at 464–66, 478, 482 (elaborating on the influence of welfare economics in the Bush 43 Administration's policy towards regulation rollbacks).

A potential new metric can be found in EO 13,771—one of the first issued by Trump—which stipulates that "for every new regulation issued, at least two prior regulations [must] be identified for elimination."⁶²

Since a regulation is by definition intrusive (i.e., it has the force of law over the conduct of regulatees), the two-for-one process may be intended, over time, to have the practical effect of reducing the number of regulatory intrusions. The two-for-one process will presumably encourage regulators to find undesirable existing regulations to eliminate, in order to facilitate issuance of favored new regulations.⁶³

For the first time in history, the federal government has begun to count national acts of deregulation as well as acts of regulation and report their ratio each year to the public. At the end of Fiscal Year 2017, the Administration reported that it had accomplished twenty-two acts of deregulation for every one act of regulation. Specifically, there were sixty-seven deregulatory actions and three regulatory actions.⁶⁴

There are concerns that the sixty-seven actions figure includes some questionable entries, and thus some analysts contend that Trump's first-year deregulatory effort does not amount to much.⁶⁵ About one-third of the sixty-seven deregulatory actions are not uniquely attributable to the Trump Administration since the Obama Administration initiated these eliminations.⁶⁶ Some of the entries are simply extensions of effective dates, not repeals or modifications that reduce burden or intrusion.⁶⁷ One of the sixty-seven may

- 62. Exec. Order No. 13,771, 82 Fed. Reg. 9339, 9339 (Jan. 30, 2017).
- 63. OIRA FALL 2018, *supra* note 49, at 1-2.
- 64. OIRA, REGULATORY REFORM: COMPLETED ACTIONS FISCAL YEAR 2017 1 (2017), https://www.reginfo.gov/public/pdf/eo13771/FINAL_BU_20171207.pdf.
- 65. See Cary Coglianese, Let's Be Real about Trump's First Year in Regulation, REG. REV. 3 (Jan. 29, 2018), https://www.theregreview.org/2018/01/29/lets-be-real-trumps-first-year-regulation (finding that far fewer regulatory burdens have been lifted than people have been led to believe and that empirical studies have shown the effects to be modest at best); Alan Levin & Ari Natter, Trump Stretches Meaning of Deregulation in Touting Achievements, BLOOMBERG (Dec. 29, 2017), https://www.bloomberg.com/news/articles/2017-12-29/trump-stretches-meaning-of-deregulation-in-touting-achievements (noting that many actions were labeled as deregulatory even though the agencies were just eliminating outdated and unnecessary proposals); Jennifer Rubin, The President and the Deregulation Myth, WASH. POST (Jan. 31, 2018), https://www.washingtonpost.com/blogs/right-turn/wp/2018/01/31/the-president-and-the-deregulation-myth/?utm_term=.89817c837add (reporting that almost a third of the regulatory reversals began under previous presidential administrations).
 - 66. See Levin & Natter, supra note 65.
- 67. See Christian Britschgi, Trump Brags about Deregulation, But a Huge Number of His Deregulatory Actions Were Started under Obama, REASON (Nov. 14, 2018), https://reason.com/

have been miscoded, as it contained both regulatory and deregulatory provisions. Specifically, while the Department of Labor (DOL) did raise the cap on the number of immigrants who are permitted to take certain seasonal, non-agricultural jobs, the action also included more complicated procedures for businesses trying to hire an immigrant.⁶⁸ Many of the sixty-seven deregulatory actions were not supported by quantitative estimates of both cost savings and foregone benefits, as two-thirds were deemed to be non-significant actions. Thus, the importance of the counted deregulatory actions is an issue.

Nor is the two-to-one ratio reported by OIRA an apples-to-apples comparison. Acts of deregulation are defined liberally by OIRA to include non-significant regulations, significant regulations, economically significant regulations, guidance documents, paperwork requirements, and even avoidance of planned regulations.⁶⁹ Acts of regulation are defined more narrowly to encompass only promulgation of significant new regulations.

In our interviews with regulatory experts across the political spectrum, skepticism was expressed as to whether this approach to computing the ratio is intellectually defensible. If OIRA continues the practice of reporting the aggregated ratios of deregulatory to regulatory actions, the practice should be modified to ensure apples-to-apples comparisons.

OIRA appears to be moving in this direction. The Administration's second public report about deregulation presents 176 deregulatory actions in fiscal year (FY) 2018, up from sixty-seven in FY 2017.⁷⁰ For FYs 2017 and 2018 combined, OIRA includes an apples-to-apples comparison of the ratio of significant deregulatory actions to significant regulatory actions, where the same type of actions ("significant" ones) are counted on both sides of the ledger. With this symmetric accounting, the Trump Administration has (so

^{2018/11/14/}an-incredible-number-of-trumps-deregulat/ (explaining that many of the victories the Trump Administration claims are Obama-era actions and noting that a number of significant rules for which the Administration took credit were merely delayed or had been previously withdrawn).

^{68.} Exercise of Time-Limited Authority to Increase the Fiscal Year 2018 Numerical Limitation for the H-2B Temporary Nonagricultural Worker Program, 83 Fed. Reg. 24,905, 24,912 (May 31, 2018) (to be codified at 20 C.F.R. pt. 655).

^{69.} See Cary Coglianese, supra note 65.

^{70.} Compare OIRA, REGULATORY REFORM AND EXECUTIVE ORDER 13,771: FINAL ACCOUNTING FOR FISCAL YEAR 2018 1–3 (2018) https://www.reginfo.gov/public/pdf/eo13771/EO_13771_Final_Accounting_for_Fiscal_Year_2018.pdf [hereinafter OIRA FY ACCOUNTING] (reporting the total number of deregulatory actions as 176), with OIRA, REGULATORY REFORM: COMPLETED ACTIONS FISCAL YEAR 2017 1 (2017) https://www.reginfo.gov/public/pdf/eo13771/FINAL_BU_20171207.pdf (noting that agencies issued sixty-seven deregulatory acts in 2017).

far) engaged in ninety significant deregulatory actions but only seventeen significant regulatory actions, a ratio of more than five-to-one.⁷¹ Yet, it remains difficult to assess the importance of the second-year deregulatory actions. Some are simply delays in effective dates while many are not accompanied by any numerical estimates of cost savings or foregone benefits.⁷²

D. Measuring Changes in Freedom

Other probing questions are asked about OIRA's new accounting practice. Are all acts of regulation equally intrusive? Are all acts of deregulation equally liberating? Unless the answers to the two questions are yes, the ratios being reported to the public can be misleading as to whether the overall body of federal regulations is becoming more or less intrusive over time. It certainly would seem dubious to allow repeal of two slightly intrusive regulations to be considered equivalent to the addition of one highly coercive regulation.

New tools are needed to assist OIRA and the agencies in the measurement of changes in freedom. From a philosophical perspective, OIRA guidance needs to start by addressing some core definitional questions such as whether only violations of "negative freedom" are to be considered or whether violations of "positive freedom" also count.⁷³

- 71. OIRA FY ACCOUNTING, supra note 70.
- 72. Stuart Shapiro, *Deregulatory Realities and Illusions*, REG. REV. (Nov. 12, 2018), https://www.theregreview.org/2018/11/12/shapiro-deregulatory-realities-illusions/.
- 73. The idea of negative liberty, put forward by Isaiah Berlin, is freedom from external constraint on one's actions, which—when exercised by the government causes grave concern for libertarians and small-government conservatives who are represented within the Trump Administration. See Isaiah Berlin, Lecture Delivered at Oxford University: Two Concepts of Liberty (Oct. 31, 1958) in Isaiah Berlin, Liberty: Incorporating Four Essays on LIBERTY 166–69 (Henry Hardy ed., 2002); MILTON FRIEDMAN, CAPITALISM AND FREEDOM 7–21(1962) (elaborating on the lack of differences between economic and political freedoms); FRIEDRICH A. HAYEK, THE ROAD TO SERFDOM WITH THE INTELLECTUALS AND SOCIALISM 66-67 (1944) (discussing the two kinds of security available to citizens of developed countries like the United States); see also Richard Mark Kirkner, It's Team Trump. But the Players Are from Think Tanks, Many with Koch Brother Roots, MANAGED CARE MAG. (Sept. 30, 2018), https:// www.managedcaremag.com/archives/2018/10/it-s-team-trump-players-are-think-tanks-m any-koch-brother-roots (reporting that 144 of Trump Administration appointees were previously employed at conservative organizations); Jonathan Mahler, How One Conservative Think Tank is Stocking Trump's Government, N.Y. TIMES (June 20, 2018), https://www.ny times.com/2018/06/20/magazine/trump-government-heritage-foundation-think-tank.html (providing an example of Heritage Foundation's footprint in the Trump Administration); Evan Osnos, Trump vs. the "Deep State", NEW YORKER (May 14, 2018), https:// www.newyorker.com/magazine/2018/05/21/trump-vs-the-deep-state (describing Trump as

Once liberty is defined appropriately by a particular administration—this definition can be expected to vary—there are measurement issues. For example, a ban may be more intrusive than a tax, since the consumer may still purchase a taxed product. A nudge, like a mandatory warning label, for a company is less intrusive than a performance standard that prohibits products which fail to meet the standard.⁷⁴ However, requiring compliance with a performance standard may be less intrusive than requiring compliance with a prescriptive design standard.⁷⁵

It is important to consider how much intrusion a regulation imposes and the breadth of its impact. Weighting each regulation by the severity of the intrusion and the number of people intruded upon would seem to be a more informative direction for regulatory analysis than simply counting the number of regulatory versus deregulatory actions. If the same regulation increases the freedom of some individuals while reducing the freedom of others, then a construct such as net freedom may be required.

E. Is It Regulation or Deregulation?

The practice of coding each rulemaking as regulatory or deregulatory is not new, as OIRA has done such coding for decades. The coding has not been important until the Trump Administration because the data was not used by policy makers and because acts of deregulation were relatively rare. Distinguishing regulation from deregulation is not as straightforward as it may seem at first blush. The same rulemaking can appear to be regulatory or deregulatory, depending on the baseline for comparison.

Consider the Environmental Protection Agency's (EPA's) Clean Power Plan (CPP), which covers electric-utility carbon pollution and was issued by the Obama Administration in 2015. The CPP was stayed by the Supreme Court, and later repealed and replaced by the Trump Administration with the more limited Affordable Clean Energy (ACE) rule.⁷⁶ On the one hand,

at peace with the plutocracy that his administration has established). In contrast is possession of the capacity to act upon one's free will. It can be impaired by external factors like poverty, poor education, language difficulties, lack of health insurance, racial or sexual discrimination, and other adverse social and economic conditions. That is why John Rawls emphasized access to the essential requirements to pursue the good life. JOHN RAWLS, A THEORY OF JUSTICE, 176–80 (rev. ed., Harvard Univ. Press 1999) (1971).

- 74. On how nudges can enhance freedom, see RICHARD H. THALER & CASS R. SUNSTEIN, NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH AND HAPPINESS 8 (2008).
 - 75. Breyer, *supra* note 5, at 105–06.
- 76. The stay was issued on February 9, 2016, in a 5–4 decision a few days before Justice Antonin Scalia passed away. See Juliet Eilperin & Brady Dennis, Court Freezes Clean Power Plan

CPP provided more compliance options than ACE, including the option of planting trees outside of the fence-line of the plant, so ACE might seem to be more restrictive, since it does not allow off-site measures. On the other hand, the greenhouse gas (GHG) emissions reductions required by CPP were much more stringent than ACE, thus making the CPP appear restrictive to the regulated industry. The proposed ACE is a regulatory action—compared to no regulation—as it imposes restrictions and costs on coal-fired power production; however, in contrast to the Obama's CPP it is arguably deregulatory. OIRA and the EPA chose to code this as two actions—the withdrawal of CPP as deregulatory and the proposed ACE as regulatory.

A related conundrum occurs when a federal regulatory action preempts regulation by state and local authorities. Congress recently modernized the Toxic Substances Control Act for the first time since 1976 and included a limited federal preemption provision to restrain state and local regulators. Some chemical companies may favor EPA regulation because the presence of federal regulation will prevent intrusive and conflicting state and local regulations. An EPA regulation of a chemical substance is difficult to see as deregulatory; however, if a federal regulation bars or discourages conflicting state and local regulations, the federal regulation might reasonably be considered deregulatory. OIRA does not currently have data or tools to handle this complication in a freedom-oriented analysis.

Sometimes a complicated relationship exists between the presence of a federal standard for consumer products and the vulnerability of the producer to common law liability. In some cases, the producer—when sued for product-related injuries—may use compliance with the federal standard as a full or partial defense against a liability lawsuit.⁷⁷ Thus, while the federal stand-

Lawsuit, Signaling Likely End to Obama's Signature Climate Policy, WASH. POST (Apr. 28, 2017), https://www.washingtonpost.com/news/energy-environment/wp/2017/04/28/court-freez es-clean-power-plan-lawsuit-signaling-likely-end-to-obamas-signature-climate-policy//?utm_term=.3ffe5417939d; Adam Liptak & Coral Davenport, Supreme Court Deals Blow to Obama's Efforts to Regulate Coal Emissions, N.Y. TIMES (Feb. 9, 2016), https://www.nytimes.com/2016/02/10/us/politics/supreme-court-blocks-obama-epa-coal-emissions-regulations.html.

77. Efforts in the Bush 43 Administration to assert broad claims of preemption met with limited success. See Preemption Choice: The Theory, Law, and Reality of Federalism's Core Question (William W. Buzbee ed., 2009). The general pattern is for courts not to accept regulatory-compliance defenses. However, some states have passed tort reform legislation allowing limited or full regulatory-compliance defenses. See David G. Owen, Special Defenses in Modern Products Liability Law, 70 Mo. L. Rev 1, 21–23 (2005). See generally Thomas O. McGarity, The Preemption War: When Federal Bureaucracies Trump Local Juries (2008) (discussing the politics of federal preemption of common law

ard is an intrusion on the producer's entrepreneurial freedom, in some unusual situations it protects the producer. On the other hand, the regulatory-compliance defense can be seen as limiting the allegedly injured consumer's freedom to seek compensation.

Under the new Toxic Substances Control Act (TSCA), the Trump EPA has issued four "framework rules" that establish the processes to be used during implementation.⁷⁸ These rules define the scientific and administrative processes for regulating chemicals under the new law. OIRA has sidestepped the coding issue for the framework rules by deciding that they are fully or partially exempt from the requirements of EO 13,771.⁷⁹ The fact that that they are excluded from the highly publicized ratio is a hint that the ratio may be misleading.

OIRA guidance suggests that a rulemaking will be designated regulatory (deregulatory) if its net costs are positive (negative).⁸⁰ OIRA has issued definitional guidance on "net costs." However, this guidance weakens the role of freedom under the two-for-one executive order, since it classifies rules in terms of a monetary metric rather than impact on freedom.⁸¹ Insofar as the two-for-one offsets system collapses into an economic system, it simply duplicates or overlaps with the regulatory budget (described below) and federal cost-benefit review—in place since Reagan.

The general point is that regulatory policy is a complex subject, and it may not be obvious whether a particular rulemaking should be considered an act

liability and stating that the Supreme Court has interpreted the Supremacy Clause to "impliedly" preempt state laws, regulations, and common law claims that are inconsistent with federal statutes and regulations); FEDERAL PREEMPTION: STATES' POWERS, NATIONAL INTERESTS (Richard A. Epstein & Michael S. Greve eds., 2007) (claiming that partisan lines are clearly drawn on the topic of federal preemption).

- 78. Pat Rizzuto, *EPA Details New Oversight of Chemicals in Three Final Rules*, BLOOMBERG BNA (June 22, 2017), https://news.bloombergenvironment.com/environment-and-energy/epa-details-new-oversight-of-chemicals-in-three-final-rules?context=article-related.
- 79. The EPA published the chemical prioritization process rule (RIN 2070-AK23) on July 20, 2017. Procedures for the Prioritization of Chemicals for Risk Evaluation under the Toxic Substances Control Act, 82 Fed. Reg. 33,753, 33,761 (July 20, 2017) (codified at 40 C.F.R. pt. 702). The Risk Evaluation process rule (RIN 2070-AK20) was published on July 20, 2017. See Procedures for Chemical Risk Evaluation under the Toxic Substances Control Act, 82 Fed. Reg. 33,726, 33,746 (July 20, 2017) (codified at 40 C.F.R. pt. 702). The Inventory Rule (RIN 2070-AK24) was published on August 11, 2017. See 82 Fed. Reg. 37,520, 37,544 (Aug. 11, 2017) (codified at 40 C.F.R. pt. 710).
- 80. OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE PRESIDENT, No. M-17-21, GUIDANCE IMPLEMENTING EXECUTIVE ORDER 13,771, TITLED "REDUCING REGULATION AND CONTROLLING REGULATORY COSTS" 1–2 (Apr. 5, 2017) [hereinafter GUIDANCE REDUCING REG.].
 - 81. Id. at 3, 6.

of deregulation or an act of regulation. Two equally competent OIRA desk officers could read the same rulemaking package and code the action differently because some subjectivity exists when deciding whether specific rulemakings are "significant"—justifying OIRA review—as it is a matter of professional judgment. Therefore, the more OIRA can do to supply principled guidance to the coding process, the more credible the aggregate deregulation/regulation ratios will be. Presently, the two-for-one system seems to be trending toward another economic-evaluation scheme while the ratios being reported lack credibility. On the other hand, some consistency value is created by using the same definitions over time to generate meaningful trends.

Some economists have little patience tallying regulation and deregulation because what they care about is the overall impact of regulation on public wellbeing—perhaps measured by costs and benefits—or on the economy as a whole (Gross Domestic Product (GDP), employment, and so forth).⁸² Trump Administration officials appear to support tangible evaluations of regulatory proposals, but they may be given less weight than previous administrations because freedom (primarily negative freedom) is the Administration's focus.

Interestingly, the Trump Administration's two-for-one initiative is already influencing other jurisdictions to move in this direction.⁸³ Virginia recently enacted a bipartisan two-for-one pilot project coupled with a legislative requirement that state agencies reduce the number of existing regulatory requirements by 25%.⁸⁴ Building on years of experience in British Columbia and the recent Virginia pilot, some reform experts argue that the

^{82.} Joshua Linn & Alan J. Krupnick, *Ninety-Six Regulatory Experts Express Concerns about Trump Administration Reforms*, RESOURCES (May 24, 2017), https://www.resourcesmag.org/common-resources/ninety-six-regulatory-experts-express-concerns-about-trump-administration-reforms/ (arguing that the plain language of Trump's Executive Orders (EOs) 13,771 and 13,777 places an outsized focus on regulatory costs). Some theorists believe that changes in freedom and equity could be incorporated into future cost-benefit analyses. *See* Matthew D. Adler, Well-Being and Fair Distribution: Beyond Cost-Benefit Analysis (2012).

^{83.} On international trends, see Daniel Trnka & Yola Thuerer, *One-In, X-Out: Regulatory Offsetting in Selected OECD Countries* (Org. for Econ. Cooperation & Dev., Working Paper No. 11, 2019), https://www.oecd-ilibrary.org/governance/one-in-x-out-regulatory-offsetting-in-selected-oecd-countries_67d71764-en (comparing different examples of regulatory offsetting approaches by selected OECD countries).

