REGULATION AND DISTRIBUTION

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This Article tackles a question that has vexed the administrative state for the last half century: how to seriously take account of the distributional consequences of regulation. The academic literature has largely accepted the view that distributional concerns should be moved out of the regulatory domain and into Congress's tax policy portfolio. In doing so, it has overlooked the fact that tax policy is ill suited to provide compensation for significant environmental, health, and safety harms. And the congressional gridlock that has bedeviled us for several decades makes this enterprise even more of a nonstarter.

The focus on negative distributional consequences has become particularly salient recently, playing a significant role in the 2016 presidential election and threatening important, socially beneficial regulatory measures. For example, on opposite sides of the political spectrum, environmental justice groups and coal miner interests have forcefully opposed the regulation of greenhouse gases through flexible regulatory tools in California and at the federal level, respectively.

The time has come to make distributional consequences a core concern of the regulatory state; otherwise, future socially beneficial regulations could well encounter significant roadblocks. The success of this enterprise requires significant institutional changes in the way in which distributional issues are handled within the executive branch. Every president from Ronald Reagan to Barack Obama has made cost-benefit analysis a key feature of the regulatory state as a result of the role played by the Office of Information and Regulatory Affairs, and the Trump administration has kept that structure in place. In contrast, executive orders addressing distributional concerns have languished because of the lack of a similar enforcement structure within the executive branch. This Article provides the blueprint for the establishment of a standing, broadly constituted interagency body charged with addressing serious negative consequences of regulatory measures on particular groups. Poor or minority communities already disproportionally burdened by environmental harms and communities that lose a significant portion of their employment base are paradigmatic candidates for such action.

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Introduction			1490
I.	Тн	E Orthodox View	1500
	A.	Common Law Rules	1501
	В.	Regulatory Policy	1506
	C.	Influence	
II.	Сн	IALLENGING THE ORTHODOXY	
	A.	Compensating Nonmonetary Harms	1512
	В.	Gridlock in Congress	
III.	Ine	EFFECTIVE APPROACHES TO ADDRESSING	
	Dis	STRIBUTIONAL CONCERNS	1525
	A.	Environmental Justice Measures	1526
		1. <i>Title VI</i>	1526
		2. Executive Orders on Environmental Justice and	
		Distribution	1534
	В.	Coal Miner Compensation	1543
		1. Clean Air Act Amendments of 1990	1544
		2. POWER Initiative and POWER+ Plan	
IV.	$\mathbf{E}_{\mathbf{M}}$	PROWERING THE EXECUTIVE BRANCH	1555
	A.	Institutional Capabilities of the President	1556
		1. Centralization, Politicization, and Pooling	
		<i>Powers</i>	1556
		2. Spending Power	1562
		3. Using Presidential Powers to Coordinate	
		Executive Policy	1565
	В.	Addressing Distributional Inequities	
		1. <i>Trigger</i>	1568
		2. The POWER Initiative and IWG as Models for	
		Action and Structure	1572
Conclusion			1577

Introduction

The dominant academic view with respect to regulatory policy holds that individual regulations should not concern themselves with questions of distribution. Instead, rules should be designed to maximize net benefits—their benefits minus their costs. Doing so expands the size of the proverbial pie, which, other things being equal, is clearly desirable. The academic support for this view is generally traced to an influential body of work by Professors Louis Kaplow and Steven Shavell.¹

¹ See Louis Kaplow & Steven Shavell, Fairness Versus Welfare (2002); Louis Kaplow & Steven Shavell, Fairness Versus Welfare, 114 Harv. L. Rev. 961 (2001) [hereinafter Kaplow & Shavell, Fairness]; Louis Kaplow & Steven Shavell, Should Legal

Perhaps the key component of federal regulatory policy reflects this view. Since 1981, administrations of both parties have operated under executive orders requiring that major federal rules be justified by reference to cost-benefit analysis.² The executive order currently in effect, promulgated by President Clinton in 1993, states that distribution must be taken into account.3 But distribution has never been an important component of the administration of this order, under which the Office of Information and Regulatory Affairs reviews significant rules. Its inquiry, instead, focuses on whether the benefits of the rule "justify" its costs. While President Obama promulgated an additional executive order that deals more explicitly with distributional issues, it has had limited effect.⁴ And none of the regulatory pronouncements of the Trump administration have dealt with distributional issues in a general way, though they have focused significant attention on the plight of coal miners and others who allegedly lost their jobs as a result of regulatory initiatives.⁵

The view that regulation should concern itself with increasing the size of the pie (maximizing net benefits), and not the size of each slice (distribution), should not be equated with lack of concern for distribution. In arguing that the efficiency of regulations should not be compromised for distributional concerns, Kaplow and Shavell do not claim that distributional concerns are unimportant. Instead, they maintain that whatever preferences our society might have for distribution should best be addressed through the income tax system, not the regulatory process.⁶ Compromising the efficiency of legal rules, the argument goes, is less desirable than promoting distributional

Rules Favor the Poor? Clarifying the Role of Legal Rules and the Income Tax in Redistributing Income, 29 J. Legal Stud. 821 (2000) [hereinafter Kaplow & Shavell, Clarifying the Role]; Louis Kaplow & Steven Shavell, Why the Legal System Is Less Efficient than the Income Tax in Redistributing Income, 23 J. Legal Stud. 667 (1994) [hereinafter Kaplow & Shavell, Why the Legal System].

² See, e.g., Exec. Order No. 12,866, 3 C.F.R. § 638 (1993), reprinted in 5 U.S.C. § 601 app. at 557–61 (1994); Exec. Order No. 12,291, 3 C.F.R. § 127 (1981), reprinted in 5 U.S.C. § 601 app. at 473–76 (1988).

³ Exec. Order No. 12,866.

⁴ Exec. Order No. 13,563 §§ 1(b)(3), 1(c), 3 C.F.R. § 215 (2012), reprinted in 5 U.S.C. § 601 app. at 816–17 (2012).

⁵ See, e.g., Exec. Order No. 13,783, 82 Fed. Reg. 16,093 (Mar. 28, 2017).