^{84.} The primary focus is professional licensing requirements at two state agencies, which is defined by the number of requirements, not the number of rules or the costs of requirements. *See* H.B. 883, 2018 Gen. Assemb., Reg. Session (Va. 2018), https://lis.virginia.gov/cgi-bin/legp604.exe?181+ful+CHAP0444; James Broughel, *How to Improve Trump's Regulatory Budget*, WASH. EXAMINER (Oct. 26, 2018), https://www.washingtonexaminer.com/opinion/op-eds/

Trump two-for-one reform should focus more on reducing the number of existing requirements.⁸⁵

F. Regulatory Budgeting

Executive Order 13,771 also calls for a new regulatory budgeting process to control the overall cost agency regulations. Prior to the Trump Administration, there was no annual cap on the additional cost burdens an agency is allowed to impose.⁸⁶

Echoing the concerns of several officials who have extensive experience at OMB, President Trump insists that there should be a cap.⁸⁷ Since there is an annual limit on the amount of public money that an agency can spend (congressional appropriations), there should also be an annual limit on the amount of non-federal money that an agency can force regulatees—business, non-profit organizations, and state and local governments—to spend. Without a regulatory cap on costs, agencies will shift more of the policy costs to regulatees, since they are less scrutinized than appropriations.⁸⁸

Skeptics counter that a regulatory budget is not necessary because OIRA already reviews each significant regulation under EO 12,866 to ensure that

how-to-improve-trumps-regulatory-budget (claiming that Virginia can apply its reforms broadly because it chose the simple measure of counting regulatory requirements).

- 85. See Laura Jones, Mercatus Ctr. George Mason Univ., Cutting Red Tape in Canada: A Regulatory Reform Model for the United States?, 3–4 (2015) (concluding that British Columbia's regulatory reform could serve as a potential model for the United States); James Broughel & Laura Jones, Mercatus Ctr. George Mason Univ., Effective Regulatory Reform: What the United States Can Learn from British Columbia 4–6 (2018) (comparing EO 13,771 with the flourishing regulatory reform program in British Columbia).
- 86. The idea was originally put forward in the 1970s by Democratic Senator Lloyd Bentsen, but Congress never warmed to the idea. *See* LAWRENCE J. WHITE, REFORMING REGULATION: PROCESSES AND PROBLEMS 226–27 (1981).
- 87. See Christopher C. DeMuth, The Regulatory Budget, REG.: AEI J. ON GOV'T & SOC'Y 29, 30, 37 (Mar./Apr. 1980) (explaining the creation and role of the OMB in the 1980's); ROBERT E. LITAN & WILLIAM D. NORDHAUS, REFORMING FEDERAL REGULATION (1983); John F. Morrall III, Controlling Regulatory Costs: The Use of Regulatory Budgeting (Org. for Econ. Cooperation & Dev., Regulatory Management & Reform Series No. 2, 1992).
- 88. On the "unappreciated synergy" between fiscal budgeting and regulatory budgeting, see CLYDE WAYNE CREWS JR., TEN THOUSAND COMMANDMENTS: AN ANNUAL SNAPSHOT OF THE REGULATORY STATE, COMPETITIVE ENTERPRISE INST. 13 (2018), https://cei.org/10 kc2018. Limits were recently set through an OMB-led budgeting process. Ted Gayer et al., Evaluating the Trump Administration's Regulatory Reform Program, BROOKINGS INST. (Oct. 2017), https://www.brookings.edu/research/evaluating-the-trump-administrations-regulatory-reform-program/.

benefits justify costs. Skeptics argue that a regulatory budget can worsen outcomes since benefits are not an explicit part of the process,⁸⁹ and accordingly no additional restraint on regulatory action is appropriate. Whether OIRA's cost-benefit review is adequate depends on the quality of the agencies' analyses prepared by the agencies, and OIRA's vigor in reviewing and enforcing EO 12,866's "benefits 'justify' the costs" test.⁹⁰

For fiscal year 2017, the Presidential Executive Order set the regulatory budgets of all agencies at net zero. This is a strong signal that the Trump Administration is serious about deregulation and means that an agency may not impose any new regulatory costs unless the agency identifies and eliminates equivalent costs within existing rules. Technical guidance from OIRA informed agencies as to how costs would be defined in the regulatory budget, exclusions as well as inclusions.⁹¹

Annual regulatory budgets, for the last fiscal years, have been set based on agency proposals and OMB review, similar to the way that the President's budget request to Congress for various agencies is prepared on a year-to-year basis.

Some critics are concerned that the new regulatory budgeting process might cause agencies to eliminate good regulations that have large benefits relative to costs, to make room in the regulatory budget for promising new regulations.⁹² The theory of the regulatory budget suggests otherwise, profering that agencies would start by eliminating regulations with high ratios of

^{89.} Joshua Linn & Alan J. Krupnick, *Ninety-Six Regulatory Experts Express Concerns about Trump Administration Reforms*, RESOURCES (May 24, 2017), https://www.resourcesmag.org/common-resources/ninety-six-regulatory-experts-express-concerns-about-trump-administration-reforms/.

^{90.} See Jerry Ellig & Patrick A McLaughlin, The Quality and Use of Regulatory Analysis in 2008, 32 RISK ANALYSIS 855, 858 (2012) (assessing the quality and use of regulatory analysis); RESOURCES FOR THE FUTURE, REFORMING REGULATORY IMPACT ANALYSIS 16 (Winston Harrington et al. eds., 2009) (discussing federal regulators' reliance on the controversial costbenefit analyses of regulatory impact analyses). The technical quality of regulatory impact analyses in the federal government is highly uneven. See Ellig & McLaughlin, supra, at 856.

^{91.} See GUIDANCE REDUCING REG., supra note 80, at 2–17 (providing definitions and additional guidance on how to calculate costs).

^{92.} See, e.g., James Goodwin, The Key Ingredient in Trump's Anti-Reg Two-for-One Executive Order? Fuzzy Math, CTR. FOR PROGRESSIVE REFORM BLOG (Apr. 12, 2017), http://www.pro gressivereform.org/CPRBlog.cfm?idBlog=B4331117-AF2B-F035-61F65A9C6558025C (arguing that "dumb" rules will likely remain on the books as long as their costs are relatively small while regulations with significant benefits will not due to cost); James Goodwin, Trump White House: Safeguards Produce Huge Net Benefits; Also Trump White House: Repeal Them Anyway, CTR. FOR PROGRESSIVE REFORM BLOG (Feb. 28, 2018), http://www.progressivereform.org/CPRBlog.cfm?idBlog=7BC1BC0F-B237-C8D4-BF13F87503CF9AB2 (claiming that Trump's domestic policy has focused on weakening existing regulations while abdicating its responsibility to develop and implement new ones).

cost to benefit before eliminating regulations with high ratios of benefit to cost. Unfortunately, the process could become politicized and cause some costly but high-benefit regulations to be eliminated if the benefits are spread diffusely among citizens, if benefits occur only in the distant future, or if benefits accrue mostly to vulnerable groups in society that lack political clout.⁹³

A check on perverse outcomes, due to the regulatory budget, is the costbenefit decision rule in EO 12,866 that governs OIRA review, since deregulatory rulemakings must be supported by cost-savings that justify their foregone benefits.⁹⁴ Nonetheless, there is concern the Trump Administration's focus on deregulation will compromise the legitimate role of benefits in future regulatory policy, and that the regulatory budget simply discourages agencies from even considering beneficial new regulations.

A deeper problem is that some agencies have little knowledge of the actual benefits and costs of existing regulations.⁹⁵ It is well known that pre-regulation estimates of costs and benefits are not always validated by retrospective evaluations, and the prediction errors go in both directions.⁹⁶ Moreover, if one-time capital costs dominate a regulation's costs, repealing that regulation is not likely to save much capital, since those capital expenses are already sunk.⁹⁷

^{93.} See Thomas O. McGarity, Freedom to Harm: The Lasting Legacy of the Laissez Faire Revival 30–32 (2013). Progressives have a long-standing concern that more influence of economics in regulatory processes will compromise public health, safety, and environmental progress. See id. at 19.

^{94.} See GUIDANCE REDUCING REG., supra note 80, at 3–4, 8; Marcus Peacock, Implementing a Two-for-One Regulatory Requirement in the United States, 15–16 (Dec. 7, 2016) (unpublished manuscript) (on file with George Washington Univ. Regulatory Studies Ctr.), https://regulatory studies.columbian.gwu.edu/sites/g/files/zaxdzs1866/f/downloads/Peacock_Implementing-Two-For-One%2012-2016_final.pdf.

^{95.} An exception may be the National Highway Traffic Safety Administration, which has published retrospective assessments of the costs and safety benefits of each of the agency's major Federal Motor Vehicle Safety Standards. See U.S. Dep't of Transp., Nat'l Highway Traffic Safety Admin., Nat'l Highway Traffic Safety Admin., DOT-HS-812-354, Cost and Weight Added by the Federal Motor Vehicle Safety Standards for MY 1968–2012 Passenger Cars and LTVs 1, 12 (2017), https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812354; U.S. Dep't of Transp., Nat'l Highway Traffic Safety Admin., DOT-HS-812-069, Lives Saved by Vehicle Safety Technologies and Associated Federal Motor Vehicle Safety Standards, 1960 to 2012 Passenger Cars and LTVs 1 (2015), https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812069; Graham, supra note 10, at 398, 526–27.

^{96.} See Winston Harrington, Grading Estimates of Benefits and Costs of Federal Regulation: A Review of Reviews 8–9 (Res. for the Future, Discussion Paper No. 06-39, 2006).

^{97.} On the importance of identifying "sunk" costs in retrospective regulatory evaluation,

Unless it can be shown that there are numerous existing regulations that lack benefits to justify their continuing costs, then regulatory budgeting could force agencies to remove regulations that have benefits that justify their costs.⁹⁸

To make this process more meaningful, the Trump Administration needs to institute a practical process of retrospective evaluation of the costs and benefits of both existing and new regulations. The Bush 43 and Obama Administrations took some modest steps in this direction, but—given the huge body of existing regulation—there is a vast amount of unfinished business without clear resolutions.

Executive Order 13,777 calls for agencies to assemble regulatory task forces to address this question. This may be a step forward from the Bush 43 and Obama efforts; however, those task forces face the same daunting task that was faced by the agencies under previous administrations' regulatory look-back processes, 99 which made only limited progress. This was, in part, because the regulatees themselves often do not know the costs and/or benefits of the regulations applied to them. The cost of collecting such information is not trivial, and it is not clear who should bear that cost. 100

As a result, the regulatory budgeting process may have much less impact than proponents hoped for, but also much less impact than opponents feared. 101 That is because the political appointees in the Trump Administration are not eager to adopt new regulations, especially ones that would impose additional costs on regulatees. Regulatory budgeting is more likely to impact a government like the Blair Administration in the United Kingdom (UK), where substantial ambitions for new regulations coincide with the need for regulatory housekeeping in the UK. 102

see Office of Mgmt. & Budget, Exec. Office of the President, Draft Report to Congress on the Benefits and Costs of Federal Regulations and Agency Compliance with the Unfunded Mandates Reform Act 52 (2017), https://www.whitehouse.gov/wp-content/uploads/2017/12/draft_2017_cost_benefit_report.pdf [hereinafter Unfunded Mandates Report] (discussing the importance of identifying "sunk" costs in retrospective regulatory evaluation).

- 98. See Wiener & Ribeiro, supra note 16, at 22–27 (discussing the history of ex ante analysis of regulatory impacts of proposed rules and ex post evaluation of existing rules).
- 99. *Cf.* Exec. Order No. 13,771, 82 Fed. Reg. 9339, 9339 (Feb. 3, 2017); Exec. Order No. 13,563, 76 Fed. Reg. 3821, 3821–22 (Jan. 11, 2011).
 - 100. A good place to start might be billion-dollar regulations. See Graham, supra note 10, at 528.
- 101. Keith B. Belton et al., *Regulatory Reform in the Trump Era*, 77 PUB. ADMIN. REV. 643, 643–44 (2017).
- 102. For reviews of experiences in the United Kingdom (UK) and Canada with regulatory budgeting, see Sean Speer, *Regulatory Budgeting: Lessons from Canada* 9–10 (R Street, Policy Study No. 54, 2016), https://www.rstreet.org/wp-content/uploads/2016/03/RSTREET54.

A regulatory budget may not have much of an impact on a deregulatoryminded administration. President Trump is separately instructing his Cabinet officers to find as many regulations as possible to eliminate, and Trump appointees have been carefully selected to ensure sympathy with deregulation. The proof of a regulatory budget will be in the pudding: The number of existing regulations eliminated or made less burdensome or less intrusive by the Trump Administration.

Conversely, a regulatory budget would not necessarily constrain a proregulation administration because agency budgets could be set relatively high. This would make room for ambitious new regulations; however, the administrative burden of a regulatory budget may not be viewed as worthwhile—a key concern—in a Democratic administration. Thus, the longevity of President Trump's regulatory-budgeting innovation is questionable.

II. FINDINGS

We proceed to the findings of our two-year assessment of what President Trump has accomplished with respect to deregulation. We consider both the *flow* of new regulations and the *stock* of existing regulations.

Each rulemaking is classified by OIRA as non-significant, significant, or economically significant. An "economically significant" regulation (similar to the term "major" regulation) is projected at the time of promulgation to have at least a \$100-million impact on the economy or alter, in a material way, the economy or a sector of the economy. The category "significant" regulations includes actions with such a large economic impact, but the category also includes those rules that have a significant budgetary impact, that

pdf. See TED GAYER ET AL., EVALUATING THE TRUMP ADMINISTRATION'S REGULATORY REFORM PROGRAM, BROOKINGS INST. 7–8 (2017), https://www.brookings.edu/wp-content/uploads/2017/10/evaluatingtrumpregreform_gayerlitanwallach_102017.pdf (reviewing the implementation of regulatory budget policy in Canada and the UK); Andrea Renda, One Step Forward, Two Steps Back? The New U.S. Regulatory Budgeting Rules in Light of the International Experience, 8 J. BENEFIT-COST ANALYSIS 291, 301–03 (2017) (discussing the differences between the system in the US and other countries); Jeffrey A. Rosen & Brian Callahan, The Regulatory Budget Revisited, 66 ADMIN. L. REV. 835, 856–60 (2014) (analyzing the UK's "one-in, one-out" and "one-in, two-out" policy).

103. The definitions of "economically significant" and "major" are quite similar and, thus, the terms are often used interchangeably, as they are in this report. However, the term "major rule," which is defined in the Congressional Review Act (CRA), is more expansive than the term "economically significant" rule because major rules also include rules that would have a significant adverse effect on the ability of U.S.-based enterprises to compete with foreign-based enterprises in domestic and export markets. See UNFUNDED MANDATES REPORT, supra note 97, at 1.

create a serious inconsistency with the actions of another agency, or that raise novel legal or policy issues. The "non-significant" regulations (those rules that are neither significant nor economically significant) make up the largest share of rules. They are often considered minor or routine, but not necessarily by the regulatees who are impacted by them.

Please note, the time period we have studied has not been impacted much by the recent partial government shutdown. During the third year of the Trump Administration, both the flow of new regulations and the pace of deregulatory rulemakings may have been impacted by the shutdown. Further, we wish to remind readers that some previous presidents (e.g., Ronald Reagan) were more inclined to regulate as re-election loomed or closer to the end of their second term. We are evaluating only Trump's first two years in office, and it remains to be seen if the deregulatory emphasis continues throughout his presidency.

Finding #1: The flow of new regulations under the Donald Trump Administration has been much smaller than observed during the Barack Obama and George W. Bush Administrations.

There is strong evidence that the pace of issuing new regulations has slowed compared to previous presidential Administrations. Table 1 reports the number of new regulations issued in the first twenty-four months of the Trump, Obama, and the Bush 43 presidencies.

Table 1. New Rulemakings During a President's First 24 Months	Table 1	. New]	Rulema	kings D	Ouring a	President's	First 24 Months.
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President ¹⁰⁵	Total	Significant	Major	Regulatory	Deregulatory	
	Regulations	Regulations	Regulations	Actions	Actions	
				under EO	under EO	
				13771*	13771*	
Bush 43	6,999	1,885	103	NA	NA	
Obama	6,793	1,931	176	NA	NA	
Trump	4,310	1,027	90	17	243	

^{104.} See Bridget C.E. Dooling, Opinion, A Long Shutdown Hinders Trump's Deregulatory Efforts, HILL (Jan. 10, 2019), https://thehill.com/opinion/white-house/424617-a-long-shutdown-hinders-trumps-deregulatory-efforts (stating that deregulation requires going through the same "painstaking steps" as regulation, and at least five of those steps were implicated in the government shutdown).

^{105.} For each administration listed, the numbers refer to rules published in the Federal Register for a twenty-four-month period starting from Inauguration Day (January 20th). Rules from both independent and cabinet agencies are included. *GAO Federal Rules Database Search*, U.S. GEN. ACCOUNTABILITY OFFICE, https://www.gao.gov/fedrules.html (last visited Nov. 12, 2019).

Sources: U.S. Government Accountability Office (GAO) Federal Rule Database and OMB.

* Covers the time period from 1/20/17 through 9/30/18. Deregulatory actions were publicly reported only after the end of the fiscal year and therefore were not available for the full twenty-four-month period.

As Table 1 shows, the total number of final regulations issued under the Trump Administration is approximately 40% smaller than the number issued by the Bush 43 or Obama Administrations. The number of "significant" regulations under President Trump is almost 50% smaller than the number issued under Presidents Bush and Obama. For major rules, the counts under both Trump (-49%) and Bush 43 (-41%) are substantially smaller than the count under Obama.

Comparing the total number of regulations is questionable because the category is dominated by the non-significant rules, a heterogeneous category that includes many minor routine rules that are updated periodically, rules that are necessary or helpful in the administration of budgetary programs (e.g., Medicare), and noncontroversial rules that lack an intrusive or burdensome character. With regard to trends, the flow of non-significant rules may also be low in periods when Congress has been enacting few new legislative measures, since implementing regulations will also decline. More study is needed to determine why the Trump Administration has issued so few non-significant rules.

Caution is also appropriate when comparing the number of significant regulations across administrations because the definition of "significant" is subjective and the determinations are often non-transparent. One study of 109 significant rules found that 72% included no explanatory language for why they were deemed significant. All that can really be said is that a significant regulation is one that OIRA decides it wants to review. More research is needed as to why the Trump Administration's significant-rule counts are so small.

OIRA also controls the determination of "economically significant" rules and there are examples where bureaucratic games have been played with how the \$100 million-threshold is applied in specific rulemakings. ¹⁰⁷ None-

^{106.} On the subjectivity and non-transparent nature of "significance" determinations, see U.S. Gov't Accountability Office, Federal Rulemaking: Agencies Included Key Elements of Cost Benefit Analysis, But Explanations of Regulations' Significance could be More Transparent 16–17 (Sept. 2014), https://www.gao.gov/assets/670/665745.pdf (discussing the subjectivity and non-transparent nature of "significance" determinations).

^{107.} See Nina A. Mendelson & Jonathan B. Wiener, Responding to Agency Avoidance of OIRA,

theless, the counts of major rules are more dependable for purposes of temporal comparisons because of the quantitative threshold and the well-accepted economic constructs that underpin the definition. Moreover, major rules are believed to account for most of the impact of federal regulation on the U.S. economy, since a small minority of federal regulations are believed to account for the bulk of total regulatory burdens and benefits. This pattern helps explain why OMB's annual report to Congress on the costs and benefits of federal regulation focuses primarily on major rules. Ven the economically significant rules include a substantial fraction (36% in FY 2016) that do not impose net costs. Instead, they transfer income within society to implement budgetary programs authorized by Congress such as Medicare and the Pell grants for student aid.

Since the \$100-million threshold is not adjusted for inflation, one might have expected President Trump to have adopted more major rules than Presidents Obama and Bush. This is because the threshold—in real terms—is declining, which makes it easier for a rule to qualify as major. In fact, President Trump issued fewer major rules during his first twenty-four months than his two predecessors. The stark difference between the Trump and Obama Administrations is not surprising, as the Obama Administration set a record for issuing the greatest number of impactful rules.¹¹¹

The final columns in Table 1 refer to regulatory and deregulatory actions under EO 13,771—those terms are applicable only to the Trump Administration. Few new regulatory actions have been issued that are subject to

- 109. See Unfunded Mandates Report, supra note 97, at 6.
- 110. Id. at 2.

³⁷ HARV. J.L. & PUB. POL'Y 447, 456, 465–67 (2014) (citing the example of the Clinton Executive Order).

^{108.} See Office of Mgmt. & Budget, Exec. Office of the President, Report to Congress on the Costs and Benefits of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities 14 (2006), https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/assets/OMB/inforeg/2006_cb/2006_cb_final_report.pdf [hereinafter Tribal Entities Report] (explaining that major rules are believed to account for the "vast majority" of federal rulemaking's total costs and benefits).

^{111.} On the Obama Administration's record rate of producing major new regulations, see Sam Batkins, 600 Major Regulations, AM. ACTION F.: INSIGHT 1 (Aug. 6, 2016), https://www.americanactionforum.org/print/?url=https://www.americanactionforum.org/insight/600-major-regulations/. One contributing factor to the large number of major rules in the first two years of the Obama Administration is that the Bush 43 EPA was slow to respond to some statutory and judicial deadlines, and some of Bush's major rules were remanded by courts late in Bush's second term. The judicial remands of those major rules had to be dealt with by the incoming Obama EPA. On Bush's loss of key rules in federal court decisions, see GRAHAM, supra note 18, at 202–14.

the "two-for-one" policy. The difference between the number of Trump's significant regulations and the number of regulatory actions subject to EO 13,771 is notable. The smaller number reflects the limited scope of the two-for-one order as OMB/OIRA restricted coverage to exclude transfer rules, financial rules, budgetary rules, rules from independent agencies, and other specialized cases.¹¹²

The Trump Administration does not always oppose new regulations. President Trump's trade policies have made extensive use of regulatory power as have the Administration's immigration policies. The Food and Drug Administration (FDA) is "bucking the Trump Administration's push for deregulation" by launching pro-regulation initiatives on drug prices, ecigarettes, and the opioid epidemic. Further, the United States Department of Agriculture (USDA) has finalized a rule compelling food manufacturers to alert U.S. consumers to the presence of genetically modified ingredients.

Why is the flow of new regulations so small under the Trump Administration? The Administration did propose large cuts in the budgets of regulatory

- 112. Two recent studies examined regulatory activity under Trump in more detail—adjusting for some of the data deficiencies described here—and both concluded that the flow of new regulations is much smaller under Trump than under Obama and Bush 43. See BRIDGET C.E. DOOLING, TRUMP ADMINISTRATION PICKS UP THE REGULATORY PACE IN ITS SECOND YEAR, GEORGE WASHINGTON UNIV. REGULATORY STUDIES CTR., 2, 6–7 (Aug. 1, 2018), https://regulatorystudies.columbian.gwu.edu/sites/g/files/zaxdzs1866/f/downloads/Dooling_Trump%27sFirst18Months.pdf; see also Connor Raso, Where and Why Has Agency Rulemaking Declined Under Trump?, BROOKINGS INST. 1, 9 (2018), https://www.brookings.edu/research/where-and-why-has-agency-rulemaking-declined-under-trump/ (finding "[a]gencies under Trump significantly reduced the total amount of rulemaking relative to 2001, 2009, and 2016.").
- 113. Specifically, the U.S. trade agreement with Mexico and Canada (USMCA) compels greater use of auto parts that are made in the United States and uses regulatory power to restrict the flow of new immigrants and prosecute apprehended immigrants.
- 114. Emily Mullin, FDA Chief Pushed Hard on Public Health Issues, 96 CHEMICAL & ENGINEERING News, Dec. 3, 2018, at 33, 33; Stephanie Armour & Joseph Walker, Trump Administration Moves to Curb Drug Rebates in Medicare, Medicaid, WALL ST. J. (Feb. 1, 2019), https://www.wsj.com/articles/u-s-proposes-curbing-drug-rebates-in-some-medicare-medica id-plans-11548971322.
- 115. Cheryl Hogue, US Required Labeling of GMO Foods as 'Bioengineered,' 97 CHEMICAL & ENGINEERING NEWS, Jan. 7, 2019, at 15, 15. Campaign positions can account for some of the Administration's pro-regulation initiatives (immigration policies) and others are due to statutory requirements from Congress (U.S. Department of Agriculture (USDA) labeling of bioengineered foods); however, several regulations—the FDA's regulatory activism in regulating nicotine—are hard to explain given the President's strong commitment to deregulation.

agencies, which were mostly not granted by the Republican-majority Congress. Therefore, we believe the most important factor may be the appointments made by President Trump to the federal regulatory agencies, since they appear to have been made with a preference for deregulation. Another underappreciated factor may be vacancies at regulatory agencies. An unusual feature of the Trump Administration is that the White House has been relatively slow to nominate candidates for top regulatory posts and the Republican-majority Senate has been correspondingly slow with approval.

The absence of a Senate-confirmed Trump nominee does not make it easy for a department or agency to issue new regulations. In fact, the career staff of a leaderless regulatory unit may simply be told that there will be no new regulations (including new deregulations) considered until leadership is appointed. The longer the appointment delay—often exacerbated by delays in the Senate confirmation process—the fewer the number of new regulations. Thus, the pace of new regulations under Trump may be slow, in part because the White House was slow in placing the Trump team.

To explore this phenomenon numerically, we define the "total appointment time" as the sum of the time it takes President Trump to make a nomination for a regulatory post, plus the time it takes for the Senate to confirm the nomination. Both the nomination and confirmation schedules are addressed below.

Figures 1 and 2 compare nomination and confirmation schedules for the top regulatory officials in the Trump Administration to the comparable schedules for officials in the Bush 43 Administration.¹¹⁷ To identify the top regulatory posts, we examined regulatory activity over the last ten years as summarized in OMB's annual reports to Congress on the costs and benefits of federal regulation.¹¹⁸ There were nine regulatory units associated with five or more major rules, and those nine regulatory posts are included in the figures. Figure 1 compares the time from inauguration to nomination for these

Trump Administration, and this trend could account for some of the decline in rulemaking activity by EPA. It does not appear to be budget-related. Senior career staff may be departing because they sense that there will be little meaningful regulation to protect the environment during the Trump Administration. See Lisa Friedman et al., EPA Officials, Disheartened by Agency's Direction, Are Leaving in Droves, N.Y. TIMES (Dec. 22, 2017), https://www.ny times.com/2017/12/22/climate/epa-buyouts-pruitt.html (discussing how EPA staff are leaving the agency due to "poor morale and a sense of grievance at the agency").

^{117.} The Obama Administration was not used as the comparator because there may be political differences between the priority given to particular posts.

^{118.} See Unfunded Mandates Report, supra note 97, at 11 (comparing annual benefits and costs of major federal rules from 2001 and 2015).

nine key positions and Figure 2 compares the time taken by the Senate to confirm these individuals.

There are two important caveats to make about the figures. President Trump did not nominate a leader of the Federal Aviation Administration (FAA) in his first two years in office. The nomination time is set provisionally in our calculation at January 19, 2019. Three of the Trump Administration nominees were still awaiting confirmation as of January 19, 2019: these nominees would lead the Department of Transportation's (DOT's) National Highway Traffic and Safety Administration, the EPA's Office of Land and Emergency Management, and the DOL's Occupational Safety and Health Administration. The confirmation time for these individuals is also set at January 19, 2019.

With these points in mind, Figures 1 and 2 show a clear pattern: President Trump is taking much longer to fill key regulatory posts than Bush 43, the previous Republican President. Both of the nomination times and confirmation times are noticeably longer under President Trump—one exception exists as Bush took much longer to nominate his FDA Commissioner. Responsibility lies with the Trump Administration and with the Senate, which is confirming Trump nominees slower than it did under President Bush. 119

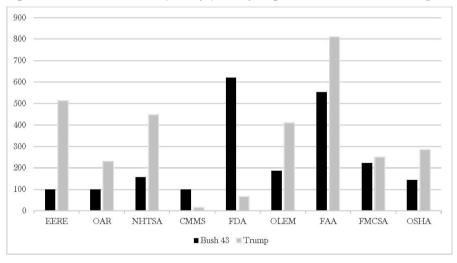


Figure 1. Nomination Time (In Days) of Key Regulators: Bush 43 vs. Trump

119. See generally Ann Joseph O'Connell, After One Year in Office, Trump's Behind on Staffing but Making Steady Progress, BROOKINGS INST. (Jan. 23, 2018), https://www.brookings.edu/research/after-one-year-in-office-trumps-behind-on-staffing-but-making-steady-progress/ (discussing a broader study that includes all government posts, without a focus on regulatory posts, and includes several previous administrations).

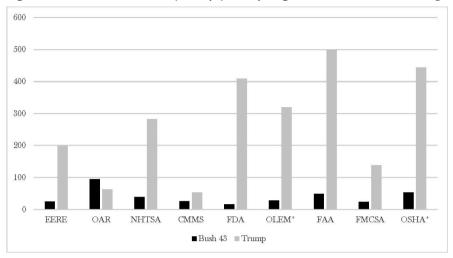


Figure 2. Confirmation Time (In Days) of Key Regulators: Bush 43 vs. Trump

- EERE = DOE Office of Energy Efficiency and Renewable Energy
- OAR = EPA Office of Air and Radiation
- NHTSA = DOT National Highway Traffic Safety Administration
- CMMS = HHS Centers for Medicare & Medicaid Services
- FDA = HHS Food and Drug Administration
- OLEM = EPA Office of Land and Emergency Management
- FAA = DOT Federal Aviation Administration
- FMCSA = DOT Federal Motor Carrier Safety Administration
- OSHA = DOL Occupational Safety and Health Administration

One might have expected the total appointment time to be particularly slow under Bush for several reasons: (1) the Administration was slow to form because of the closeness of the race, 120 (2) the Senate rules typically required sixty votes to confirm a contested Bush nominee to a regulatory post, and (3) the Democratic Party had a working majority for most of Bush's first term. In contrast, Trump's victory in the Electoral College was decisive. Executive nominees could be confirmed with a simple majority of the Senate and the

^{120.} See Andrew Glass, Bush Declared Electoral Victor Over Gore, Dec. 12, 2000, POLITICO (Dec. 12, 2018), https://www.politico.com/story/2018/12/12/scotus-declares-bush-elector al-victor-dec-12-2000-1054202 (discussing Bush's slim four-vote margin over former Vice President Al Gore in the Electoral College, coupled with the Florida recount controversy and the Supreme Court decision against a recount—which did not occur until December 2000—all of which contributed to the delay).

Republican Party had a (slim) majority. It is therefore striking that Bush filled the top regulatory posts much more quickly than Trump.

From our interviews, we gleaned that a conflict existing between the Senate Majority and Senate Minority Leaders could help explain why the nomination and confirmation intervals have been especially slow. The Senate Minority Leader is requesting floor time and roll-call votes (i.e., few voice votes) for an unusually large number of judicial and executive nominations, more than the Majority Leader believes are necessary. As a result, the Majority Leader is giving higher priority to judicial nominations and the Trump Administration has responded by placing key staff at regulatory agencies in "acting" positions, without formal nomination or Senate confirmation. In some cases, Trump-appointed staff are virtually running regulatory offices without Senate confirmation because the process is seen as dysfunctional.

Personnel policies are certainly not the only factor slowing the pace of new regulations. President Trump has publicly and explicitly stated that his Administration is trying to slow the pace of new regulations. Agency career staff respond to presidential signaling¹²² and the two-for-one EO adds a new hurdle for a regulator seeking to issue a new regulation, because at least two other regulations must be identified and rescinded. The White House has also focused agency staff on review and reconsideration of numerous regulations issued late in the Obama Administration, which detracts from time to devise new regulations.

In summary, we have not been able to discern the relative importance of the various explanations for the slowdown in new regulations. More studies should be undertaken to explore why the slowdown in new regulation flow has been so pronounced.

Finding #2: The Trump Administration has been somewhat effective in working with Congress on legislative acts of deregulation.

The Trump Administration worked with the Republican-majority House and Senate to deregulate through legislative actions. The tools included resolutions of disapproval of recent rules under the Congressional Review Act

^{121.} On the priority given to judicial nominations, see Sean Sullivan & Mike DeBonis, With Little Fanfare, Trump and McConnell Reshape the Nation's Circuit Court, WASH. POST (Aug. 14, 2018), https://www.washingtonpost.com/powerpost/with-little-fanfare-trump-and-mcconnell-reshape-the-nations-circuit-courts/2018/08/14/10610028-9fcd-11e8-93e3-24d1703d2 a7a_story.html (discussing the strategy and importance given to judicial nominees under the Trump Administration).

^{122.} See generally DAVID E. LEWIS, PRESIDENT GEORGE W. BUSH'S INFLUENCE OVER BUREAUCRACY AND POLICY: EXTRAORDINARY TIMES EXTRAORDINARY POWERS 21–24 (Colin Provost & Paul Teske eds., 2009) (explaining President Bush's influence over agencies).

(CRA) and deregulatory provisions inserted as part of newly enacted legislation. We now examine each in turn.

1. CRA Disapprovals

The CRA, enacted in 1996, allows Congress—under expedited procedures—to "disapprove" a regulation within sixty legislative days of issuance, with Presidential concurrence. Once such a disapproval occurs, the issuing agency is not permitted to issue a rule in substantially the same form. The CRA is sometimes framed as a constrained version of the old legislative veto, which was nullified as unconstitutional by the Supreme Court in 1983. 124

Until President Trump took office, the CRA had been used to overturn only one regulation since the law's inception. The Occupational Safety and Health Administration's (OSHA's) ambitious ergonomics-safety regulation, issued late in the Clinton Administration, was disapproved in early 2001 by a Republican Congress and President Bush. The CRA is an unlikely tool if the parties of the Presidency and Congress are not aligned, since the President can veto disapproval resolutions and a two-thirds majority would be required to override a veto.

The 2016 election allowed the Republican Party to take control of the White House and both chambers of Congress simultaneously. The Republican Congress promptly "dusted off" the seldom-used CRA and sought to apply it in an aggressive manner. Many important and controversial rules were finalized late in the Obama Administration. According to a December 15, 2016, analysis by the U.S. Congressional Research Service, federal rules submitted on or after June 13, 2016, may be subject to congressional disapproval under the CRA. According to the GAO Database of Rules (accessed July 30, 2019), there were ninety-two major rules and 1,828 total rules published in the Federal Register by the Obama Administration after June 13,

^{123.} See generally Adam M. Finkel & Jason W. Sullivan, A Cost-Benefit Interpretation of the "Substantially Similar" Hurdle in the Congressional Review Act: Can OSHA Ever Utter the E-Word (Ergonomics) Again?, 63 ADMIN. L. REV. (SPECIAL Ed.) 707 (2011) (discussing the complexities of the "substantially similar" standard).

^{124.} Immigration & Naturalization Serv. v. Chadha, 462 U.S. 919, 956–57 (1983).

^{125.} There have been eleven Congresses since the CRA was enacted in 1996. Only three have had unified party control of both chambers of Congress and the White House. *See Party Divisions of the House of Representatives*, 1789 to Present, U.S. HOUSE OF REPRESENTATIVES (July 7, 2019), https://history.house.gov/Institution/Party-Divisions/Party-Divisions/ (showing party control from the 105th Congress to the 116th Congress).

^{126.} See KERWIN, supra note 3, at 223–24 (explaining the uniqueness of Congress rejecting the "ergonomics' rule").

2016, each potentially eligible for CRA disapproval.¹²⁷

Between February 14, 2017, and May 21, 2017, sixteen resolutions of disapproval were passed and signed by President Trump. Many other resolutions of disapproval were introduced, but failed to garner bicameral support for various reasons, including the scarcity Senate floor time since the CRA "clock" limits the time for passage of disapproval actions. Perhaps more importantly, we suspect that Congressional Republicans found it easier to condemn regulation as an abstract concept than to vote for the repeal of specific regulations.

The economic importance of the sixteen CRA disapprovals can be questioned as none of them approach the potential economic impact of the multi-billion-dollar OSHA ergonomics rule that was repealed by Congress in 2000. 128 Several of them were enacted without quantitative estimates of benefits and costs—that analysis is required only for major (economically significant) regulations. Nonetheless, each of the repealed regulations was of significant concern to stakeholders as they would have had meaningful policy impact.

Most of the disapproved actions were final regulations but one was a guidance document issued by the Consumer Financial Protection Bureau (CFPB). Legal scholars had debated whether the CRA covers guidance documents and, if so, whether including guidance documents would have any significant practical impact. In this case, the GAO determined that the CFPB guidance document was covered, thereby expanding the potential reach of the CRA beyond what some experts envisioned.¹²⁹

The Trump Administration had good reason to favor use of the CRA tool. Compared to a deregulatory rulemaking, a CRA disapproval resolution is

^{127.} Congressional Research Service (CRS) determined that the sixty legislative days under the CRA corresponds to June 13, 2016, so any rule sent to the Federal Register after that date would be eligible for CRA disapproval. Christopher M. Davis and Richard S. Beth, Cong. Research Serv., IN10437, Agency Final Rules Submitted on or after June 13, 2016 May Be Subject to Disapproval by the 115th Congress, (2016) (explaining that "final rules submitted to Congress prior to both the [sixtieth] day of Senate session and the [sixtieth] House legislative day before the day of the adjournment will not be subject to the additional periods for review in the following congressional session").

^{128.} See Tribal Entities Report, supra note 108, at 29 (2006) (coding the repeal of OSHA ergonomics rule as saving \$4.8 billion per year); Mike Allen, Bush Signs Repeal of Ergonomics Rules, Wash. Post (Mar. 21, 2001), https://www.washingtonpost.com/archive/politics/2001/03/21/bush-signs-repeal-of-ergonomics-rules/55a82697-d83c-491c-95f4-709730 c2fc27/ (stating the repeal of OSHA ergonomics rule would have a "national impact").

^{129.} Memorandum from Thomas H. Armstrong, Gen. Counsel, U.S. Gen. Accountability Office, to Senator Patrick J. Toomey (Dec. 5, 2017) (on file with U.S. Gen. Accountability Office).

faster and more definitive and no analysis or public comment is required. Rulemaking entails a formal proposal, numerous supporting analyses, a public-comment period, interagency review within the Executive Branch, and once issued there is risk of judicial reversal.¹³⁰

There is no question that the Trump Administration encouraged CRA disapprovals. In fact, in its guidance to regulatory agencies on implementation of EO 13,771, OMB/OIRA indicated that CRA disapprovals would be considered deregulatory actions for accounting purposes under the new two-for-one system and under regulatory budgeting. This is somewhat surprising since the disapprovals are actions by the Congress, not the sponsoring agencies.

The Trump Administration's experience with the CRA, though it was not used as frequently as the administration might have preferred, was somewhat effective. Specifically, with Trump's support, it was demonstrated that the CRA is a powerful deregulatory tool in situations where both branches are controlled by the same party, especially when control has recently shifted and numerous recently issued regulations exist. In the future, the CRA could be used by a Democratic Congress and an incoming Democratic President to repeal deregulatory actions by an outgoing GOP President. It should be noted that when deregulation occurs in a two-step process, as with the EPA's CPP and ACE, it may not be feasible for Congress to use the CRA against the first step in the repeal-replace sequence.

President Trump has also taken steps to strengthen White House review of rules covered under the CRA. On April 11, 2019, OMB issued a memorandum detailing the information and analysis that must be provided to OIRA to support the classification of a rule as major and thus covered under the CRA.¹³¹ Notably, this memorandum requires independent agencies to provide a quantitative analysis of a rule's impact, marking the first time that OIRA has required such agencies submit regulatory analysis for review.

2. Deregulation through Direct (Non-CRA) Legislation

The Trump Administration also worked with Congress on direct legislation to accomplish deregulation. Four pieces of legislation are worthy of mention.

First, the required number of votes were not mustered by the GOP leadership to repeal the entire Affordable Care Act (ACA). Congress did repeal,

^{130.} See KERWIN, supra note 3, at 76–77 (outlining the stages for rulemaking activity); see also Bush Signs Repeal of Ergonomic Rules into Law, CNN (Mar. 20, 2001, 7:46 PM), http://edition.cnn.com/2001/ALLPOLITICS/03/20/bush.ergonomics/ (explaining how a bi-partisan group was attempting to reverse the repeal of ergonomic rules).

^{131.} Memorandum from Russel T. Vought, Acting Dir., Office of Mgmt. & Budget, Exec. Office of the President, to the Heads of Exec. Dep'ts & Agencies (Apr. 11, 2019) (on file with the Office of Mgmt. & Budget).