⁶ See Kaplow & Shavell, Why the Legal System, supra note 1, at 667–68 (responding to criticisms of the economic approach to legal rules by pointing out that distribution could be achieved through the income tax system instead).

goals through the tax system,⁷ which can be done in a manner that gives rise to less serious undesirable distortions.⁸

Because regulations are promulgated by administrative agencies but tax reform needs to be passed by Congress,⁹ the dominant view has an important institutional corollary. It implies that the executive branch, where the bulk of administrative agencies reside, should be in the business of increasing the sizes of pies, whereas Congress should be in charge of figuring out the sizes of the respective slices.

This Article challenges the dominant view, arguing that it suffers from two serious practical shortcomings: one conceptual and the other political. As to the first, the largest benefit of health, safety, and environmental regulation is the prevention of premature deaths. ¹⁰ But the resulting loss of life years, which in some cases results from risks of instantaneous deaths and in other cases comes from latent harms, such as those posed by carcinogens, is not the type of loss that traditional income tax regimes are well suited to compensate. Indeed, they are not sufficiently correlated with the types of variables, primarily income, on which tax regimes are based. ¹¹

On the political front, distribution through the tax system is premised on the notion that Congress will in fact act to provide the necessary distributional adjustments to the tax system. But we now live in a

⁷ See id. ("[R]edistribution through legal rules offers no advantage over redistribution through the income tax system and typically is less efficient.").

⁸ See id. ("The reason is that using legal rules to redistribute income distorts work incentives fully as much as the income tax system . . . and also creates inefficiencies in the activities regulated by the legal rules.").

⁹ See U.S. Const. art. I, § 8, cl. 1 ("Congress shall have the power to lay and collect taxes"); Sheldon D. Pollack, A New Dynamics of Tax Policy?, 12 Am. J. Tax Pol'y 61, 63–64 (1995) (stating that tax policy is made "within the confines of the congressional tax committees"); Writing and Enacting Tax Legislation, U.S. Dep't of Treasury, https://www.treasury.gov/resource-center/faqs/Taxes/Pages/writing.aspx (last updated Dec. 5, 2010) (stating that all legislation concerning taxes must originate in the House of Representatives); see also Michael Fitts & Robert Inman, Controlling Congress: Presidential Influence in Domestic Fiscal Policy, 80 Geo. L.J. 1737, 1756–57 (1992) (summarizing the President's ability to influence domestic fiscal policy and finding both Congress-related, either through veto power or through informal influence over Congress); Barack Obama, President of the U.S., Remarks by the President on the Economy (Apr. 5, 2016), https://www.whitehouse.gov/the-press-office/2016/04/05/remarks-president-economy-0 (stating that while the Department of the Treasury has some control over closing tax loopholes, only Congress can close these loopholes for good).

¹⁰ Agencies often justify regulations through the number of premature deaths prevented. *See, e.g.*, U.S. Envtl. Prot. Agency, Benefits and Costs of the Clean Air Act Amendments of 1990 (2011), https://www.epa.gov/sites/production/files/2015-07/documents/factsheet.pdf [hereinafter EPA BCA] (estimating that more than 160,000 premature deaths were prevented as of 2010 by emissions control programs resulting from the 1990 amendments to the Clean Air Act).

¹¹ See infra Section II.A.

world of congressional gridlock, where significant policy decisions once made in Congress are now done through administrative action.¹²

We are also witnessing a time in which, across both sides of the political spectrum, groups adversely affected by government action have been able to organize effectively to mount frontal challenges, based on distributional arguments, against welfare-enhancing regulations. Take, for example, the case of the Trans-Pacific Partnership Agreement (TPP), which most economists regard as highly desirable for the U.S. economy. One feature of the agreement, though, is that it would lead to the loss of certain U.S. jobs. He plight of these displaced workers played a significant role in the 2016 election, and both major candidates eventually indicated their opposition to the TPP. These concerns led President Trump to withdraw from the agreement shortly after taking office. Similar concerns had led him during the campaign to rail against the North American Free Trade Agreement (NAFTA), which has long been considered beneficial to the U.S. economy.

¹² See infra Section II.B.

¹³ See CSILLA LAKATOS ET AL., WORLD BANK, GLOBAL ECON. PROSPECTS, HIGHLIGHTS FROM CHAPTER 4: POTENTIAL IMPLICATIONS OF THE TRANS-PACIFIC PARTNERSHIP 1 (2016), http://pubdocs.worldbank.org/en/287761451945044333/Global-Economic-Prospects-January-2016-Highlights-Trans-Pacific-Partnership.pdf (estimating that NAFTA countries' GDPs would improve by 0.6% as a result of the TPP); Jeffrey H. Bergstrand, Should TPP Be Formed? On the Potential Economic, Governance, and Conflict-Reducing Impacts of the Trans-Pacific Partnership Agreement, 20 E. ASIAN ECON. Rev. 279, 279 (2016) (concluding that the TPP should be formed because of its benefits for the United States); Peter A. Petri & Michael G. Plummer, The Economic Effects of the Trans-Pacific Partnership: New Estimates 1 (Peterson Inst. for Int'l Econ., Working Paper 16-2, 2016), http://piie.com/system/files/documents/wp16-2_0.pdf (naming the United States the "largest beneficiary of the TPP" and estimating that real incomes in the United States would increase by \$131 billion).

¹⁴ For example, despite overall economic benefits, the TPP was predicted to dampen job growth in the United States manufacturing sector. *See* IAN F. FERGUSSON & BROCK R. WILLIAMS, CONG. RESEARCH SERV., R44489, THE TRANS-PACIFIC PARTNERSHIP (TPP): KEY PROVISIONS AND ISSUES FOR CONGRESS 7–8 (2016), https://fas.org/sgp/crs/row/R44489.pdf; Petri & Plummer, *supra* note 13, at 13.

¹⁵ See Amy Chozick, Hillary Clinton Opposes Obama's Trans-Pacific Trade Deal, N.Y. Times (Oct. 7, 2015), https://www.nytimes.com/politics/first-draft/2015/10/07/hillary-clinton-opposes-obamas-trans-pacific-trade-deal/; Cristiano Lima, Trump Calls Trade Deal 'a Rape of Our Country,' Politico (June 28, 2016), http://www.politico.com/story/2016/06/donald-trump-trans-pacific-partnership-224916.