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as part of tax reform, the penalty for violating the individual mandate in the ACA, the most unpopular provision of President Obama's signature piece of domestic legislation.¹³² Although this rescission is a classic step forward for the protection of negative liberty, the weakened individual mandate complicates the development of a robust and affordable market for private health insurance. Indeed, in March 2019, the Trump Administration sided with a Texas district court ruling that congressional removal of the individual mandate makes the ACA unconstitutional.¹³³

Second, Congress authorized oil and gas drilling in the Arctic National Wildlife Refuge (ANWR) on Alaska's North Slope as part of tax reform.¹³⁴ This issue, long important to Alaska's congressional delegation but opposed by environmental and conservation organizations, was resolved by Republican-led branches. In assessing this action, it is of note that President George W. Bush did not obtain legislative authorization for drilling in the ANWR during his tenure.¹³⁵

Third, Congress passed modest deregulatory provisions in banking reform legislation. Many conservatives and the Trump Administration might have preferred total repeal of Dodd-Frank, but only modest deregulation—primarily for mid-sized banks—was accomplished because of bipartisan support.¹³⁶

Finally, in an appropriations law covering the DOL, Congress created a

^{132.} GRAHAM, *supra* note 14, at 174–77 (explaining the individual mandate in the ACA was extremely unfavorable amongst members of Congress).

^{133.} On March 25, 2019, the Department of Justice (DOJ) sided with a district court ruling in Texas v. United States which found the Affordable Care Act violated the Constitution. The ruling has been appealed. See David A. Archer, 3 Weeks to Go Until Oral Arguments in Texas v. United States, NAT'L L. REV. (July 2, 2019), https://www.natlawreview.com/print/article/three-weeks-to-go-until-oral-arguments-texas-v-united-states (describing the DOJ's reversal and subsequent argument that the individual mandate was "unconstitutional and not severable from the remainder of the Act").

^{134.} Robinson Meyer, *The GOP Tax Bill Could Forever Alter Alaska's Indigenous Tribes*, ATLANTIC (Dec. 2, 2017), https://www.theatlantic.com/science/archive/2017/12/senate-tax-bill-indigenous-communities/547352/.

^{135.} Graham, Bush on the Home Front, *supra* note 18, at 125–26.

^{136.} See Erik Sherman, Congress Just Approved a Bill to Dismantle Parts of the Dodd-Frank Banking Rule, NBC NEWS (May 23, 2018), https://www.nbcnews.com/business/economy/cong ress-just-approved-bill-dismantle-parts-dodd-frank-banking-rule-n876516 (explaining the unpopularity of the Dodd-Frank Street Reform and Consumer Protection Act among conservatives); Erik Sherman, Scaling Back Dodd-Frank Is Just the Beginning of Trump's Run on Deregulation, NBC NEWS (May 24, 2018), https://www.nbcnews.com/business/economy/scaling-back-dodd-frank-just-beginning-trump-s-run-deregulation-n877031 (stating "[p]roponents [of the act] saw any display of bipartisanship as a success in itself, but weren't satisfied").

compromise to the controversy surrounding how tips are allocated at restaurants in March 2018. Beginning in 1966, restaurants were permitted to use tip pools or credits and a loophole in the Fair Labor Standards Act authorized employers to keep employee's tips, provided the employee earned at least federal minimum wage. Most employers took advantage of the flexibility and raised the wages of other employees such as cooks and dishwashers, but some owners simply reinvested the tips in their business or supplemented the pay of managers. A 2011 DOL regulation categorized tips as the property of the employee and restricted pooling amongst those who customarily receive tips. The Trump Administration committed a procedural error during rulemaking (described later in this report) that contributed to a stakeholder-negotiated legislative solution in 2018. The new congressional language explicitly prohibits employers (including managers and supervisors) from "keeping" tips but may allow employers to pool tips and include previously exempt employees, provided tipped are paid the full federal minimum wage.¹³⁷

This legislative compromise, without judging its merits, is quite difficult to classify as either a deregulation or a regulation. It is also difficult to discern whether it increases or decreases freedom, since the liberties of various stakeholders must be considered.

It is always arguable how deserving the White House is of credit in circumstances of successful legislative collaboration. What is certain is that the Trump Administration's support was necessary for all of the CRA actions and for the three deregulatory laws discussed. The threat of a veto would have killed all these efforts. Looking forward, the Democratic takeover of the House of Representatives in the 2018 elections dims any near-term hope of deregulatory legislation or even modernization of the Administrative Procedure Act of 1946. 138

Finding #3: Progress toward reviewing and removing the huge body of existing regulations has been slow, though there are some completed deregulatory rulemakings.

We are not aware of any published count of the total number of federal regulations on the books, but it has to be at least in the hundreds of thousands. Table 2 reports the total number of rulemakings completed by the

^{137.} Jean Ohman Back, Congress Paves the Way for Tip Pooling to Include Back-of-the-House Employees, SCHWABE, WILLIAMSON & WYATT (Apr. 12, 2018), https://www.schwabe.com/newsro om-publications-congress-paves-the-way-for-tip-pooling-to-include-back-of-house-employees.

^{138.} See Christopher J. Walker, Modernizing the Administrative Procedure Act, 69 ADMIN. L. REV. 629, 631 (2017) (contrasting the Republican and Democratic priorities regarding modernization of the APA).

^{139.} Since the federal government first began itemizing rules in the Federal Register in 1976, there have been 198,470 rules created. Crews, Jr., *supra* note 88, at 4.

last three (pre-Trump) Presidential Administrations. The number of regulatory requirements is probably much larger since a rulemaking may contain more than one requirement.

Administration	Final Rules	Significant Rules	Major Rules	
Obama	23,669	7,524	695	
Bush 43	27,040	7,942	497	
Clinton	18,143	5,714	331	

Source: U.S. GAO Rules Database. Accessed April 28, 2019. Rules include those from cabinet and independent agencies.

Aggregating over the three pre-Trump Administrations, the total flow of new regulations included 1,523 economically significant actions, 21,175 significant actions, and 68,846 non-significant actions. A substantial minority of the actions relate to the administration of federal expenditure programs and thus do not necessarily impose intrusive requirements.

All of the regulatory actions counted in Table 2 are somewhere between two and eighteen years old. There are no legislative requirements for retrospective evaluation of a new regulation after adopting the regulation.¹⁴⁰ Thus, some regulators lose interest in a regulation once it is adopted, unless there is an opportunity to build upon it with additional regulation.¹⁴¹ Consequently, most of the actions in Table 2 have never been formally evaluated to determine whether they accomplished their objectives, the actual benefits and costs, or whether any unintended negative or positive side effects resulted.¹⁴²

^{140.} See Adoption of Recommendations, 79 Fed. Reg. 75,114, 75,114 (Dec. 17, 2014) (stating the Administrative Conference of the United States has recommended adoption of a systematic process of retrospective review of agency rules).

^{141.} See generally Wendy Wagner et al., Dynamic Rulemaking, 92 N.Y.U. L. Rev. 183 (2017) (stating that at some regulatory programs, a phenomenon called "dynamic rulemaking" unfolds because of interest-group pressures to refine a rule once it is adopted).

^{142.} See generally James F. Simons, Cost and Weight Added by the Federal Motor Vehicle Safety Standards for MY 1968–2012 in Passenger Cars and LTVs, DOT HS-812-354 (2017) (showing that the National Highway Traffic Safety Administration (NHTSA) is an exception because NHTSA has performed retrospective assessments of the costs and lifesaving benefits of each of its Federal Motor Vehicle Safety Standards); Charles J. Kahane, Lives Saved by Vehicle Safety Technologies and Associated Federal Motor Vehicle Safety Standards, 1960 to 2012, DOT HS-808-570 (1997) (demonstrating that the NHTSA performs retrospective assessments).

All three pre-Trump presidential administrations undertook limited efforts at retrospective analysis of existing regulations to determine their effectiveness, costs, and benefits. The number of existing regulations analyzed was typically in the dozens or hundreds rather than thousands. ¹⁴³ One leading business organization reviewed such efforts and concluded that they "achieved relatively little," ¹⁴⁴ and a major academic study focused on environmental regulation reached a similar conclusion. ¹⁴⁵

Usually, the process of retrospective analysis involves an agency or OMB request for regulatees to nominate specific regulations that are no longer needed, that need to be modernized, or that can be made less burdensome, without sacrificing significant public benefits. The sponsoring agency and OIRA then review the nominations and decide what, if anything, should be done. When actions are taken, repeal is much less likely than refinement. 146

For regulations, whose primary burdens are one-time capital expenses, the regulatees may not be motivated to request repeal or refinement, since the capital expenses are already sunk. Existing regulations that have ongoing costs are more likely to be nominated. Moreover, recent regulatory actions are more likely to be nominated, because the regulated community has acclimated to old regulations and because newer regulations can still be in a frustrating stage of unpredictable interpretation, legal uncertainties, and costly implementation.

In his 2016 campaign pledges and his public statements while in office, President Trump envisioned a process where each Cabinet department would review each existing regulation and terminate each unnecessary

^{143.} See Aldy, supra note 16, at 27–36 (analyzing the use of retrospective review from the Carter Administration to the Bush 43 Administration); Miller, supra note 16, at 7 (stating that "[o]f the 22 regulations we examined in 2014, none included a plan to conduct retrospective review of the rule after implementation"); Wiener & Riberio, supra note 16, at 53 (stating that from 2012 to 2016 the EPA "reported a total of fifty-five different 'retrospective review initiatives").

^{144.} Business Roundtable, Comments on EPA Advance Notice of Proposed Rulemaking: Increasing Consistency and Transparency in Considering Costs and Benefits in the Rulemaking Process, No. EPA-HQ-OA-2018-01071 6 (Aug. 20, 2018), https://www.regulations.gov/document?D=EPA-HQ-OA-2018-0107-1186.

^{145.} See generally Wiener & Ribeiro, supra note 16, at 60–61 (proffering that "[t]he majority of such revisions tend to lead to non-economically significant rule changes, aimed at cutting red tape or implementing minor improvements").

^{146.} See generally Susan Dudley, A Retrospective Review of Retrospective Review, George Washington Univ. Regulatory Studies Ctr. (May 7, 2013) (explaining the difficulties in assessing the consequences of fully removing a regulation).

one.¹⁴⁷ President Bill Clinton made a similar public pledge after the Republicans seized a majority of House seats in 1995.¹⁴⁸ Interestingly, one of the best-kept secrets in Washington is that Congress has required a retrospective review process for each federal regulation since the Regulatory Flexibility Act (RFA) of 1980, at least for those regulations that impact small businesses.¹⁴⁹ This provision of the RFA has not been implemented with any rigor, in part because the task would be enormous and there is no penalty if an agency ignores the RFA.

In one prominent press conference that occurred about a year into his term, President Trump used a poster to show the explosive growth in federal regulation—measured as the number of pages in the *Code of Federal Regulations*—since 1960. President Trump indicated an intention to return the United States to the 1960-level of federal regulation, a task even more ambitious than the RFA review provision. In reality, there is no evidence thus far that the number of federal regulations under President Trump has declined; the best that can be said is that the rate of growth in federal regulatory restrictions has declined a bit, which itself is somewhat noteworthy. 150

Like Congress drafting the 1980 RFA and President Clinton having Vice President Al Gore spearhead his 1995 Regulatory Reform Initiative, ¹⁵¹ the Trump Administration has not designed a practical process for performing the massive task of retrospective regulatory analysis. President Trump issued EO 13,777, which calls for each Cabinet agency to establish regulatory task forces. The task forces may be an enhancement over the Obama-era process, because they may help focus agencies on finding undesirable regulations to eliminate or make less burdensome. Nonetheless, it is not apparent how the daunting challenge facing the task forces is any more tractable than the comparable challenge facing the political leadership and career civil servants

^{147.} See President Trump, supra note 47, at 2 (stating he is "challenging [his] Cabinet to find and remove every single outdated, unlawful, and excessive regulation currently on the books").

^{148.} Memorandum from William J. Clinton, President, to Heads of Dep'ts & Agencies on Regulatory Reinvention Initiative (Mar. 4, 1995), https://www.govinfo.gov/content/pkg/WCPD-1995-03-13/pdf/WCPD-1995-03-13-Pg363.pdf ("I direct you to conduct a page-by-page review of all your regulations now in force and eliminate or revise those that are outdated or otherwise in need of reform.").

^{149.} See 5 U.S.C. \S 610 (2018) (requiring agencies to publish periodic review of issued rules in the Federal Register).

^{150.} Patrick McLaughlin, *Regulatory Data on Trump's First Year*, MERCATUS CTR. GEORGE MASON UNIV. (Jan. 30, 2018), https://www.mercatus.org/publications/regulatory-data-trump-first-year.

^{151.} See Al Gore, Vice President, Exec. Office of the Vice President, Address on Regulatory Reform, (Feb. 21, 1995), https://govinfo.library.unt.edu/npr/library/speeches/226a.html; supra notes 148–149 and accompanying text.

in the regulatory agencies under the RFA.

The two-for-one executive order was intended to motivate agency staff to find undesirable regulations. Yet, the slow flow of new regulations curtails incentive for staff to find undesirable regulations. Some of the task forces are repeating processes used in the last three administrations, which entails inviting the public to nominate existing regulations for reconsideration. We are unaware of any agency reviewing all of its existing regulations, one at a time, as candidate Trump pledged.

In comparison to the huge volume of unanalyzed existing regulations, the number of completed Trump deregulatory actions is very small. The total for FYs 2017 and 2018 is 243 out of the 68,846 total regulations adopted in the last twenty-four years—indicated in Table 2—if we accept the accuracy of the OIRA's "deregulatory" classifications. The vast majority of the 243 are not economically significant, but they address a wide range of issues from exemptions for religious and moral objections under the ACA to streamlined approvals of liquefied natural gas (LNG) exports. ¹⁵²

In the long run, a more promising approach would be for Congress or OMB to require that agencies plan for retrospective evaluation when a new regulation is adopted.¹⁵³ However, since the Trump Administration is adopting few new regulations, the near-term impact of such a reform will be limited. More focus should be given to retrospective analysis of Trump's deregulatory measures, once they are adopted and implemented. There may be advantages in having that ex post evaluation research undertaken by independent third parties such as think tanks, academics and/or the Government Accountability Office and the National Research Council.¹⁵⁴

^{152.} According to the Competitive Enterprise Institute, only twenty-four deregulatory actions are coded as significant; eleven are coded as economically significant. See CLYDE WAYNE CREWS JR., COMPETITIVE ENTERPRISE INSTITUTE, TEN THOUSAND COMMANDMENTS: AN ANNUAL SNAPSHOT OF THE FEDERAL REGULATORY STATE 25 (May 7, 2019), https://cei.org/sites/default/files/10KC2019.pdf (showing that the fall 2018 Regulatory Agenda reports that ninety-four deregulatory actions were completed in the last year—only twenty-four are coded as significant; eleven are coded as economically significant).

^{153.} Maureen Cropper et al., Looking Backward to Move Regulations Forward, 355 SCIENCE 1375, 1375–76 (Mar. 31, 2017); see Maureen Cropper et al., Facilitating Retrospective Analysis of Environmental Regulation, 12 REV. ENVIL. ECON. & POL'Y 359, 359–70 (2018); Morgenstern, supra note 16, at 300–01 (discussing the "culture of retrospective review and analysis" promoted by OIRA).

^{154.} Graham, supra note 10, at 527–28.

Finding #4: The Trump Administration has underway 514 deregulatory rulemakings on a wide range of issues at different agencies.

The Trump Administration's most recent *Regulatory Agenda* reports 514 deregulatory rulemakings are ongoing (i.e., "active"). ¹⁵⁵ This number is also small compared to the huge stock of existing regulations but larger than what the Reagan Administration tackled over a similar time frame. ¹⁵⁶ The fact that twenty-six are categorized as economically significant and 156 are categorized as significant is an indication that they may represent important changes to national policy.

The deregulatory ambitions of the Trump Administration are particularly large in the environmental arena.¹⁵⁷ One set of deregulatory proposals seeks to simplify burdensome permitting processes for economic projects under the National Environmental Policy Act and the Endangered Species Act.¹⁵⁸ A second set seeks to ease costly pollution-control requirements on energy developers and producers, especially in the coal, oil and gas, and biofuels industries.¹⁵⁹ A third set is designed to limit future federal clean-water regulations that might adversely impact small businesses, construction,

^{155.} There are 514 active deregulatory rulemakings, of which fifty-six are significant and twenty-six are economically significant. *See* Introduction to the Unified Agenda of Federal Regulatory and Deregulatory Action—Fall 2018, 83 Fed. Reg. 57,802, 57,802–989 (Nov. 16, 2018).

^{156.} PRESIDENTIAL TASK FORCE ON REGULATORY RELIEF, supra note 28, at 1, 67 (indicating the Reagan Task Force on Regulatory Relief sponsored 119 reviews of "inherited rules"); see also Richard S. Williamson, Reagan Federalism: Goals and Achievements, in ADMINISTERING THE NEW FEDERALISM 41, 48–49 (Lewis G. Bender & James A. Stever eds., 1986) (citing the Reagan Administration's rulemaking efforts that resulted in dozens of actions that greatly reduced the regulatory burden).

^{157.} The Environmental Law Program at Harvard has developed a "Regulatory Rollback Tracker" that supplies basic information on each Trump Administration effort to deregulate in the environmental arena. As of February 2, 2019, the list had fifty-five entrees. *Regulatory Rollback Tracker*, Harv. Law Sch. Envil. & Energy Law Program (Feb. 2, 2019), https://eelp.law.harvard.edu/regulatory-rollback-tracker/; *see* Michael Greshko et al., *A Running List of How President Trump is Changing Environmental Policy*, NAT'L GEOGRAPHIC (May 3, 2019), https://news.nationalgeographic.com/2017/03/how-trump-is-changing-science-environment/ (referring to the Trump Administration's goal to deregulate environmental protections put in place by the Obama Administration).

^{158.} Update to the Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, 83 Fed. Reg. 28,591, 28,591 (June 20, 2018) (to be codified at 40 C.F.R. pts. 1500–08).

^{159.} See, e.g., Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 82 Fed. Reg. 61,924, 61,924–25 (Dec. 29, 2017) (to be codified at 43 C.F.R. pt. 3160).

manufacturing, and agriculture. Rulemakings related to climate change are addressed separately below.

Several of our interviewees believe that the Trump EPA's proposal to give states and localities more discretion about whether and how to regulate small waterways (rivers and streams near wetlands) could prove to be one of the most important first term rulemakings. The issue is complicated by recent court decisions and unresolved litigation against the "Waters of the United States" rule issued by the Obama EPA in 2015. The Trump EPA's February 2017 proposal is also controversial because the supporting regulatory impact analysis discards a major category of benefits that were included in the original analysis supporting the 2015 rule. Thus, once finalized, the Trump rule is likely to face complex litigation.

Finally, EPA has two process-oriented rulemakings underway, one related to the role of cost-benefit analysis in various EPA programs and the other focused on making the scientific data and analyses in EPA rulemakings more transparent. Both of these process rulemakings could be quite important, but neither is strictly deregulatory in nature and both appear to be on a slow timetable for completion. In fact, EPA's cost-benefit initiative began as an advanced notice of proposed rulemaking with very limited depth.

^{160.} Heidi Vogt, EPA Chief Calls for Narrowing Scope of Clean-Water Rule; Wheeler Says Obama Administration Went Too Far in Stream, Wetland Protection, WALLST. J. (Dec. 11, 2018), https://www.wsj.com/articles/epa-chief-calls-for-narrowing-scope-of-clean-water-rule-11544504460.

^{161.} S.C. Coastal Conservation League v. Pruitt, 318 F. Supp. 3d 959, 969–70 (D.S.C. 2018) (enjoining a 2018 rule adopted by the EPA and the U.S. Army Corps of Engineers that sought to delay the implementation of waters of the United States (WOTUS) for two years. Previous federal court rulings have, in effect, stayed the effectiveness of the 2015 rule in twenty-four states while the 2015 rule remains in effect in twenty-six states); see WOTUS and the Reach of CWA Jurisdiction, Am. BAR ASS'N (May 21, 2019), https://www.americanbar.org/groups/environment_energy_resources/resources/wotus/.