¹⁶ See Peter Baker, Trump Abandons Trans-Pacific Partnership, Obama's Signature Trade Deal, N.Y. Times (Jan. 23, 2017), https://www.nytimes.com/2017/01/23/us/politics/tpp-trump-trade-nafta.html.

¹⁷ See Neil Irwin, Donald Trump Trashes NAFTA. But Unwinding It Would Come at a Huge Cost., N.Y. Times: TheUpshot (Oct. 3, 2016), https://www.nytimes.com/2016/10/04/upshot/donald-trump-trashes-nafta-but-unwinding-it-would-come-at-a-huge-cost.html.

¹⁸ See Mary E. Burfisher et al., *The Impact of NAFTA on the United States*, 15 J. Econ. Persp. 125, 141 (2001) (concluding that as anticipated, NAFTA had small but positive

Distributional concerns also played a significant role in the defeat of a 2016 Washington State initiative to impose a statewide carbon tax—the first in the country—in order to reduce greenhouse gas emissions. 19 Carbon taxes are generally regarded as a desirable way to control greenhouse gases, 20 and support for such control was widespread in the state. 21 The dispute centered on how the tax proceeds would be used. The initiative contemplated a reduction in existing taxes, including the sales tax. 22 But environmental justice advocates sought instead to use a significant portion of the revenues to aid communities that had been negatively affected by pollution and climate change. 23

effects on the U.S. economy and large positive effects on the Mexican economy); Carla A. Hills, *NAFTA's Economic Upsides: The View from the United States*, 93 FOREIGN AFF. 122, 122 (2014) (referring to NAFTA's economic "success"); Irwin, *supra* note 17 (reporting that the view among economists is that NAFTA has raised incomes overall in the United States, despite costing the country thousands of manufacturing jobs).

- ¹⁹ See Heidi Groover, Carbon Fee Likely to Appear on November Ballot, STRANGER (July 2, 2018, 2:14 PM), https://www.thestranger.com/slog/2018/07/02/28586191/carbon-fee-likely-to-appear-on-november-ballot; Marianne Lavelle, Washington State Voters Reject Nation's First Carbon Tax, InsideClimate News (Nov. 9, 2016), https://insideclimatenews.org/news/09112016/washington-state-carbon-tax-i-732-ballot-measure; David Roberts, The Left vs. a Carbon Tax, Vox (Nov. 8, 2016), https://www.vox.com/2016/10/18/13012394/i-732-carbon-tax-washington.
- ²⁰ See Gary M. Lucas, Jr., Behavioral Public Choice and the Carbon Tax, 2017 UTAH L. Rev. 115, 121 ("On [both] the political right and left, economists generally favor a carbon tax as the primary policy tool for addressing global warming."); Gilbert E. Metcalf & David Weisbach, The Design of a Carbon Tax, 33 HARV. ENVIL. L. Rev. 499, 556 (2009) (arguing that a well-designed carbon tax could cover most U.S. emissions through low tax rates on a broad tax base); Kevin A. Hassett et al., The Incidence of a U.S. Carbon Tax: A Lifetime and Regional Analysis 15 (Nat'l Bureau of Econ. Research, Working Paper No. 13,554, 2007) (concluding that the regressive effects of a carbon tax are overstated).
- ²¹ According to a poll taken shortly before the state voted on the measure, 42% of Washington residents supported the carbon tax, while 37% opposed it. *See* Editorial, *Washington State's Ambitious Carbon Tax Proposal*, N.Y. Times (Oct. 24, 2016), https://www.nytimes.com/2016/10/24/opinion/washington-states-ambitious-carbon-tax-proposal. html. Climate scientists and the state's Audubon Society chapter backed the proposal. *Id*.
- ²² Wash. Initiative Measure No. 732 § 1 (2015), https://www.sos.wa.gov/_assets/elections/initiatives/finaltext_779.pdf (offsetting the carbon tax with a reduction in the state sales tax and a reduction in the occupation tax on manufacturers).
- ²³ See Bill Corcoran & Byron Gudiel, Column: Washington's Carbon Tax Doesn't Address Environmental Justice, PBS NewsHour (Nov. 8, 2016, 11:40 AM), http://www.pbs.org/newshour/making-sense/column-washingtons-carbon-tax-doesnt-address-environmental-justice/ (arguing, on behalf of the Sierra Club and Communities for a Better Environment, that the carbon pricing plan should be rejected in part because none of the revenues from pricing carbon would be used to invest in green infrastructure or help "communities on the frontlines of climate change"). See generally Seth B. Shonkoff et al., The Climate Gap: Environmental Health and Equity Implications of Climate Change and Mitigation Policies in California—A Review of the Literature, 109 CLIMATE CHANGE S485, S494 (2011 Supp. I) (advocating for revenues from cap-and-trade to be used to offset the regressive aspects of the program, for example, by investing in public transit in areas hard hit by air pollution).

The environmental justice opposition, together with that of the fossil fuel industry, ultimately doomed the measure.²⁴

The unusual alliance that opposed the Washington State carbon tax illustrates the connection between the demands of two interest groups that have long been regarded as occupying diametrically opposed positions on the political spectrum: the environmental justice movement on the one hand, and workers in polluting industries on the other. The environmental justice movement aligns itself on the progressive side of the political spectrum and is generally supportive of more protective regulatory measures.²⁵ In contrast, the plight of workers in polluting industries has been a rallying cry for the antiregulatory right,²⁶ as is perhaps best exemplified by President Trump's repeated statements about putting coal miners back to work.²⁷ Nonetheless, as the fight over the Washington State carbon tax illustrates, the actions of these two groups sometimes coalesce.

This phenomenon is well illustrated by the opposition to what are perhaps the two most salient recent environmental controversies: the extension of the California cap-and-trade program²⁸ and the federal

²⁴ See Editorial, supra note 21; Lavelle, supra note 19.

²⁵ See Richard J. Lazarus, Pursuing "Environmental Justice": The Distributional Effects of Environmental Protection, 87 Nw. U. L. Rev. 787, 814 (1993) (explaining that environmental justice calls for closing gaps in environmental statutes, for example, by focusing not only on the overall pollution of a metropolitan area, but also on toxic hotspots in the city).

²⁶ See Inst. for Policy Integrity, The Regulatory Red Herring: The Role of Job Impact Analyses in Environmental Policy Debates 2 (2012) (discussing criticisms in the wake of the 2008 recession that regulation causes unemployment); Jean Chemnick, Sen. Collins to Offer Bill to Delay 'Boiler MACT,' E&E Daily (July 19, 2011), https://www.eenews.net/eedaily/stories/1059951736 (reporting that Senator Susan Collins introduced a bill to delay an Environmental Protection Agency (EPA) regulation because she believed the regulation threatened manufacturing jobs); Fred Upton, Declaring War on the Regulatory State, Wash. Times (Oct. 18, 2010), https://upton.house.gov/news/documentsingle.aspx?DocumentID=212358 (referring to regulations from the EPA as "smothering the economy" and arguing that regulations send jobs overseas).

²⁷ Immediately after the election, President Trump promised: "I will cancel job-killing restrictions on the production of American energy, including shale energy and clean coal, creating many millions of high paying jobs." Transition 2017, *A Message from President-Elect Donald J. Trump*, YouTube (Nov. 21, 2016), https://www.youtube.com/watch?v=7xX_KaStFT8. And, before signing his Executive Order to Create Energy Independence, President Trump said to coal miners present at the signing: "Come on, fellas. Basically, you know what this is? You know what it says, right? You're going back to work." Press Release, The White House, Remarks by President Trump at Signing of Executive Order to Create Energy Independence (Mar. 28, 2017), https://www.whitehouse.gov/the-press-office/2017/03/28/remarks-president-trump-signing-executive-order-create-energy.

²⁸ A.B. 398, 2017 Assemb., Reg. Sess. (Cal. 2017). In 2006, California passed the California Global Warming Solutions Act of 2006, directing the California Air Resources Board (ARB) to design a program to reduce overall state greenhouse gas emissions to 1990 levels by 2020. ARB released its finalized Scoping Plan in 2009, which featured a

Clean Power Plan (CPP),²⁹ both of which seek to reduce greenhouse gas emissions through flexible regulatory tools.³⁰ The main opposition to the California cap-and-trade program came from the environmental justice movement.³¹ In contrast, the sustained invocation of the plight of coal miners provided the impetus for making opposition to the Clean Power Plan, a centerpiece of President Obama's environ-

statewide carbon cap-and-trade market as the cornerstone of its overall program—covering approximately 85% of the California carbon market. See Cal. Envtl. Prot. Agency, Air Res. Bd., Overview of ARB Emissions Trading Program (2015), https://www.arb.ca.gov/cc/capandtrade/guidance/cap_trade_overview.pdf. There was uncertainty as to what would happen beyond 2020, and A.B. 398 officially extended and modified the program. See Melanie Mason & Chris Megerian, California Legislature Extends State's Cap-and-Trade Program in Rare Bipartisan Effort to Address Climate Change, L.A. Times (July 17, 2017), http://www.latimes.com/politics/la-pol-ca-california-climate-change-vote-republicans-20170717-story.html.

²⁹ Clean Power Plan, 80 Fed. Reg. 64,661 (Oct. 23, 2015). The Clean Power Plan established carbon emission performance rates for both coal-fired and gas-fired power plants, established state-specific carbon reduction goals based on those performance rates as applied to each state's electricity generation fleet and profile, and left implementation details to the states. See Clean Power Plan, 80 Fed. Reg. at 64,820. The Obama administration estimated that the Clean Power Plan would cut national carbon emissions 32% from 2005 levels by 2030. Press Release, The White House, Fact Sheet: President Obama to Announce Historic Carbon Pollution Standards for Power Plants (Aug. 3, 2015), https://obamawhitehouse.archives.gov/the-press-office/2015/08/03/fact-sheet-president-obama-announce-historic-carbon-pollution-standards.

³⁰ See Ann E. Carlson, Regulatory Capacity and State Environmental Leadership: California's Climate Policy, 24 FORDHAM ENVIL. L. REV. 63 (2013) (arguing that California was able to pass its ambitious cap-and-trade program and other environmental regulations because its state agencies had the historical opportunity to develop "extraordinary sophistication and capacity and real political agility"); Richard L. Revesz et al., Familiar Territory: A Survey of Legal Precedents for the Clean Power Plan, 46 ENVIL. L. REP. 10,190, 10,190–93 (2016) (arguing that the Clean Power Plan's flexible design is supported by substantial precedents throughout the Clean Air Act's history).

³¹ See The California Environmental Justice Movement's Declaration in Support of Carbon Pricing Reform in California (2017), https://www.arb.ca.gov/cc/ejac/meetings/01182017/20170112ca_ej_declaration_on_carbon_pricing_reform.pdf [hereinafter California Declaration]; Press Release, Cal. Envtl. Justice All., California Environmental Justice Alliance Announces Opposition to Cap and Trade Extension Deal Rife with Industry Give Aways (July 14, 2017), http://caleja.org/wp-content/uploads/2015/10/AB398PressRelease.pdf.

These groups also opposed the initial cap-and-trade program. See, e.g., ENVIL. JUSTICE ADVISORY COMM., RECOMMENDATIONS AND COMMENTS OF THE ENVIRONMENTAL JUSTICE ADVISORY COMMITTEE ON THE IMPLEMENTATION OF THE GLOBAL WARMING SOLUTIONS ACT OF 2006 (AB 32) ON THE DRAFT SCOPING PLAN 8 (2008), https://www.arb.ca.gov/cc/ejac/ejac_comments_final.pdf ("It is market-based decisions, within a framework of structural racism in planning and zoning decisions, that has created the disparate impact of pollution that exists today; relying on that same mechanism as the 'solution' will only deepen the disparate impact."); California Declaration, supra (declaring support for measures "only if they directly and significantly reduce emissions, require the shift away from use of fossil fuels and nuclear power, and do not cause or exacerbate the pollution burden of poor communities of color in California, as well as in the United States and developing nations around the world").

mental accomplishments,³² a rallying cry of the Republican rhetoric during the 2016 presidential election cycle.³³

Admittedly, the two groups had different end goals. California environmental justice advocates believed that if their opposition succeeded, the alternative outcome would be equally stringent regulatory caps on greenhouse gases implemented through less flexible regulatory tools,³⁴ which might have the effect of reducing the concentrations of toxic co-pollutants,³⁵ particularly around some industrial facilities located in areas with disproportionately large poor and minority populations.³⁶ In contrast, the miner-inspired opposition to the Clean Power Plan seeks to derail greenhouse gas limits on existing

More generally, commentators argue that a number of factual predicates would have to align for a greenhouse gas cap-and-trade program to cause co-pollutant hotspots, and that empirically, many of these predicates are not met. For example, they point out the highly variable relationships between greenhouse gas and co-pollutant emissions across different types of emissions sources, and between mitigation strategies to reduce greenhouse gas emissions and those to reduce co-pollutant emissions. *See* Todd Schatzki & Robert N. Stavins, Addressing Environmental Justice Concerns in the Design of California's Climate Policy 6–18 (2009), http://www.analysisgroup.com/uploadedFiles/Publishing/Articles/Environmental_Justice.pdf.