^{162.} See Kevin J. Boyle et al., Deciphering Dueling Analyses of Clean Water Regulations, 358 Science 49–50 (Oct. 6, 2017) (stating Trump's 2017 proposal questions the effect of the 2015 WOTUS rule to expand the coverage of the Clean Water Act (CWA) to areas of connectivity between navigable waterways and upstream water bodies, including wetlands).

^{163.} Increasing Consistency and Transparency in Considering the Costs and Benefits in the Rulemaking Process, 83 Fed. Reg. 27,524, 27,528 (June 13, 2018) (to be codified at 40 C.F.R. ch. 1); Strengthening Transparency in Regulatory Science, 83 Fed. Reg. 18,768, 18,771 (Apr. 30, 2018) (to be codified at 40 C.F.R. pt. 30).

^{164.} See Ellen Knickmeyer, EPA Puts Off Final Say on Science Transparency Rule, ASSOCIATED PRESS (Oct. 17, 2018), https://www.apnews.com/2c12602deb6c4beab3d84b024c96ac7d; see also Increasing Consistency and Transparency in Considering the Costs and Benefits in the Rulemaking Process, 83 Fed. Reg. at 27,524–25 (requiring advanced notice of proposed rulemaking for cost-benefit rulemaking).

The Trump Administration's deregulatory rulemakings do not focus primarily or entirely on environmental matters. The wide topical range of deregulatory proposals now under consideration is noteworthy. The current version of the federal regulatory agenda lists nineteen major deregulatory actions under development, of which four could be considered environmental (two from EPA and two from the U.S. Department of the Interior (DOI).

Here is a sampling of the wide range of non-environmental proposed deregulatory actions underway various federal agencies:

- Department of Education, July 25, 2018: relaxation of student-loan forgiveness requirements for for-profit colleges and universities;
- Department of Education August 15, 2018: rescind the gainful employment regulation of for-profit colleges and replace it with a consumer-information tool for students;
- Department of Education, March 1, 2019: narrow the Title IX definition of sexual harassment, require school response only with actual knowledge of harassment (official report from accuser), expand rights for the accused to cross-examine their accuser through an adviser, and apply school responsibility only when harassment occurs within school's programs or activities;
- Food and Drug Administration, February 28, 2019: clarify standards for exemption from informed consent during clinical trials when there are minimal risks to participants and other safeguards for participants are present;
- Department of Labor, November 15, 2018: allow sixteen to seventeenyear olds to work in occupations that use patient lifts, as they entail less risk than forklifts and cranes;
- Department of Transportation, September 10, 2018: relax work-hour limits on commercial motor vehicle drivers, especially where vehicle has a sleeper berth;
- Department of Agriculture, March 9, 2018: expand hiring flexibility for school nutrition program directors; and
- Veterans Administration, January 30, 2019: allow veterans increased voluntary access to the private health care system.

Up-to-date information on the Trump Administration's deregulatory agenda, summarized in readable form, is provided by the independent Center on Regulation and Markets at the Brookings Institution.¹⁶⁵

^{165.} Tracking Deregulation in the Trump Era, BROOKINGS INST., https://www.brookings.edu/interactives/tracking-deregulation-in-the-Trump-era (last visited Oct. 20, 2019).

Finding #5: There are early signs that Trump's deregulatory agenda is being blocked or delayed by decisions in the federal judiciary.

The regulatory actions of each presidential administration are often litigated by oppositional parties. Federal judges strive to resolve each case based on the applicable law and the rulemaking record, regardless of partisan and ideological leanings. Nonetheless, for the last decade or so, evidence suggests that the federal judiciary is becoming more polarized on partisan and ideological lines, though not as severely as the Congress. 166

A majority of active federal judges (especially district-court judges) were appointed by Democratic presidents. See Table 3. Slightly more than half of active federal appellate judges were appointed by Republican presidents. The D.C. Circuit Court of Appeals, which hears a disproportionate share of administrative law cases, has four Republican-appointed judges and seven judges appointed by Democrats. Thus, when the Administration happens to draw a judge or panel of judges that were appointed by a president from the opposing party, it is possible that the court will be predisposed regarding the administration's position, potentially elevating the risk of judicial reversal. 168

Table 3. Counts of Federal Judges (Active) by Partisan Affiliation of Appointing President

Courts	Democratic	Republican	Total	
	Appointee .	Appointee		
Supreme Court	4	5	9	
Circuit Judges	82	93	179	
District Judges	320	270	679	

Source: Judicial Appointment History for United States Federal Courts, WIKIPEDIA.ORG, Retrieved Oct. 27, 2019.

^{166.} Compare Richard L Hasen, Polarization and the Judiciary, 22 Ann. Rev. Pol. Sci. 261, 261–73 (2019), with Thomas M. Keck, Judicial Politics in Polarized Times 256 (2014) (noting "the most significant normative concern with regard to contemporary courts is not counter-majoritarianism but partisan capture"), and C.R. Sunstein et al., Are Judges Political? An Empirical Analysis of the Federal Judiciary, 19 Int'l Crim. Just. Rev. 363, 364 (2009) (presenting academic consensus of group polarization affecting both all-Democratic and all-Republican judicial panels).

^{167.} Judicial Appointment History for United States Federal Courts, WIKIPEDIA.ORG, https://en.wikipedia.org/wiki/Judicial_appointment_history_for_United_States_federal_courts (last visited Oct. 25, 2019).

^{168.} Some scholars argue that a deregulation-minded administration may be inclined to pursue their favored policy even when the probability of judicial reversal is high. *See* William W. Buzbee, *Agency Statutory Abnegation in the Deregulatory Playbook*, 68 DUKE L.J. 1509, 1511–18 (2019).

The Institute of Policy Integrity (IPI) of New York University School of Law is tracking litigation over President Trump's deregulation efforts. As of May 8, 2019, there were forty-one cases in the IPI database. The Administration won only three; thirty-eight were won by plaintiffs (either by a formal court decision or because the federal government capitulated before a judicial decision was issued). There were eleven cases of capitulation and twenty-seven cases where, from the government's perspective, adverse judicial verdicts occurred. None of the adverse decisions reached the U.S. Supreme Court, where Republican-appointed justices hold a five-to-four majority. Some legal experts have observed that the Trump Administration's loss rate in administrative litigation appears much larger than that experienced by previous Administrations. 170

We gathered appointment information from *Wikipedia* on which president appointed each of the judges participating in the twenty-seven judicial verdicts adverse to the Trump Administration. Twenty of the twenty-seven decisions were rendered at the district court level (single judges); six were made at the appellate level (three-judge panels). Of the twenty single-judge decisions, fifteen were made by judges appointed by Democratic presidents (seven by Obama); five were made by judges appointed by Republican presidents. All six of the three-judge panels were comprised of at least two judges appointed by Democratic presidents. In three cases the panel was unanimous and in two cases the panel was split, with both dissents written by judges

^{169.} In the three cases won by the Trump Administration, one case was decided by a judge appointed by a Democratic President; the other two cases were decided by a judge appointed by a Republican President. *See Roundup: Trump-Era Agency Policy in the Courts*, INST. FOR POL'Y INTEGRITY, https://policyintegrity.org/deregulation-roundup (last updated Nov. 1, 2019) (displaying a database of the outcomes of litigation in the Trump Administration). *Compare* Nat'l Fair Hous. All. v. Carson, 330 F. Supp. 3d 14, 66 (D.D.C. 2018) (granting the Housing and Urban Development's motion to dismiss), *with* Org. for Competitive Mkts. v. USDA, 912 F.3d 455, 463 (8th Cir. 2018) (denying plaintiff's petition against the USDA in its entirety); *and* Organic Trade Ass'n v. USDA, No. 17-1875, 2019 WL 3803085, at *5 (D.D.C. Aug. 13, 2019) (denying Plaintiff's Motion to Complete the Administrative Record and Correct an Error in the Existing Record).

^{170.} See Connor Raso, Trump's Deregulatory Efforts Keep Losing in Court—and the Losses Could Make it Harder for Future Administrations to Deregulate, BROOKINGS INST. (Oct. 25, 2018), https://www.brookings.edu/research/trumps-deregulatory-efforts-keep-losing-in-court-and-the-loss es-could-make-it-harder-for-future-administrations-to-deregulate/ (noting the Trump Administration's average win rate as five percent—far below the average agency win rate of sixty-nine percent); Jonathan Adler, Does the Trump EPA Know How to Deregulate? The Early Returns Are Not Promising, VOLOKH CONSPIRACY (Oct. 3, 2018), https://reason.com/2018/10/03/does-the-trump-epa-know-how-to-deregulat/.

appointed by Republican presidents. In the sixth case, only two judges participated in the opinion, as the third judge (Brett Kavanaugh) was being considered for confirmation to the United States Supreme Court by the Senate.

Based on the IPI data, it is apparent that the Trump Administration must face the reality that, unless a case is heard by the U.S. Supreme Court, where a majority comprised of GOP-appointed judges could uphold the Trump agenda, the outcome is likely to be controlled or influenced by judges appointed by Democratic presidents. Of note, even when the Trump Administration was fortunate enough to argue a case before a judge appointed by a Republican president, the Administration won only 36% (4/11) of those judicial decisions. Thus, a key insight from the IPI database is that the administrators, general counsels of the regulatory agencies, and OIRA need to do a much better job of building an appropriate administrative record for deregulatory decisions—buttressing the preambles to the rules, and strictly following proper administrative procedures under the APA.

The only positive news for Trump's Administration is that the judicial setbacks to date revolve around a few consistent shortcomings that might be correctable. Thus, we consider why the Trump Administration is losing so many judicial decisions.

Before doing so, we note that pro-regulation groups have not persuaded the federal judiciary that Trump's signature "two-for-one" executive order on deregulation, EO 13,771, is unlawful. In an important case—not included in the IPI database—Judge Randolph Moss (an Obama appointee) held that the proregulation groups lacked standing. The court did not address the merits of the issue, so further future litigation on this subject is likely. 171

An overarching legal vulnerability for Trump's deregulatory initiatives is insufficient attention to the construction of an administrative record with factual findings supportive of deregulation.¹⁷² Weaknesses in the administrative record may be particularly serious in some of the deregulatory rulemakings

^{171.} See Andrew Harris & Kartikay Mehrotra, California, Other States Challenge Trump's Deregulation Plan, BLOOMBERG (Apr. 4, 2019), https://www.bloomberg.com/news/articles/2019-04-04/california-two-other-states-challenge-trump-s-deregulation-plan (noting that states possess "proprietary interests" that are more likely to propel litigation compared to the legal efforts of citizens groups); see also, Compl. at 7, California v. Trump, No. 19-cv-960(RDM) (D.D.C. Apr. 4, 2019), ECF No. 1 (stating that the EO 13,771 is unlawful on its face); Dockets & Filings, California v. Donald J. Trump, JUSTIA, https://dockets.justia.com/docket/district-of-columbia/dcdce/1:2019cv00960/205900 (last visited Oct. 21, 2019).

^{172.} See generally William W. Buzbee, The Tethered President: Consistency and Contingency in Administrative Law, 98 B.U. L. Rev. 1357 (2018) (noting multiple instances where the Administration's failure to engage with particular facts contributed to legal difficulties for the Trump Administration).

related to energy and the environment.¹⁷³ So far, themes of the Trump Administration's judicial setbacks have been (1) unlawful delay of effective dates, (2) failure to supply formal analyses required to support a deregulatory action, and (3) failure to consider the foregone benefits of a regulation. We consider each theme below.

1. Unlawful delay in the effective dates of rules

One of the Trump White House's first official actions, on January 20, 2017, was a Memorandum from the President's Chief of Staff (Reince Priebus) to the heads of all executive departments and agencies.¹⁷⁴ The memorandum was aimed at pulling back "midnight regulations" issued by the Obama Administration. Specifically, regulators were instructed to: (1) to withdraw any Obama Administration regulatory actions transmitted to the Office of the Federal Register but not yet published and, (2) to extend the effective date of recently enacted, but not yet effective Obama Administration regulations by sixty days from the date of the memorandum, for the purpose of reviewing questions of fact, law, and policy they raised. If the review raised substantial issues of law or policy, the agencies were instructed to take appropriate action in consultation with the Director of OMB. If the necessary delay was likely to be longer than sixty days, the memorandum instructs regulators to consider initiating a notice-and-comment rulemaking, including public comment, on the need for a longer delay.

In a majority of the eighteen cases the Trump Administration lost, courts faulted the agencies for suspending or delaying effective dates in settings where Trump appointees were planning a new rulemaking to repeal or modify the Obama rule. A new rulemaking typically takes at least six months to a year to complete and, for complex rules, a multi-year period of rulemaking is not uncommon.¹⁷⁵ Courts have held, in general, that effective dates for

^{173.} See Bethany A. Davis Noll & Denise A. Grab, Deregulation: Process and Procedures that Govern Agency Decisionmaking in an Era of Rollbacks, 38 ENERGY L.J. 269, 287–88 (2017) (explaining the statutory limitations inhibiting the Trump Administration's ability to repeal environmental and energy regulations). On the sketchy and uneven technical case for deregulation in the oil and gas sector, see Alan J. Krupnick et al., The Economics of Regulatory Repeal and Six Case Studies, RESOURCES FOR THE FUTURE (Nov. 6, 2018), https://www.rff.org/publications/reports/the-economics-of-regulatory-repeal-and-six-case-studies/.

^{174.} Memorandum from Reince Priebus, Assistant to the President and Chief of Staff, Exec. Office of the President, to the Heads of Exec. Dep'ts & Agencies on Regulatory Freeze Pending Review (Jan. 20, 2017), https://www.whitehouse.gov/presidential-actions/memorandum-heads-executive-departments-agencies/.

^{175.} On the concern about Trump-associated delays in implementing regulatory re-

completed rulemakings may not be tactically delayed to give Trump-appointed regulators time to modify or repeal the Obama-era regulations. In effect, delaying an effective date is equivalent to amending an existing rule, and such amendments must go through normal APA notice-and-comment rulemaking procedures.

An illustration of the "effective date" litigation concerns a 2016 regulation that compels control of methane emissions from oil and gas facilities. Trump's EPA delayed the effective date to allow the agency to modify the rule to make it less burdensome. A panel of the D.C. Circuit Court of Appeals (July 3, 2017) blocked the stay of the effective date. The panel's majority (Judge David S. Tatel, a Clinton appointee, and Judge Robert L. Wilkins, an Obama appointee) ruled that the stay was arbitrary and capricious, in part because the issues the Trump EPA sought to address had already been addressed in the public comment period concerning the original 2016 rule. The dissenter, Judge Janice Rogers (Bush 43 appointee), argued that the court should not have ruled on the challenge until the Trump EPA's revision of the 2016 rule was final.

Although this case is somewhat complex, the Trump EPA created a greater risk of judicial reversal by deciding that the entire rule would be reconsidered during the stay (instead of a few targeted issues) and that the stay could last years. The lesson is: Once a rulemaking is final, it may not be changed or suspended indefinitely—absent compelling circumstances—without going through another notice-and-comment rulemaking. 178

2. Failure to supply formal analyses that are required to support a deregulatory action

In 2017, the Trump Administration reversed a 2015 pipeline decision of the Obama Administration, seeking to allow the Keystone pipeline from

quirements, see Lisa Heinzerling, *Unreasonable Delays: The Legal Problems (So Far) of Trump's Deregulatory Binge*, 12 HARV. L. & POL'Y REV. 13, 14–15, 39, 45 (2018) (noting concerns of Trump-associated delays in implementing regulatory requirements).

176. See Michael Biesecker, EPA Chief Delays Methane Rule at Behest of Oil and Gas Firms, ASSOCIATED PRESS (Apr. 20, 2017), https://apnews.com/4926a870ca414c0a884707 fd49619bb5 (stating the EPA Administrator issued a ninety-day delay for oil and gas companies to comply with the 2016 regulation); cf. Jennifer A Dlouhy, Trump Takes His Assault on Obama Climate Regulations to Oil Wells, BLOOMBERG (Sept.10, 2018), https://www.bloomberg.com/news/articles/2018-09-10/trump-said-to-relax-methane-pollution-curbs-on-oil-and-gas-wells (noting the EPA's delay of compliance is just one method of the Agency's two-part strategy to scale back federal controls on methane emissions).

177. Lisa Friedman, *Court Blocks EPA Effort to Suspend Obama-Era Methane Rule*, N.Y. TIMES (July 3, 2017), https://www.nytimes.com/2017/07/03/climate/court-blocks-epa-effort-to-suspend-obama-era-methane-rule.html.

178. Raso, *supra* note 170.

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Canada to the Gulf Coast. While this action is technically an adjudication (rather than a regulatory action), the reaction of the federal judge illustrates the importance of proper formal analysis.

Between 2014 and 2017, and after a full-scale Environmental Impact Assessment was completed, a modified route for the pipeline through Nebraska was developed. Opponents of the pipeline sued the State Department for approving the revised pipeline plan.

In August 2018, the U.S. District Court for the District of Montana (Judge Brian Morris, an Obama appointee) ruled that the State Department must complete a fuller Environmental Impact Statement.¹⁷⁹ Initially, the presidential permit for the pipeline was not revoked, but in a November 2018 follow-up ruling, Judge Morris temporarily blocked the permit until the Trump Administration addressed several complex issues "related to climate change, cultural resources, and endangered species."¹⁸⁰ In short, President Trump may not merely order a deregulatory action; his Administration must prepare the action's required analyses.

A highly publicized incident has raised questions about the Trump Administration's commitment to prepare regulatory impact analyses in support of deregulatory actions. As explained earlier, in 2011 the Obama Administration, through DOL, issued a final rule intended to ensure tips were wait-staff property. Under President Trump, DOL on December 5, 2017, issued a proposal calling for a partial rescission of the rule, seeking to give restaurant owners discretion to allocate tips. In a highly unusual situation, this economically significant proposal was released for public comment without a regulatory impact analysis as required under EO 12,866. Secondary sources have suggested that Trump officials disagreed with the draft analysis prepared by the DOL's career staff and thus decided to propose the rule without any supporting analysis. Congress ultimately resolved

^{179.} Timothy Gardner, *U.S. Judge Orders Review of TransCanada's Keystone XL Pipeline Route*, REUTERS (Aug. 15, 2018), https://www.reuters.com/article/us-usa-pipeline-court-keystone/judge-orders-keystone-xl-pipeline-review-in-setback-for-trump-idUSKBN1L10A5.

^{180.} Fred Barbash et al., Federal Judge Blocks Keystone XL Pipeline, Saying Trump Administration Review Ignored 'Inconvenient' Climate Change Facts, WASH. POST (Nov. 9, 2018), https://www.washingtonpost.com/nation/2018/11/09/keystone-xl-pipeline-blocked-by-federal-judge-major-blow-trump-administration/.

^{181.} See Charles S. Clark, The Trump Administration War on Regulations, GOV'T EXECUTIVE, https://www.govexec.com/feature/trump-administrations-war-regulations/ (last visited Oct. 20, 2019) (noting "Senior Labor officials at the Wage and Hour Division were uncomfortable with a cost-benefit analysis by department staff that showed workers could lose billions of dollars that would instead be controlled by restaurant owners").

the matter with appropriations language (described earlier), so the Administration's procedural error is moot in this particular case.

Looking forward, President Trump will need competent regulatory analyses to support politically sensitive rulemakings with strong implications for his re-election prospects and those of his Republican allies in Congress. Consider the case of whether the EPA cap on ethanol blending of gasoline should be raised from 10% (E10) to 15% (E15) during summer months. A former congressional aide to Senator Tom Daschle (D-South Dakota) noted, "this is a big deal—it is not something that makes a front page on the East and West Coast newspapers, but it's something that farmers watch closely." For those watching, in 2016 candidate Donald Trump pledged support of expanded ethanol blending to reduce foreign oil dependence and boost Midwestern farm income. Not surprisingly, the petroleum industry opposes EPA's ethanol-blending program, and environmentalists have become increasingly negative about corn based ethanol.