³² See Dan Farber, Obama's Remarkable Environmental Achievements, LegalPlanet (Nov. 2, 2016), http://legal-planet.org/2016/11/02/obamas-remarkable-environmental-achievements/.

³³ See supra notes 26-27 and accompanying text.

³⁴ California Declaration, supra note 31 (advocating "direct emissions reductions").

³⁵ Greenhouse gases are global pollutants, meaning that they mix relatively uniformly in the atmosphere and their harm is not correlated with the location of their emissions. While carbon dioxide, the primary greenhouse gas, causes indirect harm through its contribution to climate change, localized carbon dioxide emissions do not directly negatively affect human health. Greenhouse gases are often emitted along with varying levels of co-pollutants, including criteria pollutants, which are regulated by the National Ambient Air Quality Standards, and toxic air pollutants. See Richard L. Revesz & Michael A. Livermore, Retaking Rationality: How Cost-Benefit Analysis Can Better Protect the Environment and Our Health 59, 63–64 (2008); Jonas J. Monast et al., On Morals, Markets, and Climate Change: Exploring Pope Francis' Challenge, 80 L. & Contemp. Probs. 135, 148–49 (2017).

³⁶ There is no persuasive empirical support for this proposition. A September 2016 study found that overall state greenhouse gas emissions decreased after cap-and-trade went into effect in 2013, though several industry sectors' greenhouse gas emissions actually increased between the 2011–12 to 2013–14 periods. Lara J. Cushing et al., A Preliminary Environmental Equity Assessment of California's Cap-and-Trade Program 6 (2016), https://dornsife.usc.edu/assets/sites/242/docs/Climate_Equity_Brief_CA_Cap_and_Trade_Sept2016_FINAL2.pdf. Of eighty-two electric generation facilities, for example, the majority increased their emissions. *Id.* at 6. The study also confirmed that facilities that emit localized greenhouse gases are more likely to be located in disadvantaged communities, and that the largest greenhouse gas emitters are correlated with particulate matter emissions (a criteria pollutant). *Id.* at 2, 6. The study was not able to track changes in co-pollutant emissions because of differences in how greenhouse gas and co-pollutant data is gathered. *See id.* at 13.

power plants altogether.³⁷ Nonetheless, they both share strong concerns about the distributional consequences of the respective regulatory measures.

The environmental justice opponents of the extension of the California greenhouse gas program ultimately did not prevail,³⁸ though they were able to obtain some concessions in the final legislation.³⁹ The jury is still out on the ultimate fate of the Clean Power Plan.⁴⁰ But regardless of the final outcomes, one must reckon with the force of the distributional-based opposition to these programs. Ignoring the pleas of communities that disproportionately suffer serious harms is likely, in the future, to derail important welfare-enhancing regulations.

Unfortunately, the current tools are inadequate to complete the tasks of evaluating the significance of distributional claims and determining how to remedy those deemed worthy of attention. Our regulatory system has grappled for almost half a century with the question of how to deal with regulations that displace workers in communities where there are few other employment options.⁴¹ And for a quarter century, it has tried, in fits and starts, to give meaning to environ-

³⁷ See, e.g., Terry Jarrett, Guest Column: Good Riddance to Obama's Job-Killing 'Clean Power Plan,' Del. Cty. Daily Times (Apr. 9, 2017), https://www.delcotimes.com/news/guest-column-good-riddance-to-obama-s-job-killing-clean/article_896c4462-9fd3-59ec-89a5-b231ced9ce43.html.

³⁸ See A.B. 398, 2017 Assemb., Reg. Sess. (Cal. 2017) (extending cap-and-trade program).

³⁹ A.B. 398 was passed with a companion bill, A.B. 617, which increases monitoring of pollutants in disadvantaged communities and imposes stricter enforcement penalties. Tony Barboza & Chris Megerian, *Questions Remain as Gov. Brown Signs Legislation to Address Neighborhood-Level Air Pollution*, L.A. TIMES (July 26, 2017), http://www.latimes.com/local/lanow/la-me-ln-air-pollution-law-20170725-story.html.

⁴⁰ In 2016, the Supreme Court stayed the implementation of the Clean Power Plan pending resolution of legal challenges. West Virginia v. EPA, 136 S. Ct. 1000 (2016). Subsequently, the D.C. Circuit placed the litigation in abeyance, while the EPA reconsiders it. See Juan Carlos Rodriguez, DC Circ. Pauses CPP Litigation for 2 More Months, LAW360 (Aug. 8, 2017), https://www.law360.com/articles/952545/dc-circ-pauses-cpp-litigation-for-2more-months. In March 2017, President Trump issued an executive order ordering immediate review of the Clean Power Plan. Exec. Order No. 13,783, 82 Fed. Reg. 16,093 (Mar. 28, 2017). On October 16, 2017, the EPA published the proposed repeal of the Clean Power Plan. See Repeal of Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 82 Fed. Reg. 48,035 (Oct. 16, 2017). Comments were due on April 26, 2018. See 83 Fed. Reg. 4620 (Feb. 1, 2018). The EPA also issued an advanced notice of proposed rulemaking for a modest replacement of the Clean Power Plan. See State Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units, 82 Fed. Reg. 61,507 (Dec. 28, 2017). The EPA subsequently proposed such a replacement. See Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units, 83 Fed. Reg. 44,746 (Aug. 31, 2018). Any repeal or revision of the Clean Power Plan will undoubtedly be challenged by Clean Power Plan supporters.

⁴¹ See infra Section III.B.

mental justice goals.⁴² The respective results, however, have been far from encouraging.⁴³

One significant reason for the failure of distributional efforts is institutional. A good illustration of the problem is the disparate fates of three executive orders promulgated by President Clinton. Executive Order 12,866⁴⁴ (and its Reagan administration predecessor⁴⁵), which requires that significant federal rules be justified on cost-benefit grounds, fundamentally restructured the regulatory state.⁴⁶ In contrast, his executive orders on environmental justice⁴⁷ and federalism⁴⁸ hardly made a difference.⁴⁹ The most likely reason is that the cost-benefit executive order has a built-in enforcement mechanism administered by a single-mission institution within the Executive Office of the President: the now powerful Office of Information and Regulatory Affairs.⁵⁰ In contrast, no similar mechanism was established to administer the other two executive orders.

⁴² See infra Section III.A.

⁴³ See infra Part III.

⁴⁴ Exec. Order No. 12,866, 3 C.F.R. § 638 (1993), reprinted in 5 U.S.C. § 601 app. at 557–61 (1994).

⁴⁵ Exec. Order No. 12,291, 3 C.F.R. § 127 (1981), reprinted in 5 U.S.C. § 601 app. at 473–76 (1988).

⁴⁶ When introduced, President Clinton's Executive Order 12,866 was seen as a strong embrace of cost-benefit analysis. *See* Richard H. Pildes & Cass R. Sunstein, *Reinventing the Regulatory State*, 62 U. Chi. L. Rev. 1, 128 (1995) (referring to Executive Order 12,866 as presaging a greater shift to economic incentives). Cost-benefit analysis still dominates regulatory decisionmaking today. *See* Nicholas Bagley & Richard L. Revesz, *Centralized Oversight of the Regulatory State*, 106 Colum. L. Rev. 1260, 1262 (2006) (noting that the basic contours of the Reagan cost-benefit analysis remain in place today, in part because more recent presidents from both parties have embraced cost-benefit review of regulations); Michael A. Livermore & Richard L. Revesz, Retaking Rationality *Two Years Later*, 48 Hous. L. Rev. 1, 12–26 (2011) (noting that President Obama had taken several steps to cement the bipartisan consensus around cost-benefit analyses of regulations).

⁴⁷ Exec. Order No. 12,898, 3 C.F.R. § 859 (1994), reprinted in 42 U.S.C. § 4321 app. at 278–80 (2012).

⁴⁸ Exec. Order No. 13,132, 64 Fed. Reg. 43,255 (Aug. 4, 1999).

⁴⁹ See Bagley & Revesz, supra note 46, at 1325 (calling Executive Order 12,898 "ineffective" and "not a prominent feature of regulatory decisionmaking" because of the traditional view that cost-benefit analyses should separate efficiency from distributive issues); Elizabeth Glass Geltman et al., Beyond Baby Steps: An Empirical Study of the Impact of Environmental Justice Executive Order 12898, 39 Fam. & CMTY. HEALTH 143, 148 (2016) (discussing the failure of agencies to meaningfully include Executive Order 12,898 in their analyses in part because of a lack of environmental justice enforcement mechanisms); Nina A. Mendelson, A Presumption Against Agency Preemption, 102 Nw. U. L. Rev. 695, 718–21 (2008) (summarizing the ineffectiveness of President Clinton's federalism executive order by noting that agency evaluations of federalism impacts were rare and low-quality).

⁵⁰ See John D. Graham & James W. Broughel, Stealth Regulation: Addressing Agency Evasion of OIRA and the Administrative Procedure Act, 1 HARV. J.L. & PUB. POL'Y: FEDERALIST 30, 35 (2014) (stating that the "ultimate effect of OIRA's emergence has been to give . . . the President[] greater authority over the federal regulatory process"). To

In light of the inadequacies of providing compensation for the negative distributional consequences of environmental, health, and safety regulation through the tax system,⁵¹ the current gridlock that is plaguing Congress,⁵² and the failures of efforts to address distribution in a decentralized, agency-by-agency manner,⁵³ what is needed is a fundamental rethinking of the role of the executive branch on distributional matters. This Article provides a blueprint for the establishment of appropriate institutional mechanisms.

The discussion proceeds as follows. Part I explains the academic orthodoxy on regulation and redistribution, generally traced to Kaplow and Shavell's work. Part II discusses the conceptual and political shortcomings of this view in the context of regulatory policy. Part III shows that the existing efforts to deal with distributional matters of this sort have been largely ineffective. Part IV presents a blueprint for a robust executive branch approach to dealing effectively with the distributional consequences of regulation.

I The Orthodox View

In 1994, Louis Kaplow and Steven Shavell wrote the first of a series of articles arguing that the income tax system could redistribute income better than legal rules could, a view they later incorporated into the book *Fairness Versus Welfare*.⁵⁴ Since then, the assertion has become a tenet of law and economics orthodoxy.⁵⁵

Kaplow and Shavell argue that the best legal rules are those that increase economic wealth—or income—without regard for distribu-

strengthen the use of cost-benefit analysis under Executive Order 12,866, Robert Hahn and Cass Sunstein suggested further strengthening OIRA—before Sunstein headed the office. See Robert W. Hahn & Cass R. Sunstein, A New Executive Order for Improving Federal Regulation? Deeper and Wider Cost-Benefit Analysis, 150 U. Pa. L. Rev. 1489, 1516 (2002). For an example of this enforcement mechanism in action, see Letter from Cass R. Sunstein, Adm'r, Office of Info. & Regulatory Affairs, to Lisa Jackson, Adm'r, U.S. Envtl. Prot. Agency (Sept. 2, 2011), https://obamawhitehouse.archives.gov/sites/default/files/ozone_national_ambient_air_quality_standards_letter.pdf.

- ⁵¹ See infra text accompanying notes 110–31.
- 52 See infra Section II.B.
- 53 See infra Part III.
- 54 See sources cited supra note 1.