Preceding the 2018 midterm elections, President Trump finally delivered on the 2016 promise by announcing that E15 would be allowed at refueling stations year-round. Some press coverage of Trump's E15 announcement was quite perceptive, highlighting that President Trump does not have the authority—via executive order—to raise the cap on ethanol blending. It must be accomplished by an EPA rulemaking or by new legislation. Currently, only E10 is permitted during summer months, and some refueling stations do not want to invest in pump and label changes twice annually. The EPA

^{182.} Eric Wolff, Trump's Ethanol Move Delivers Gift to Corn Country, POLITICO (Oct. 10, 2018), https://www.politico.com/story/2018/10/08/trump-ethanol-corn-831493.

^{183.} More than 95% of ethanol is derived from corn. See Matt Campbell, Trump Lifted Ethanol Restriction in Gasoline. Here's What It Means for Your Car and More, SPOKESMAN-REV. (Oct. 18, 2018), http://www.spokesman.com/stories/2018/oct/18/trump-lifted-ethanol-restrict ion-in-gasoline-heres/ (explaining "[m]ost ethanol is produced by corn," and production of gasoline with a higher percentage of ethanol is thus a benefit for farmers).

^{184.} Some experts speculate that new legislation from Congress may be necessary to authorize year-round E15 use. If that is the case, Trump has made a pledge that could be quite difficult to deliver on. The partial government shutdown may also delay the anticipated EPA rulemaking. See Marc Heller, E15 Fans Nervous as Shutdown Puts Pressure on Deadline, ENERGY & ENV'T NEWS (Jan. 22, 2019), https://www.eenews.net/greenwire/stories/1060118077?t=https%3A%2F%2Fwww.eenews.net%2Fstories%2F1060118077 (discussing the need for legislation and the concerns of state government actors and other stakeholders for timely rulemaking related to year-round production of E15 fuels).

^{185.} Of the 114,000 gasoline stations in the United States, approximately 1,600 stations, concentrated in thirty states, currently offer E15. *See* Marc Heller, *EPA Rolls Out E15 Rule, Aiming for Summer Sales*, ENERGY & ENV'T NEWS (Mar. 12, 2019), https://www.eenews.net/ee

issued the proposed rule in March 2019 and the final rule in May 2019. 186

The administrative record to support raising the cap may need to address a variety of technical, environmental, and cost-benefit issues. Since ethanol is corrosive, will raising the ethanol blend from 10% to 15% damage the engines of old cars and lawn mowers? Will raising the ethanol blend create more smog-forming emissions? When additional land is put into production to grow more corn, what will be the impact on food prices, water supplies in rural areas, endangered species, and greenhouse gas emissions? Since ethanol has less energy content than gasoline, what will be the impact on vehicle mileage and fuel expenses for the consumer? A high-quality regulatory analysis of these issues requires careful collaboration between EPA career staff, staff at other agencies (Department of Agriculture and Department of Energy), OIRA, and the Administration's political leadership. If there are flaws in the regulatory analysis, they will be found as both the petroleum industry and national environmental groups oppose Trump's E15 pledge and a lawsuit has already been filed in federal court. 187

3. Failure to consider the foregone benefits of a regulation

In 2016, the Obama DOI finalized a Waste Prevention Rule that required energy developers to reduce leaks of natural gas and the intentional venting and flaring of natural gas at production sites on federal land. The Rule was finalized in November 2016, with an effective date set for January 17, 2017. In response to the January 2017 instruction from Trump's White House, the DOI delayed the effective date until June 15, 2017. A second, longer delay was issued by the Department in response to EO 13,783, which instructed agencies to suspend or rescind those agency actions that "unduly burden" the development of domestic energy sources. Meanwhile, DOI proceeded with work toward a notice-and-comment rulemaking that might have repealed or modified the 2016 rule.

In response to a challenge from environmental groups, the U.S. District Court for the Northern District of California issued a preliminary injunction

newspm/2019/03/12/stories/1060127101. The announcement was favorably received by then Iowa Gubernatorial candidate Kim Reynolds—Iowa is the top corn-producer and home to job-producing ethanol refineries—who ultimately won a close race and will be a key actor during the Iowa presidential caucuses in 2020. Press Release, Office of the Governor of Iowa, Reynolds Releases Statement on Year-Round E15 Proposal (Mar. 2019), https://governor.iowa.gov/2019/03/reynolds-releases-statement-on-year-round-e15-proposal.

186. Marc Heller, surpa note 185.

187. Todd Neeley, *Petroleum Interests Sue EPA on E15 Rule*, PROGRESSIVE FARMER (June 11, 2019), https://www.dtnpf.com/agriculture/web/ag/news/business-inputs/article/2019/06/10/renewable-fuels-association-set-e15.

against the second postponement, deciding that the plaintiffs were likely to prevail in showing that the second postponement was arbitrary and capricious. The opinion, written by Judge William Orrick III (2012 appointee of Obama), noted among several concerns that DOI took into account only the 2016 Rule's costs to the oil and gas industry and ignored the Rule's benefits such as decreased resource use, decreased air pollution, and enhanced public revenues (from royalties).

The opinion's theme drew heavily from the 1983 Supreme Court decision in State Farm. The State Farm ruling, though it was decided more than thirty-five years ago, should be considered carefully by the Trump Administration as repeal of completed Obama era rules is undertaken. Specifically, the decision highlights the incoming Reagan Administration's rescindment of a Carter Administration auto-safety regulation issued by the National Highway Traffic Safety Administration (NHTSA). The Rule was rescinded without considering the benefits of airbag technology, which had been included in the Carter Administration's cost-benefit analysis of the Regulation. In the airbag-portion of the State Farm opinion, the Court held 9–0 that it was arbitrary and capricious for the NHTSA to rescind the safety standard without considering the foregone benefits of airbags.

In short, a presidential election does have policy consequences, but changes of regulatory policy must still satisfy the APA's "arbitrary and capricious" test. ¹⁹⁰ An agency is allowed to change its mind; one president is allowed to reconsider a regulatory decision made by his or her predecessor. ¹⁹¹ But, both benefits and costs of deregulatory changes need to be considered.

Some scholars believe that the federal courts are increasingly using costbenefit thinking when applying the APA's "arbitrary and capricious" test to rulemaking actions, regardless of actions' deregulatory or regulatory nature. 192 When reviewing acts of deregulation by the Trump Administration,

^{188.} Susan Heavey and Valerie Volcovici, *U.S. Court blocks Trump Administration from ending oil*, gas waste rule, REUTERS (Feb. 23, 2018), https://www.reuters.com/article/us-usa-environment-wasterule/u-s-court-blocks-trump-administration-from-ending-oil-gas-waste-rule-id USKCN1G71WJ; see also Court Stops Trump Administration Attempt to Delay BLM's Waste Prevention Rule, ENVTL. DEF. FUND (Feb. 23, 2018), https://www.edf.org/media/court-stops-trump-administration-attempt-delay-blms-waste-prevention-rule.

^{189.} Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 46–48 (1983).

^{190.} For a thoughtful discussion of the tension between policy change and continuity, see Buzbee, *supra* note 172, at 1362–63.

^{191.} FCC v. Fox Television Stations, Inc., 556 U.S. 502, 514–15 (2009).

^{192.} See Cass R. Sunstein, Cost-Benefit Default Principles, 99 MICH. L. Rev. 1651, 1694 (2001) (discussing recent opinions in which the court considered cost-benefit thinking); see also Cass R. Sunstein, Cost-Benefit Analysis and Arbitrariness Review, 41 HARV. ENVIL. L. REV. 1, 7–8 (2016).

courts are likely to look carefully at whether the agency considered the foregone benefits of regulation and the cost savings from deregulation. The Administration's best defense in such litigation is a robust regulatory analysis of foregone benefits as well as cost savings.¹⁹³

Finding #6: The Trump Administration is undertaking several deregulatory actions related to climate change, but those actions are vulnerable to delay or reversal through judicial or legislative interventions.

During the 2016 presidential campaign, candidate Donald Trump expressed skepticism and disbelief about climate change. He also pledged to cancel the United States' participation in the United Nations Paris Accord of 2015 saying the climate agreement was unfair to United States' interests. Further, he pledged repeal of the EPA's CPP aimed at reducing GHGs from coal-fired power plants.

During his first two years in office, President Trump has worked aggressively to follow through on his climate-related pledges. On June 1, 2017, President Trump announced that the United States "will withdraw" from the Paris Climate Accord.¹⁹⁴ The possibility for new negotiation was left open but influential leaders from Europe and other regions have opposed the effort.¹⁹⁵ Technically, under the Paris Accord, a participating country may not withdraw until four years after the Accord took effect, which will be one day after the 2020 Presidential election. At President Trump's instruction, the State Department is taking the necessary steps for withdrawal while around the world news of the United States' withdrawal is causing issues for the international agreement.¹⁹⁶

The Trump Administration also has three climate-related rulemakings underway at EPA—one in collaboration with DOT. The three rules will modify or replace rules adopted by the Obama Administration.

^{193.} Davis Noll & Grab, supra note 173, at 292-93.

^{194.} Donald J. Trump, President, Statement on the Paris Climate Accord at the White House (June 1, 2017), https://www.whitehouse.gov/briefings-statements/statement-president-trump-paris-climate-accord/.

^{195.} Jonathan Watts & Kate Connolly, World Leaders React After Trump Rejects Paris Climate Deal, GUARDIAN (June 1, 2017), https://www.theguardian.com/environment/2017/jun/01/trump-withdraw-paris-climate-deal-world-leaders-react.

^{196.} Mark Tutton, 'Trump Effect' Is Hurting Paris Agreement, Report Says, CNN (Dec. 4, 2018), https://www.cnn.com/2018/12/04/europe/trump-effect-paris-agreement/index.html (stating that Russia and Turkey signed the Paris Accord but are now refusing to ratify it; Australia has abandoned legislation designed to comply with its Paris pledge; global investments in fossil fuels are rising again).

First, the Trump EPA has proposed to replace the CPP with the ACE Rule (described earlier). 197 ACE establishes state emission guidelines to develop greenhouse gases (GHG) control plans at existing coal-fired power plants. EPA determined that the "best system of emission reduction" (BSER) is on-site efficiency upgrades (or "heat rate improvements"). A related EPA proposal relaxes GHG emissions requirements for new coal-fired powerplants. 198 Second, the Trump EPA, jointly with DOT, is developing less stringent standards for GHG emissions from passenger cars and light trucks for model years 2021 through 2025. The "preferred" option is to freeze the GHG standards at the 2020 levels set by the Obama Administration, without any increase in stringency from 2021 to 2025.199 Finally, the Trump EPA has proposed less stringent standards for methane—a particularly potent GHG—control at oil and gas facilities. The revisions, among other flexibilities, provide drillers more time between inspections and to repair leaks.²⁰⁰ Taken together, the three deregulatory rulemakings represent a major shift in climate policy compared to the Obama Administration.

The three rulemakings are somewhat vulnerable to delay or reversal for a variety of reasons, and the federal courts have already indicated mistrust of the Trump Administration on climate-policy issues.²⁰¹ The key complications are the EPA endangerment finding of 2009, the social-cost-of-carbon issue, the health "co-benefit" issue, and the changing congressional politics of climate change. Each issue is addressed briefly below.

1. Endangerment

A major vulnerability is that the Trump Administration has not modified or withdrawn the "endangerment finding" made by EPA in 2009, after the Supreme Court's 2007 *Massachusetts v. EPA* decision. In a 5–4 decision, the

^{197.} Ledyard King, Trump's Plan for Coal-Fired Power Plants: Key Takeaways about the EPA Clean Air Proposal, USA TODAY (Aug. 22, 2018), https://www.usatoday.com/story/news/politics/2018/08/21/trumps-plan-coal-plants-key-takeaways-epa-proposal/1052390002/.

^{198.} Review of Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units, 83 Fed. Reg. 65,279, 65,424 (proposed Dec. 20, 2018) (to be codified at 40 C.F.R. pt. 60).

^{199.} Todd Spangler & Nathan Bomey, *Trump Administration Wants to Freeze Gas-Mileage Standards, Reversing Obama*, USA TODAY (Aug. 2, 2018), https://www.usatoday.com/story/money/cars/2018/08/02/trump-epa-fuel-economy-standards/887683002/.

^{200.} Heidi Vogt, EPA Announces Proposal to Roll Back Obama-Era Rules on Methane Emissions, WALL ST. J. (Sept. 11, 2018), https://www.wsj.com/articles/epa-announces-proposal-to-roll back-obama-era-rules-on-methane-emissions-1536702464.

^{201.} See generally Dena P. Adler, Colum. Law Sch., U.S. Climate Change Litigation in the Age of Trump: Year Two (2019) (exploring the role of the courts in climate change deregulation in the Trump Administration).

Court held that the EPA has the authority to regulate GHGs under the Clean Air Act and must regulate them if a finding of endangerment is made. In the 2009 finding, EPA determined that six specific GHGs may reasonably be anticipated to endanger the health and welfare of current and future generations. Since 2009, additional scientific evidence from the federal government and university researchers worldwide has buttressed EPA's 2009 endangerment finding. Since 2003

While the endangerment finding is in place, federal courts will examine Trump rulemakings to determine whether they reasonably respond to the endangerment finding and whether they account for the substantial body of climate science published since 2009. The Administration can argue that federal climate regulation has not been eliminated, but hard questions will be asked regarding whether each of the three EPA deregulatory rulemakings is sufficiently responsive to the science of climate change.

2. Social Cost of Carbon

In conducting benefit-cost analyses of climate regulations, the Trump EPA has also changed an important technical factor used to compute the benefits of GHG control. When analysts convert the benefits of GHG control into monetary units, a social cost of carbon (SCC) value (expressed in dollars per metric ton) is multiplied by the physical amount of GHG control.²⁰⁴ The figures used by the Trump Administration (\$1 per ton or \$8 per ton, depending on the future discount rate) are much smaller than the roughly \$50 per ton central figure used by the Obama EPA to support the CPP.²⁰⁵

- 202. Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,213, 66,496 (Dec. 15, 2009) (to be codified at 40 C.F.R. ch. 1).
- 203. Special Report: Global Warming of 1.5 Degrees Centigrade, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (2018), https://www.ipcc.ch/sr15/; see also Philip B. Duffy et al., Strengthened Scientific Support for the Endangerment Finding for Atmospheric Greenhouse Gases, 363 SCIENCE 2 fig.1 (2019) (providing new evidence since the EPA's endangerment finding (EF) in those areas discussed in the EF and four additional impact areas where evidence of climate sensitivity has transpired).
- 204. For a review of recent economic thinking about the social cost of carbon, see Maximilian Auffhammer, *Quantifying Economic Damages from Climate Change*, J. ECON. PERSPS., Fall 2018, at 33, 33.
- 205. Strictly speaking, the EPA Regulatory Impact Analysis for the Clean Power Plan used four values for the domestic social cost of carbon (SCC): \$12, \$40, \$60, \$120 per short ton of carbon dioxide (CO2) emissions in 2020 (\$2011). The first three values are based on discount rates of 5%, 3%, and 2.5%, respectively, while the largest value is included to capture the possibility of catastrophic outcomes of climate change coupled with a 3% discount rate.

The courts are likely to scrutinize this technical change. During the Bush 43 Administration, regulators argued that the science of climate change was too inexact to support a numerical SCC value. Even today, some scientists believe climate change is too complex to construct a meaningful and valid average SCC figure, especially given the possibility of non-linear catastrophic impacts, ²⁰⁶ while the predominant view is that the SCC can be estimated, though imprecisely.

In the first case where a federal court considered the SCC, the Ninth Circuit Court of Appeals ruled in a motor vehicle case that the Bush DOT was "arbitrary and capricious" for not using a SCC value in benefit calculations. The court reasoned that, while the SCC might be uncertain, it is not zero.²⁰⁷ The incoming Obama Administration dealt with this issue on remand from the Ninth Circuit.

During the Obama Administration, a federal interagency task force was formed to address the SCC. The task force issued several technical guidance that had the practical effect of increasing the recommended values of the SCC over time.²⁰⁸ Instead of one value for the SCC, a set of SCC values was recommended based on alternative discount rates of 2.5%, 3.0%, and 5.0%. By the time the CPP was finalized, EPA was using a central SCC value on the order of \$50 per ton.

The administrative processes used by the Obama Administration to establish the SCC were not ideal, but they involved substantial public input and scientific participation, including participation by scientists and economists

ENVTL. PROT. AGENCY, OFFICE OF AIR & RADIATION, EPA-452/R-15-003, REGULATORY IMPACT ANALYSIS FOR THE CLEAN POWER PLAN FINAL RULE, ES14-ES17 (2015).

206. M. Granger Morgan et al., *Rethinking the Social Cost of Carbon Dioxide*, 33 ISSUES SCI. & TECHN. (Summer 2017).

207. Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin., 538 F.3d 1172, 1181–82 (9th Cir. 2008).

208. The Interagency Working Group on the Social Cost of Carbon was renamed the Interagency Working Group on the Social Cost of Greenhouse Gases in August 2016. The Working Group released an estimating approach in 2010 that was refined in several subsequent reports. See Interagency Working Grp. on the Soc. Cost of Carbon, Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis under Executive Order 12866 3, 5, 29 (Feb. 2010) (estimating the SCC, although the task force was renamed later to the Interagency Working Group on the Social Cost of Greenhouse Gases); Interagency Working Grp. on the Soc. Cost of Greenhouse Gases, Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866, Revision (Aug. 2016) (describing the most recent report and changes since 2010).

from multiple federal agencies.²⁰⁹ The SCC then became a point of contention in 2016 litigation over the U.S. Department of Energy's (DOE's) 2014 refrigerator standards, where the agency used four alternative values for the SCC (\$11.8, \$39.7, \$61.2, and \$117 per metric ton in 2012). The Seventh Circuit Court of Appeals reviewed the SCC values and decided not to overturn them or compel DOE to reconsider.²¹⁰

During the Obama Administration, two reports were commissioned on the SCC from the well-respected National Research Council of the National Academies (NRC), a private organization chartered by Congress to provide scientific advice to the federal government. The first report concluded that the SCC values in use by the Obama Administration were defensible on an interim basis, while the second report established an ambitious long-term scientific agenda to resolve the many lingering uncertainties about the SCC.²¹¹ The second NRC report was not issued until early in the Trump Administration.

Soon after taking office, the Trump White House, via executive order, disbanded Obama's interagency task force on SCC, and withdrew the Obamaera technical guidance documents on SCC.²¹² OIRA directed agencies to approach the SCC issue as they saw appropriate, while considering the general guidance on benefit-cost analysis contained in OMB Circular A-4 (2003).

OMB Circular A-4 looms important in the Trump Administration because (1) it was adopted after extensive public participation and scientific peer review during the Bush 43 Administration, (2) it was never withdrawn or modified by the Obama Administration, and (3) it has been in practical use by the federal agencies for more than fifteen years.²¹³ While Circular A-4 does not speak directly to the SCC value, it summarizes accepted principles of benefit-cost analysis highly relevant to the computation of SCC.

When a regulation is expected to have impacts outside of the United States, A-4 instructs agency analysts to focus on the domestic impacts and separately report the beyond border impacts.²¹⁴ With respect to treatment

^{209.} For a useful review of the federal processes used to establish the SCC, see U.S. Gov't Accountability Office, GAO-14-663, Regulatory Impact Analysis: Development of Social Cost of Carbon Estimates (2014).

^{210.} Zero Zone, Inc. v. DOE, 832 F.3d 654, 678 (7th Cir. 2016).

^{211.} See generally NAT'L ACADEMY OF SCIS., VALUING CLIMATE DAMAGES: UPDATING ESTIMATION OF THE SOCIAL COST OF CARBON DIOXIDE (2017) (explaining insufficiencies in OMB's discounting guidance for long term SCC rate calculous).

^{212.} Exec. Order No. 13,783, 82 Fed. Reg. 16,093, 16,095–96 (Mar. 31, 2017).

^{213.} *See* Graham, *supra* note 10, at 452 n.259, 528 (discussing costs and benefits of federal regulations).

^{214.} There is a subtle difference between impacts on U.S. citizens and impacts inside the

of future costs and benefits, A-4 instructs agencies to report results with annual real discount rates of 3% and 7%. It also permits (but does not require) that results be computed based on a real discount rate of less than 3% in cases where intergenerational equity is an issue.²¹⁵

A different approach has emerged in the Trump Administration to the SCC that is consistent with the principles in Circular A-4. Primary reliance is placed on the domestic SCC value—using discount rates of 3% and 7%—while secondary results using the global SCC are also reported, usually in an appendix. The domestic SCC value is reported using discount rates of 3% and 7%, though some results with a rate of 2.5% may be included in an Appendix. ²¹⁷

The reason that Trump's SCC position is somewhat vulnerable is due to the deregulatory rulemakings' preambles. The preambles fail to provide fully coherent explanations as to why, during deregulatory decisionmaking, the domestic SCC was given much more weight than the global SCC. Unless the policy rationale is buttressed, and it can be,²¹⁸ a federal court might be inclined to remand this issue for further agency consideration.

Briefly, reliance on the global SCC may have been appropriate in the Obama Administration because President Obama determined that the country's best interests were served by participation in the Paris Accord. Thus, the White House had agreed, through a complex set of international negotiations, to respect the interests of other countries impacted by GHG emissions from the United States. President Trump has a different perspective and believes U.S. interests were treated unfairly. Since the United States is withdrawing from the Paris Accord, reliance on domestic SCC may be appropriate until either a new agreement is negotiated or until the United States rejoins the Paris Accord.

borders of the United States. Some U.S. citizens live outside the U.S. borders, and impacts on them should be counted in the domestic SCC. When climate change hurts our trading partners or causes an influx of illegal immigration into the United States, adverse impacts within the U.S. borders will be felt and should be counted. In the long run, more sophisticated modeling can address these complications but, in the short run, it may be appropriate to use a suite of high and low values for the domestic SCC to capture some of the uncertainty. In all likelihood, the direct impacts of climate change on U.S. citizens within the borders of the United States will account for the vast majority of the correctly estimated domestic SCC. On the complications of estimating the domestic SCC, see NAT'L ACADEMY OF SCIENCES, *supra* note 211, at 51–53.

- 215. OMB Circ. A-4, *supra* note 20, at 36.
- 216. ENVIL. PROT. AGENCY, REGULATORY IMPACT ANALYSIS FOR THE REVIEW OF THE CLEAN POWER PLAN: PROPOSAL 168 (2017).
 - 217 Id at 169
 - 218. Art Fraas et al., Social Cost of Carbon: Domestic Duty, 351 Science 569 (2016).

It may ultimately be prudent for the Trump Administration to make a concession to other countries about the climate externalities imposed by the U.S. economy, but Trump may wish to extract some concessions in return.²¹⁹ The Trump Administration may prefer to negotiate the climate issue with a limited number of key countries in a setting involving multiple diplomatic issues. President Obama made progress with China on climate change in the context of a broader relationship-reset.²²⁰ Thus, climate-only discussions in a United Nations forum may not be seen as in the best near-term interest of the United States.

On the discount rate, environmental economists tend to prefer a lower consumption-based rate of 3% (accounting for future growth uncertainty) but economists from other subfields—especially those focused on tradeoffs in capital markets—tend to prefer higher discount rates, as high as 7%.²²¹ It seems unlikely that a federal court would intervene on the choice of a proper discount rate to use in regulatory analysis, even though the choice has a powerful impact on the magnitude of the SCC.²²²

3. Health "Co-Benefits"

A related, but nonetheless important issue is whether regulators gave adequate attention to "co-benefits" that result when industry reduces GHG emissions. The same requirements that reduce GHG emissions (especially those reducing energy consumption or shifting the market from coal to natural gas) also tend to reduce pollutants related to smog and soot.²²³ Exposures to those pollutants in cities have well-established relationships with excess rates of premature death and morbidity.²²⁴ The magnitudes of the co-

- 219. For example, the United States could insist on payments from Europe for North American Trade Organization and policy changes from China on abusive trade practices and protection of intellectual property held by U.S. inventors.
- 220. Michael Fullilove & Fergus Green, Obama Sets the Tone for U.S.-China Cooperation on Climate Change, BROOKINGS INST. (2009); GRAHAM, OBAMA ON THE HOME FRONT, supra note 14, at 233.
- 221. David F. Burgess & Richard O. Zerbe, *Appropriate Discounting for Benefit-Cost Analysis*, 2 J. Benefit-Cost Analysis 13 (2011); Arnold C. Harberger Et Al., Cost-Benefit Analysis for Investment Decisions 7 (1991).
- 222. For a good discussion of the discount rate in the climate context, see NAT'L ACADEMY OF SCIENCES, *supra* note 211, at 157–83.
- 223. On the history of "co-benefits" as a concept in the climate policy debate, see Jan P. Mayrhofer & Joyeeta Gupta, *The Science and Politics of Co-Benefits in Climate Policy*, ENVTL. SCI. & POL'Y, Mar. 2016, at 22, 22, 25–26.
- 224. See Johanna Lepeule et al., Chronic Exposure to Fine Particles and Mortality: An Extended Follow-up of the Harvard Six Cities Study from 1974 to 2009, 120 ENVTL. HEALTH PERSPS. 965, 965–70 (2012) (discussing the association of long-term exposure to air pollutants and heart-

benefits, in dollar terms, are often much larger than the GHG control benefits, even if the primary regulatory purpose is GHG control.²²⁵ In its deregulatory rulemakings, the Trump Administration is acknowledging the foregone co-benefits but reducing their magnitude and/or giving them relatively little weight in determining regulatory stringency.²²⁶

As a rationale for de-emphasizing co-benefits, the Trump EPA is relying on a legal argument that regulation of pollutant A may not be justified primarily by the co-benefits that occur from reducing pollutant B, especially when EPA has other regulatory programs to address pollutant B.²²⁷ In a recent proposal about mercury regulation at electric power plants, EPA argues that the regulation of mercury (and other hazardous air pollutants) may not be justified primarily through co-benefits related to smog and soot control.²²⁸ A similar type of legal argument can be used to dismiss or down-play the co-benefits in the climate rulemakings. We are agnostic as to the validity of the legal argument, but the agencies and OIRA should also take a harder technical look at the co-benefit claims being made, especially the extent of

and lung-related causes of death); see also DANIEL KREWSKI ET AL., HEALTH EFFECTS INSTIT., EXTENDED FOLLOW-UP AND SPATIAL ANALYSIS OF THE AMERICAN CANCER SOCIETY STUDY LINKING PARTICULATE AIR POLLUTION AND MORTALITY 99–101 (May 2009) (analyzing the connection between air pollution and morbidity, and recommending air quality management actions to protect public health). But see Louis Anthony (Tony) Cox, Miscommunicating Risk, Uncertainty, and Causation: Fine Particulate Air Pollution and Mortality Risk as an Example, 32 RISK ANALYSIS 765, 765–67 (2012) (expressing skepticism as to whether the reported statistical associations reflect a causal relationship).

- 225. When regulating greenhouse gas (GHG) emissions from coal plants, the health cobenefits may be at least as large as the GHG benefits. Jonathan J. Buenocore et al., *An Analysis of the Costs and Health Co-Benefits for a U.S. Power Plant Carbon Standard*, Pub. Libr. Of Sci., June 7, 2016, at 1, 4, 7–8 (explaining that when regulating GHG emissions from coal plants, the health benefits may be at least as large as the GHG benefits).
- 226. Lisa Friedman, *Cost of New EPA Coal Rules: Up to 1,400 More Deaths a Year*, N.Y. TIMES (Aug. 21, 2018), https://www.nytimes.com/2018/08/21/climate/epa-coal-pollution-deaths.html.
- 227. The legal relevance of EPA's co-benefit claims was left unresolved by the U.S. Supreme Court in a challenge to the Obama-era mercury regulation. In this rulemaking, co-benefits from smog and soot control accounted for 99.9% of the monetized benefits of the mercury rule. Considered alone, the mercury-control benefits of the regulation were far smaller than the projected costs of controlling mercury. *See* Michigan v. EPA, 135 S. Ct. 2699, 2705–06 (2015).
- 228. National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units—Reconsideration of Supplemental Finding and Residual Risk and Technology Review, 84 Fed. Reg. 2670, 2677 (Feb. 7, 2019) (to be codified at 40 C.F.R. pt. 63).

scientific uncertainty about those claims.²²⁹

4. Changing Climate Politics in Congress

The three Trump climate rulemakings are likely to be scrutinized by an increasingly skeptical Congress. Even before the 2018 midterm elections, the Republican-majority Congress was expressing some independence on climate policy.

In 2017 EPA's Obama-era methane rule was slated for repeal under the CRA. All that was required was a simple majority vote in the House and Senate, as President Trump supported the effort. While the CRA disapproval resolution passed the Republican-majority House, it was defeated in the Senate when three Republican Senators joined a unified Democratic Congress against the disapproval resolution.²³⁰ If more Republican Senators become interested in climate-change, the Trump Administration's current climate-policy position could become aligned with a minority view in Congress.

Looking forward, President Trump will be dealing with a Democratic majority in the House of Representatives. This will have a disproportionate impact on climate-related policies because climate-change is such a high priority for many Democratic politicians. The Republicans did pick up two seats in the Senate—sixty votes are required to legislate—but it is unclear where the Republican Senate will be on climate change in 2019–2020.

It is too early to predict President Trump's re-election prospects, but the 2020 congressional elections may not be easy for the Republican Party. Un-

^{229.} See NAT'L RESEARCH COUNCIL, ESTIMATING THE PUBLIC HEALTH BENEFITS OF PROPOSED AIR POLLUTION REGULATIONS 117 (2002) (discussing how the EPA has never fully responded to recommendations that they enhance the quantitative analysis of uncertainty about the health benefits of air regulations). There are new scientific contributions to this issue. On the one hand, recent published research suggests that EPA may have understated the uncertainties about the magnitude of co-benefits from reducing soot and smog, especially in areas of the country with relatively clean air. Louis Anthony (Tony) Cox, Jr., Reassessing the Human Health Benefits from Cleaner Air, 32 RISK ANALYSIS 816, 828 (2012); see Anne E Smith, Inconsistencies in Risk Analyses for Ambient Air Pollution Regulations, 36 RISK ANALYSIS 1737, 1743 (2015). On the other hand, there is new research, based on publicly available data, linking inhalation of fine particles to premature death, even at levels of exposure that EPA has traditionally defined as adequately protective of public health. Qian Di et al., Air Pollution and Mortality in the Medicare Population, 376 N. ENG. J. MED. 2513, 2513–22 (2017).

^{230.} Juliet Eilperin & Chelsea Harvey, Senate Unexpectedly Rejects Bid to Repeal a Key Obama-Era Environmental Regulation, WASH. POST (May 10, 2017), https://www.washingtonpost.com/news/energy-environment/wp/2017/05/10/senates-poised-to-repeal-a-final-obama-era-rul e-as-soon-as-wednesday/ (referring to dissenting Republican Senators John McCain, Susan Collins, and Lindsey Graham).

less President Trump's job-approval rating rises significantly, GOP challengers in the House may have difficulty gaining traction. In the Senate, the GOP will be defending more seats than they were in 2018.²³¹

President Trump has the veto threat to deter efforts at repealing or modifying his climate rulemakings. However, Congressional Democrats will have access to a wide range of oversight and appropriations tools to slow and obstruct his deregulation agenda. The more congressional strength Democrats acquire, and the more unified Democrats become on the climate issue, the greater obstacles President Trump's deregulatory climate change agenda will face. Under these conditions, the Trump Administration might benefit from a proactive legislative position on climate change—some options are mentioned in the recommendations.

Finding #7: An unintended consequence of federal deregulation under Trump has been determined growth in state and local regulations on some issues.

In a federalist system of government, the overall burden of regulation is a function of actions taken by federal, state, and local regulators. If businesses experience or fear a proliferation of conflicting state and local regulations, they may seek a uniform national regulatory solution. This situation is worthy of special analysis when product sales traverse state lines, and where there are incremental costs of producing different products for different state and local jurisdictions.

An unintended consequence of Trump's deregulation program is that some state and local governments are becoming more aggressive in their regulatory policies.²³² To support Finding #7, we present three illustrations of the intergovernmental dynamic: internet regulation, greenhouse gas regulation for motor vehicles, and industrial-chemical regulation.

1. Internet Regulation

The Federal Communications Commission (FCC) is an independent agency that does not report its regulations to the White House for approval. However, presidents have influence over the FCC through the appointment of Commissioners.

^{231.} Manas Sharma et al., *Here's What the 2020 Senate Map Looks Like*, WASH. POST (Nov. 21, 2018), https://www.washingtonpost.com/graphics/2018/politics/2020-senate/ (explaining that both parties have opportunities for pickups).

^{232.} See Jessica Bulman-Pozen, Partisan Federalism: Examining the Interaction of Party Politics and Federalism, 127 HARV. L. REV. 1078, 1101 (2014) (describing the adoption of regulatory agendas—after Bush 43 took office—at the state level that had been unsuccessfully sponsored by Democrats in Congress).

In 2015 the FCC, led by President Obama's appointees, asserted broad regulatory authority over internet providers. A new rule prohibited several practices such as discrimination against lawful content by blocking websites or applications, slowing the transmission of lawful data based on its content, and creating internet fast lanes for those who pay premiums while slowing lanes for those who do not. More generally, the FCC rules sought to preclude internet bundling, where premium fees might be charged by providers for access to a package of social media sites. Without regulation of such practices, some users (e.g., low-income households, small businesses, and start-up companies) feared that they would face higher costs. President Obama publicly supported what became known as the "net neutrality" regulations.

The FCC reversed course—aligning with Trump's campaign pledge—in late 2017 when a new Commission, appointed by President Trump, repealed the net-neutrality rule. The FCC argued that there was insufficient evidence of harm to consumers to justify net-neutrality regulations. Concerns were also expressed that the 2015 regulation could thwart industry innovation.²³³

A slim majority (52 to 47) in the Senate voted to overturn the FCC's deregulatory action, but the House did not act, and President Trump could veto any congressional effort.²³⁴ A coalition of twenty states favoring the 2015 Obama-era rule sued, arguing that the FCC exceeded its authority—a Supreme Court ruling may be required for resolution.

Within a month of FCC's late 2017 decision, some state legislatures and regulators began pushing back against internet deregulation.²³⁵ By mid-January 2018, legislators in several states had introduced bills to restore net-neutrality regulation or adopt different forms of internet regulation.²³⁶ The prospect of a proliferation of uncoordinated state regulatory regimes was evident.

California was the fourth state to create a net neutrality regulation, a measure that is in some ways more prescriptive than the 2015 FCC regulation. The California action is especially significant because of the large size of the state's economy and the state's track record as a leader in other fields of regulation, such as automotive emissions control. Legislators framed the

^{233.} Cecilia Kang, FCC Repeals Net Neutrality Rules, N.Y. TIMES (Dec. 14, 2017), https://www.nytimes.com/2017/12/14/technology/net-neutrality-repeal-vote.html.

^{234.} Cecilia Kang, Senate Democrats Win Vote on Net Neutrality, a Centerpiece of 2018 Strategy, N.Y. TIMES (May 16, 2018), https://www.nytimes.com/2018/05/16/technology/net-neutrality-senate.html.

^{235.} Cecilia Kang, States Push Back After Net Neutrality Repeal, N.Y. TIMES (Jan. 11, 2018), https://www.nytimes.com/2018/01/11/technology/net-neutrality-states.html (explaining that states have introduced bills to restore net-neutrality in response to the FCC's deregulation).

^{236.} *Id.* These states included California, Illinois, Massachusetts, Nebraska, New York, North Carolina, and Washington. *See* Kang, *supra* note 233.

new legislation as a way to stand up to "Donald Trump's FCC"²³⁷ However, in September 2018, the DOJ sued California on the grounds that the state law was illegal.²³⁸ In January 2019, the D.C. Circuit Court of Appeals heard challenges to FCC's case for deregulation.²³⁹

2. Regulation of Greenhouse Gases from Motor Vehicles

In 2012, the Obama Administration, through a collaborative rulemaking by the EPA, NHTSA, and California, set ambitious greenhouse-gas standards for cars and light trucks for model years 2017 to 2025. California agreed that if automakers complied with the federal standards through model year 2025, the State would accept federal compliance as evidence of compliance with California's standards. EPA and the California Air Resources Board (CARB) relied on legal authority from *Massachusetts v. EPA*,²⁴⁰ where the Court held that carbon dioxide is a pollutant within the meaning of the Clean Air Act (CAA).²⁴¹ The federal CAA has a special provision authorizing California to seek EPA approval to set its own motor vehicle emissions standards, and other states are allowed to either follow California or the EPA standards. In this case, California agreed to harmonize with the federal standards. NHTSA has separate authority under a 1974 law passed by Congress after the Arab oil embargo of 1973–74.

The Trump Administration, reversed a late 2016 decision by the Obama EPA to retain the 2022–2025 GHG standards.²⁴² This rulemaking, once finalized, is likely to be challenged under the APA as arbitrary and capricious

^{237.} Cecilia Kang, California Lawmakers Pass Nation's Toughest Net Neutrality Law, N.Y. TIMES (Aug. 31, 2018), https://www.nytimes.com/2018/08/31/technology/california-net-neutrality-bill.html.

^{238.} Cecilia Kang, Justice Department Sues to Stop California Net Neutrality Law, N.Y. TIMES (Sept. 30, 2018), https://www.nytimes.com/2018/09/30/technology/net-neutrality-california.html (claiming that Congress granted FCC the power to regulate the internet).

^{239.} The panel has two judges appointed by Democratic presidents and one judge appointed by a Republican president. Brent Kendall & John D. McKinnon, *Net Neutrality Faces Legal Challenges Testing Trump Agenda*, WALL ST. J. (Feb. 1, 2019), https://www.wsj.com/articles/net-neutrality-rollback-faces-legal-challenges-testing-trump-agenda-11548965122.

^{240. 549} U.S. 497 (2007).

^{241.} Id. at 528-29.

^{242.} A three-judge panel of the D.C. Circuit Court of Appeals has decided to hear a merit challenge to EPA's decision to reopen the 2022–2025 standards. Two of the three judges were appointed by Democratic presidents. See Khorri Atkinson, DC Cir. Skeptical of Challenge to GHG Standards Rollback, LAW360 (Sept. 6, 2019), https://www.law360.com/articles/1196138/dc-circ-skeptical-of-challenge-to-ghg-standards-rollback (describing the skepticism expressed by the panel regarding the lawsuits timing); see also California v. EPA, CLIMATE

due to alleged flaws in the supporting Regulatory Impact Analysis.²⁴³ The bigger issue is that CARB was not included in the rulemaking. Indeed, the preamble to the proposed rule asserts federal preemption of California's right to enact its own GHG regulations.²⁴⁴ Although GHGs might appear to be a different matter than fuel economy regulation, the two performance standards are closely related from a technical perspective and automakers resort to roughly the same suite of technologies for compliance. Two federal district courts have ruled that NHTSA's fuel economy authority does not preempt California's authority to set GHG standards under the CAA, but the issue has never adjudicated before a higher court.²⁴⁵

California has warned the Trump Administration that the State intends to enforce stricter standards on automakers if the Administration proceeds with deregulation. California cites the CAA, where Congress gave California special authority to regulate motor vehicle emissions provided those regulations are not weaker than EPA standards. Other states are likely to follow California's lead. When President Trump took office in January 2017, a total of thirteen states—about 30% of new vehicle sales domestically—had already adopted California motor vehicle emissions standards. In reaction to the Trump Administration's deregulatory efforts, additional states are considering adopting the California program.²⁴⁶

Petroleum industry interests may be more enthusiastic about Trump's deregulatory proposal than auto industry interests.²⁴⁷ The two major trade associations representing the auto industry have pleaded with California regulators and the Trump Administration to negotiate and settle their

CHANGE LITIG. DATABASES, http://climatecasechart.com/case/california-v-epa-4/ (last visited Nov. 12, 2019).