⁵⁵ See, e.g., ROBERT COOTER & THOMAS ULEN, LAW & ECONOMICS 9–11 (5th ed. 2007) ("[R]edistribution by private law distorts the economy more than progressive taxation does."); A. MITCHELL POLINSKY, AN INTRODUCTION TO LAW AND ECONOMICS 158–61 (4th ed. 2011) ("In sum, the legal system is not nearly as precise as the tax system in redistributing income among income classes.").

tion.⁵⁶ Determining how to redistribute the wealth and allocate it to each person, they explain, is a job for the income tax system, which provides the most efficient way of redistributing wealth across a society.⁵⁷ Kaplow and Shavell focus on legal rules in the common law context,⁵⁸ but their argument also applies to regulations promulgated by administrative agencies.⁵⁹ Although their theory has attracted some criticism,⁶⁰ it has become extremely influential and broadly accepted in the academic literature.⁶¹ This Part analyzes the Kaplow and Shavell approach to distribution. The bulk of their work, discussed in Section A, focuses on common law rules. Section B explains that their analysis also extends to regulatory policy, which is the focus of this Article. Section C explains that the Kaplow and Shavell work has greatly influenced legal scholarship.

A. Common Law Rules

Kaplow and Shavell's theory focuses on what type of instrument—legal rules or an income tax-and-transfer system—can best help a society reach a target level of income distribution across citizens.⁶² Although their definition of legal rules includes most legally

⁵⁶ See Kaplow & Shavell, Why the Legal System, supra note 1, at 675 ("[N]ormative economic analysis of legal rules should be primarily concerned with efficiency rather than the distribution of income.").

⁵⁷ See id. at 667 (developing the argument that "redistribution through legal rules offers no advantage over redistribution through the income tax system and typically is less efficient"); see also Kaplow & Shavell, supra note 1, at 34–35 (citing the "inefficiency of redistribution generally... and the additional cost involved in adopting less efficient legal rules" as "sound reasons for much normative economic analysis of law not to take explicit account of the distribution of income"); Kaplow & Shavell, Fairness, supra note 1, at 994–95 (same).

⁵⁸ See Kaplow & Shavell, Clarifying the Role, supra note 1, at 822 (analyzing what tort damages rule applies to yachting accidents); Kaplow & Shavell, Why the Legal System, supra note 1, at 669 (using damages awarded to plaintiffs in cases involving "an activity that may cause accidents").

⁵⁹ See Kaplow & Shavell, supra note 1, at 396–402 (applying the argument from the common law context to government regulations); Kaplow & Shavell, Fairness, supra note 1, at 1318–22 (including "government decisionmakers" and the FDA as parties that should ascribe to welfare economics); Kaplow & Shavell, Why the Legal System, supra note 1, at 667 n.1 (defining legal rules as "rules other than those that define the income tax and welfare system").

⁶⁰ See, e.g., Lee Anne Fennell & Richard H. McAdams, *The Distributive Deficit in Law and Economics*, 100 MINN. L. REV. 1051, 1059 (2016) (taking issue with Kaplow and Shavell's argument that "outside of tax, welfarists should ignore the distributive consequences of legal rules"); Richard S. Markovits, *Why Kaplow and Shavell's "Double-Distortion Argument" Articles Are Wrong*, 13 GEO. MASON L. REV. 511, 524 (2005) (summarizing criticisms of Kaplow and Shavell).

⁶¹ See infra Section I.C.

⁶² See Kaplow & Shavell, Clarifying the Role, supra note 1, at 821; Kaplow & Shavell, Why the Legal System, supra note 1, at 667. In some academic disciplines, "distribution"

binding rules set by lawmakers and other government officials,⁶³ they focus on how to set appropriate damages in tort and contract law.⁶⁴ An "efficient legal rule," according to Kaplow and Shavell, is one that "minimizes the total of accident costs and prevention costs."⁶⁵ They explain, "when injurers pay damages equal to harm caused, all costs are internalized, so actors are induced to take the level of care that minimizes the sum of the cost of care and expected harm."⁶⁶

This remedy does not move the plaintiff closer to society's mean income level; it merely restores her to the same position she was in before the tort. Kaplow and Shavell contrast efficient legal rules with those designed to redistribute wealth by increasing damages that low-income plaintiffs receive or decreasing damages that high-income plaintiffs receive.⁶⁷ The purpose of such rules would be to redistribute wealth from wealthy individuals to poor individuals.

But a regime with efficient legal rules can be just as redistributive, according to Kaplow and Shavell, so long as the income tax is adjusted. The tax system would then do the redistribution by awarding low-income plaintiffs the difference between the damages they received under the efficient rule and the damages they would have received under an inefficient, redistributive legal rule.⁶⁸ A low-income plaintiff could then be compensated through a lower marginal rate, or

may refer only to the distribution of income, but in this Article, the term refers to the distribution of welfare broadly. Kaplow and Shavell's discussion of distribution focuses on income, but it also implicates other kinds of welfare and has been interpreted by other scholars to refer to the distribution of welfare generally. See infra Section I.C. Although their early works focus on income, the authors' later article and book specify that they view income (or wealth) as a proxy for welfare, not as an end in itself. See Kaplow & Shavell, supra note 1, at 35–37; Kaplow & Shavell, Fairness, supra note 1, at 995–97. They also define efficiency as "a concept that captures aggregate effects of policies on individuals' well-being," indicating that efficiency is not merely "some technical or accounting notion." Kaplow & Shavell, supra note 1, at 37; Kaplow & Shavell, Fairness, supra note 1, at 997. Thus, like maximizing wealth, maximizing efficiency is a proxy for maximizing welfare. See Kaplow & Shavell, supra note 1, at 37; Kaplow & Shavell, Fairness, supra note 1, at 997–98.