- 243. A team of environmental and energy economists argues that the fleet-turnover model used by EPA and DOT to justify the relaxed motor vehicle standards is flawed. Antonio M. Bento et al., *Flawed Analyses of U.S. Auto Fuel Economy Standards*, 362 SCIENCE 1119, 1120 (Dec. 7, 2018).
- 244. This assertion was based on language in the 1974 legislation that creates NHTSA's authority to regulate fuel economy.
- 245. See generally Kevin O. Leske, A Closer Look at Green Mountain Chrysler v. Crombie, 32 VT. L. REV. 439 (2008) (providing the history of this litigation).
- 246. See David Migoya, Colorado Will Adopt California-Style Low-Emission Vehicle Standards Under Hickenlooper Order, DENVER POST (June 19, 2018), https://www.denverpost.com/2018/06/19/colorado-california-emission-vehicle-standards/ (reporting that the State of Colorado has already decided to adopt the California standards and other states (e.g., Virginia) are reported to be considering similar action).
- 247. See Hiroko Tabuchi, The Oil Industry's Covert Campaign to Rewrite American Car Emissions Rules, N.Y. TIMES (Dec. 13, 2018), https://www.nytimes.com/2018/12/13/climate/cafe-emissions-rollback-oil-industry.html (explaining that automakers disapprove of Trump's deregulatory plan in light of the overreaching benefits to the petroleum industry).

differences.²⁴⁸ Both associations want a uniform national regulatory system, even if that means that the federal standards might be stricter. At the same time, some segments of the auto industry want more flexibility to meet the federal standards and an extension of federal subsidies to help consumers pay for California's mandate of plug-in electric vehicles. The collapse of oil and gasoline prices since 2014 has exacerbated automakers and dealers struggle to sell fuel-efficient and plug-in electric vehicles.²⁴⁹

This issue may be headed to the Supreme Court. The D.C. Circuit Court of Appeals is already hearing a case against the Trump Administration for reopening the rulemaking process without an adequate record. But, now that Justice Brett Kavanaugh has joined the bench, some conservative legal experts believe that there might be five justices who could be persuaded that the federal government's authority preempts California's authority to regulate greenhouse gases from motor vehicles. *Massachusetts v. EPA* was a 5–4 decision in favor of EPA regulation of GHGs, with Justice Kennedy supplying the crucial fifth vote, which did not speak directly to California's authority to regulate in this area. Trump Administration has triggered complicating state regulations and extensive litigation.

3. Federal Regulation of Industrial Chemicals

In 2016, bipartisan legislation was passed by the Congress to modernize EPA's authority under the TSCA of 1976.²⁵¹ Environmentalists argued that

^{248.} David Shepardson, Major Automakers Urge Trump Not to Freeze Fuel Economy Targets, REUTERS (May 7, 2018), https://www.reuters.com/article/us-autos-emissions/major-automakers-urge-trump-not-to-freeze-fuel-economy-targets-idUSKBN1I821P.

^{249.} See Sanya Carley et al., Ind. Univ. Sch. Pub. & Envil. Affairs, A Macroeconomic Study of Federal and State Automotive Regulations with Recommendations for Analysts, Regulators, and Legislators, 1, 44–52, 117, 149–52 (2017) (showing a powerful causal connection between low fuel prices and a decline in plugin electric vehicles).

^{250.} During the Bush 43 Administration, two federal district courts—one in Vermont, the other in Fresno, California—ruled against the industry's claim that the 1974 Corporate Average Fuel Economy (CAFE) law preempts California's authority to regulate greenhouse gases. Felicity Barringer, *U.S. Court Backs States' Measures to Cut Emissions*, N.Y. TIMES (Sept. 13, 2007), https://www.nytimes.com/2007/09/13/us/13emissions.html; John M. Broder, *Federal Judge Upholds Law on Emissions in California*, N.Y. TIMES (Dec. 13, 2007), https://www.nytimes.com/2007/12/13/washington/13emissions.html. Before the industry could appeal the two decisions to a higher court, the industry negotiated a new national CO2 control program with the new Obama Administration. Graham, Obama On the Home Front, *supra* note 14, at 225–26.

^{251.} See Darryl Fears, The President Just Signed a Law that Affects Nearly Every Product You Use,

EPA was regulating too few chemicals, while industry sought a stronger national regulatory system to preclude or discourage state and local governments from regulating or banning industrial chemicals. This 2016 legislation includes a limited preemption provision that operates in settings where EPA has taken action on a chemical or is actively deliberating on the chemical.

The Obama Administration did begin to implement the legislation, but the Trump Administration issued the "framework rules" that cover how the revised TSCA will be implemented by EPA.²⁵² Environmental groups are objecting that EPA is not following the terms of the new legislation, and litigation is underway on some of those issues. If the Trump Administration does not take sufficient regulatory action under TSCA, the chemical industry may face a proliferation of uncoordinated state and local regulatory actions on chemicals. It is too early to tell how this area of regulation will unfold, but it is an excellent illustration of how the regulatory burden on industry is influenced.²⁵³

In summary, federal deregulatory initiatives do not occur in a vacuum. Pro-regulation forces can shift their energies to the state and local levels of government, thereby producing a proliferation of conflicting regulations. Smart deregulation requires careful thinking on how to anticipate and prevent state and local backlash, or how to achieve a negotiated solution to federal regulation that deters backlash.

III. RECOMMENDATIONS

In this final section, we offer some conditional recommendations as to what the Trump Administration might do to buttress effective deregulation.

WASH. POST (June 22, 2016), https://www.washingtonpost.com/news/speaking-of-science/wp/2016/06/22/obamatoxic/ (describing the new law's updates to the Toxic Substances Control Act, (TSCA), which provide the EPA with "more oversight and stronger tools" to monitor cancer-causing chemicals).

- 252. EPA Meets Important Milestone: Proposes Fees Rule, the Final of Four Framework Rules for EPA Chemical Safety Evaluations under TSCA, EPA (Feb. 8, 2018), https://www.epa.gov/newsre leases/epa-meets-important-milestone-proposes-fees-rule-final-four-framework-rules-epa-0.
- 253. Progressive scholars sometimes describe acts of federal preemption as a form of "deregulation" since the powers of state and local regulators are withdrawn. COOPER, *supra* note 7, at 3. In the case of the revised TSCA, some media reports show an increase in state legislation to manage chemicals since the new law was enacted. *See States Ramp Up Chemicals Management Legislation Despite TSCA Reform*, INSIDEEPA (Feb. 11, 2019), https://insideepa.com/daily-news/states-ramp-chemicals-management-legislation-despite-tsca-reform (reporting that at least ninety-seven bills in twenty-two states are calling for the elimination or reduction of toxic chemicals).

The recommendations are conditional in the sense that we are accepting the President's deregulation agenda as given. We have not evaluated the economic, health, social, and environmental consequences of the specific rule-makings or the agenda as a whole. Thus, our recommendations are not a normative endorsement of Trump's agenda. Some of our recommendations, while likely helpful in their pursuit of deregulation, have other rationales that may be appealing to readers who do not share President Trump's passion for deregulation.

A. The unfilled leadership posts at federal agencies should be filled by the Trump Administration as soon as possible.

If the Administration's only objective is to halt the issuance of new regulations, then regulatory offices without leadership can serve the Administration's interests. Since President Trump is determined to accomplish removal or reform of existing regulations to make them less burdensome and intrusive, vacant regulatory posts are problematic.

The completion of deregulatory rulemakings is a sensitive, complex, and evidence-intensive process. Career staff in the regulatory agencies are more likely to work diligently and constructively on such rulemakings if their agency is led by a qualified and duly confirmed appointee. If a political appointee is "acting" and has not been confirmed, career staff may question the legitimacy, influence, or longevity. Without the assistance of agency career staff, it is unlikely that deregulatory rulemakings will be completed in a judicially defensible manner. Some improvements may be needed in the Trump Administration's personnel policies and in appointee-careerist working relationships to achieve high-quality deregulatory rulemakings.

^{254.} On the crucial role of career staff in achieving regulatory excellence, see Achieving Regulatory Excellence 12–13 (Cary Coglianese ed., 2017).

^{255.} The Trump Administration's next two years need stronger personnel policies, more respect for administrative procedure, and better working relationships between careerists and political appointees. This is not simply good government; it is essential to the success of Trump's deregulatory strategy. Rachel Augustine Potter, The Trump Administration's Regulatory Corner-Cutting Isn't Just Bad for Democracy—It's a Bad Strategy, BROOKINGS INST. (Nov. 20, 2018), https://www.brookings.edu/research/the-trump-administrations-regulatory-corner-cuttingisnt-just-bad-for-democracy-its-a-bad-strategy/. See generally DAVID E. LEWIS, THE POLITICS POLITICAL Presidential APPOINTMENTS: Control AND PERFORMANCE (2008) (illustrating that similar problems, though perhaps not quite as widespread or severe, diminished the effectiveness of the Bush 43 Administration); WILLIAM G. RESH, RETHINKING THE ADMINISTRATIVE PRESIDENCY: TRUST, INTELLECTUAL CAPITAL, AND APPOINTEE-CAREERIST RELATIONS IN THE GEORGE W. BUSH ADMINISTRATION, 1–2

The Republican Party's net gain of two Senate seats in the 2018 midterm elections, expands the GOP margin from 51-49 to 53-47. Although small, the gain makes it easier for President Trump to accomplish Senate confirmation of his executive nominations.

B. When OMB reports the number of deregulatory and regulatory actions, the same type of actions should be counted on the regulatory and deregulatory sides of the ledger.

OIRA is not currently making apples-to-apples comparisons under the two-for-one Executive Order. If only significant new regulations are counted as pro-regulatory actions, then only significant deregulatory actions should be allowed to offset them. This recommendation is particularly important for OIRA's public communications about progress on deregulation, as the ratios currently reported lack credibility.

C. New tools are needed to measure the impact of regulatory and deregulatory actions as to their impact on freedom.

Not all regulations are equally intrusive, yet the two-for-one accounting system implicitly assumes that they are. A new measurement system should be devised and validated, one that accounts for the degree of a regulation's intrusion on each regulatee and the number of regulatees that are impacted. The system could be semi-quantitative or continuous, as either would be more defensible than the current approach, which fails to consider the extent of regulatory impacts on freedom. Research is needed to develop the tools to assist agencies and OIRA in understanding the extent of regulatory intrusion and deregulatory liberation. OIRA should request the National Science Foundation (NSF) to commission tools-oriented research and development (R&D) into how changes in human freedom due to regulation can be defined and measured.

D. The foregone benefits of regulation need to be taken seriously in regulatory impact analyses, agency decisionmaking, and OMB communications about federal regulatory policy.

When a regulation is rescinded or made less burdensome or intrusive, benefits may be foregone that would have occurred had the regulation been implemented and enforced. Foregone benefits, which may be qualitative or

^{(2015) (}highlighting the importance of the functional relationships between careerists and appointed executives).

quantitative in nature, can relate to a variety of welfare outcomes like economic wellbeing, health status, social equity, and environmental quality. Failure of agencies to analyze foregone benefits will undermine public confidence in regulatory analysis and put deregulatory actions at significant risk of judicial and legislative reversal. Like smart regulation, smart deregulation includes careful consideration of the societal consequences on both sides of the cost-benefit ledger. Cost-benefit analyses may therefore increase the stability of regulation or deregulation.²⁵⁶

E. The Trump Administration should revise its climate rulemakings to make them less vulnerable to judicial reversal; given the changing composition of the Congress, it should also consider a legislative initiative on climate policy.

EPA's final climate rulemakings should be revised to ensure responsiveness to the agency's 2009 endangerment finding and the additional climate science that has since been published. The final rules may not need to be as stringent as the Obama-era rulemakings, but they must be responsive to climate science, and based on improved analyses of the benefits of reducing GHGs and related co-benefits. A clear policy rationale should be provided as to why the EPA shifted from primary reliance on a global SCC to primary reliance on a domestic SCC.

Given that the politics of climate change will shift in the new Congress, the Trump Administration should consider developing a legislative position because, without one, the Administration risks being excluded from legislative dialogue.

One option is a pro-technology stance that calls for expanding federal R&D to advance promising technologies such as nuclear, solar, carbon capture and storage, new battery technologies, and hydrogen fuel cell vehicles. Retiring Senator Lamar Alexander (R-Tennessee) has been an effective champion of R&D strategies to address climate change.²⁵⁷ Another option is to emphasize energy efficiency and low-carbon technologies in the forthcoming legislative debate on infrastructure. A different option would be to

^{256.} See Caroline Cecot, Deregulatory Cost-Benefit Analysis and Regulatory Stability, 68 DUKE L.J. 1593, 1612, 1615–16 (2019) (focusing on the effect of the use of cost-benefit analysis on rulemaking).

^{257.} See Stephen Stromberg, The Bad GOP and Good GOP on Climate Change, WASH. POST (Mar. 31, 2015), https://www.washingtonpost.com/blogs/post-partisan/wp/2015/03/31/the-bad-gop-and-the-good-gop-on-climate-change/ (offering alternatives to President Obama's plan to cut emissions); see also Andy Sher, Alexander Downplays U.S. Climate Accord Exit, Calls for Doubling Energy Research, Breaking News, TIMES FREE PRESS (June 2, 2017), https://www.timesfree press.com/news/breakingnews/story/2017/jun/02/alexander-downplays-us-cli mate-accord-exit/431427/ (addressing how important it is to solve the energy and climate challenges).

coordinate policy positions on trade and climate, leading to heightened pressure on China to be both cleaner and fairer in its trade practices. ²⁵⁸ Insofar as the Administration is opposed to a regulatory approach, it may be sensible to consider replacing federal and state authority to regulate greenhouse gas emissions with a revenue-neutral national carbon tax. ²⁵⁹ An appropriate price on carbon is the most cost-effective way to address the concerns contained in the 2009 endangerment finding. ²⁶⁰ Revenues from the carbon tax could be used to finance tax cuts for individuals and businesses. ²⁶¹ Any or all of these options could be linked to a renewed long-term effort to renegotiate the Paris Accord in a direction more favorable to U.S. interests.

F. When devising federal regulatory and deregulatory solutions, the Trump Administration should take into account the prospects of future state and local regulations.

In our federalist system, a proliferation of conflicting state and local regulations may be the predictable result of a regulatory vacuum at the federal level.²⁶² The Trump Administration needs to engage in careful legal, economic, and political analysis of the opportunities for federal preemption of

^{258.} See George David Banks, Finally Some Fairness in Global Reporting of Greenhouse Gas, Energy & Climate, AM. COUNCIL FOR CAP. FORMATION (Jan. 15, 2019), http://accf.org/2019/01/15/finally-some-fairness-in-global-reporting-of-greenhouse-gas/ (suggesting that the United States impose carbon tariffs to displace dirtier products made abroad with cleaner goods, which would greatly affect China).

^{259.} For a bipartisan case for a national carbon tax that replaces climate regulations, see George Akerlof et al., *Economists' Statement on Carbon Dividends*, WALL ST. J. (Jan. 16, 2019), https://www.wsj.com/articles/economists-statement-on-carbon-dividends-11547682910 (showing signatures of forty-five prominent economists with affiliations in both political parties, including several recipients of the Nobel Memorial Prize in Economic Sciences).

^{260.} See generally WILLIAM NORDHAUS, THE CLIMATE CASINO: RISK, UNCERTAINTY, AND ECONOMICS FOR A WARMING WORLD 6–7 (2013) (discussing the four goals that raising the price on carbon will achieve).

^{261.} See George P. Shultz & James A. Baker III, A Conservative Answer to Climate Change, WALL St. J. (Feb. 7, 2017), https://www.wsj.com/articles/a-conservative-answer-to-climate-change-1486512334 (explaining how "carbon dividend" payments are a cost-effective method for reducing emissions while providing Americans with tax benefits).

^{262.} In some cases, a federal regulatory agency may encourage (or defer to) state regulatory action so that the federal agency will not have to address the cost-benefit requirements of EO 12,866 and OIRA review. Mendelson & Wiener, *supra* note 107, at 496–500; *see* John D. Graham & Cory R. Liu, *Regulatory and Quasi-Regulatory Activity Without OMB and Cost-Benefit Review*, 37 HARV. J.L. & PUB. POL'Y 425, 431–39 (2014).

state and local regulatory actions.²⁶³ On the other hand, the potential for policy experimentation and learning due to state and local innovation in regulatory choice should also be considered.²⁶⁴ On occasion, a negotiated solution between federal and state regulators may be superior to years of unpredictable litigation.

^{263.} There is guidance on such issues in a 1999 order issued by President Clinton. Exec. Order No. 13,132, 64 Fed. Reg. 43,255 (Aug. 10, 1999).

^{264.} On the importance of regulatory experimentation and learning, see Michael Greenstone, *Toward a Culture of Persistent Regulatory Experimentation and Evaluation*, in New Perspectives on Regulation 12 (David Moss & John Cisternino eds., 2009).

APPENDIX: NAMES OF CONSULTED EXPERTS AND THEIR AFFILIATIONS

The authors thank the following individuals for referring us to useful information (*), answering our questions (**), or serving as a peer reviewer of our draft manuscript (***). In order to encourage candid responses to our questions, we have not attributed specific viewpoints to specific individuals. Several unlisted experts agreed to be interviewed but requested that they remain anonymous.

- Jonathan H. Adler,*** Case Western University
- Howard Beales,** Regulatory Studies Center, George Washington University
- James Broughel,** Mercatus Center, George Mason University
- Cary Coglianese,** Penn Program on Regulation, University of Pennsylvania
- Jamie Conrad,*** Conrad Law and Policy Counsel
- Clyde Wayne Crews Jr.,** Competitive Enterprise Institute
- John Cuaderes,** Senate Committee on Homeland Security and Governmental Affairs
- Bridget C. E. Dooling, *** Regulatory Studies Center, George Washington University
- Susan E. Dudley,** Regulatory Studies Center, George Washington University and former OIRA Administrator under President George W. Bush
- Ross Eisenberg,** National Association of Manufacturers
- Neil R. Eisner,*** former Assistant General Counsel, U.S. Department of Transportation
- E. Donald Elliott,** Yale University and former General Counsel, Environmental Protection Agency
- Adam M. Finkel,*** University of Michigan and University of Pennsylvania
- Burnell C. Fischer,*** Indiana University
- Arthur G. Fraas,*** Resources for the Future
- Howard J. Feldman,** American Petroleum Institute
- James L. Gattuso,** Heritage Foundation
- James Goodwin,** Center for Progressive Reform

- C. Boyden Gray,** former White House General Counsel to President George Herbert Walker Bush and U.S. Ambassador to the European Union
- James K. Hammitt,*** Harvard School of Public Health
- Karen Harned,** National Federation of Independent Business
- Devin Hartman,** Electricity Consumers Resource Council
- Patrick Hedren,** National Association of Manufacturers
- Sally Katzen,** New York University and former OIRA Administrator under President Bill Clinton
- Michael A. Livermore,*** University of Virginia
- Janet G. McCabe,*** Indiana University and former Acting Assistant Administrator for the Office of Air and Radiation at the United States Environmental Protection Agency under President Barack Obama
- Richard D. Morgenstern,*** Resources for the Future
- Richard J. Pierce, Jr.** George Washington University
- William G. Resh,*** University of Southern California
- Paul Schlegel,** American Farm Bureau Federation
- Stuart Shapiro,** Rutgers University
- Howard Shelanski,*** Georgetown University and former OIRA administrator under President Barack Obama
- Cass R. Sunstein,* Harvard University and former OIRA Administrator under President Barack Obama
- Jim Tozzi,** Center for Regulatory Effectiveness
- Christopher J. Walker,*** Ohio State University
- Jonathan B. Wiener,*** Duke University
- Susan Webb Yackee,* University of Wisconsin