Though the authors do not explicitly define "efficiency" in their early articles, Markovits suggests they intend a "monetized" definition. *See* Markovits, *supra* note 60, at 556–58. Under this formulation, a rule is more efficient if "the equivalent-dollar gains that a transaction-costless switch" from one rule to another would be greater for beneficiaries than the equivalent-dollar losses the switch would impose on victims. *See id.*

- 63 See infra text accompanying notes 70–75.
- ⁶⁴ See Kaplow & Shavell, supra note 1, at 155–56; Kaplow & Shavell, Fairness, supra note 1, at 1102–03; Kaplow & Shavell, Why the Legal System, supra note 1, at 667 n.1, 699–74
 - 65 Kaplow & Shavell, Clarifying the Role, supra note 1, at 822.
 - 66 Kaplow & Shavell, Why the Legal System, supra note 1, at 678.
 - 67 See id. at 669.
- ⁶⁸ For a graphical depiction, see *id.* at 669–74. The redistributive income tax to accompany the efficient legal rule is calculated by beginning with the original income tax

through a tax credit, which is equivalent to a payment from the government.⁶⁹

Although both systems would award a low-income plaintiff the same amount of money, according to Kaplow and Shavell a regime that redistributes through legal rules would be inferior to a regime redistributing through the income tax because the former interferes more with people's incentives to work the amount they deem optimal.70 An unfortunate side effect of any kind of income redistribution is that it distorts incentives to work. If an individual earns \$10 per hour, but must give away \$0.50 for every dollar she earns beyond \$100 per day, her optimal labor-leisure tradeoff will be affected after her 100th dollar—the scale will be more heavily weighted toward leisure than if she kept all her earnings. This incentive distortion holds true if the \$0.50 must be paid in taxes. But it also holds true if the \$0.50 are instead paid as part of damages beyond the cost of harm whenever she commits a tort. In other words, a redistributive legal rule requiring a wealthy party to overcompensate a poor party creates the same leisure-labor distortion as an income tax.

Thus, redistributive income taxes and legal rules alike may decrease the total wealth produced by weakening work incentives, creating a first distortion.⁷¹ Kaplow and Shavell argue, however, that redistributive legal rules create a second distortion as well: Anticipating adjustments to damages based on income, high-income individ-

rate and adding the total accident costs under the inefficient regime and subtracting total accident costs under the efficient regime. See id. at 678.

⁶⁹ Kaplow and Shavell provide an example in which individuals pay 20% of their income to the extent it exceeds \$10,000, and those with income under \$10,000 receive transfer payments equal to 20% of the difference between their income and \$10,000. *See id.* at 670.

⁷⁰ See id. at 669–74.

⁷¹ Kaplow and Shavell may incorrectly equate the way legal rules and taxes distort the incentive to work. See Christine Jolls, Behavioral Economics Analysis of Redistributive Legal Rules, 51 Vand. L. Rev. 1653, 1662 (1998). Jolls sums up the argument in this way: People tend to underestimate the chance that they will be liable for harm to others. The consequences of an income tax are more predictable: If people make more money, they can expect to pay higher taxes. By contrast, a legal rule would require higher payments from higher earners only in the case of liability. See id. If people underestimate their likelihood of liability, they will underestimate the likelihood of higher payments and therefore be less inclined to work below their optimal amount. See id. Thus, under these circumstances, legal rules should distort work incentives less than an income tax. Kaplow and Shavell respond by noting that although some individuals may be inclined to underestimate their chance of liability, others may overestimate this probability because of risk aversion. See Kaplow & Shavell, supra note 1, at 34 n.38; Kaplow & Shavell, Fairness, supra note 1, at 994 n.65. They also argue that the popularity of liability insurance further undermines the claim that people view a definite payment as costlier than the uncertain cost of future liability. See KAPLOW & SHAVELL, supra note 1, at 34 n.38; Kaplow & Shavell, Fairness, supra note 1, at 994 n.65.

uals will overspend on precautions to avoid torts, while low-income individuals will underspend.⁷² This "double distortion"⁷³ renders redistributive legal rules inferior to redistributing through the tax system.⁷⁴ They conclude that the income tax is therefore the most efficient tool available for redistribution.⁷⁵

75 Some scholars have challenged the notion that taxes are more efficient than legal rules in addressing distributional issues. Zachary Liscow has argued that legal rules are sometimes more efficient at redistribution than the income tax system and, in other cases, are the only means of redistribution. See Zachary Liscow, Note, Reducing Inequality on the Cheap: When Legal Rule Design Should Incorporate Equity as Well as Efficiency, 123 YALE L.J. 2478, 2482–87, 2503–05 (2014). First, Liscow notes that it is estimated that one-third of each dollar paid in taxes is lost to waste because the tax discourages work and investment. See id. at 2482. Thus, Liscow reasons, even if a redistributive legal rule causes waste, if the resultant waste is less than one-third of each dollar, it is more efficient than the tax system. See id. at 2482–83, 2491. For example, Liscow suggests that a legal rule that applies a strict liability standard to polluters could be more efficient at redistribution than the tax system, because it would redistribute from wealthy plant owners to poor residents while causing no distortion in behavior. See id. at 2486–87. Second, Liscow notes that the tax system is unhelpful in measuring non-income-based harms and may undercompensate victims of harms that affect forms of welfare other than income. See id. at 2484, 2503.

In fact, an income tax may be insufficient to address monetary inequities as well. If Kaplow and Shavell intend an income tax to apply only to earned income, then such a tax will miss a considerable amount of wealth for redistribution. A 1975 study found that between sixty and eighty percent of the nation's wealth is inherited, not earned. See Sanchirico, supra note 72, at 1041 (citing Laurence J. Kotlikoff & Lawrence H. Summers, The Role of Intergenerational Transfers in Aggregate Capital Accumulation, 89 J. Pol. Econ. 706 (1981)). On the other hand, if the income tax includes unearned income, such as gifts, then it will create a double distortion itself, by distorting not only the incentive to work, but also gift-giving and "bequesting." See Markovits, supra note 60, at 553. Additionally, a rights-based torts regime may be better suited to directly redistribute wealth than a cost-minimizing torts system. The former would require consideration of the impacts on only two parties, the defendant and the plaintiff, while the latter would require

⁷² See Kaplow & Shavell, Why the Legal System, supra note 1, at 669, 680; see also Chris William Sanchirico, Deconstructing the New Efficiency Rationale, 86 CORNELL L. REV. 1003, 1014–15 (2001).

⁷³ See Chris William Sanchirico, *Taxes Versus Legal Rules as Instruments for Equity: A More Equitable View*, 29 J. LEGAL STUD. 797, 799–800 (2000) (referring to the concept of "double distortion").

⁷⁴ Sanchirico notes that two distortions are not always less efficient than one—in fact, one distortion may help correct another. *See* Sanchirico, *supra* note 72, at 1017–18. Kaplow and Shavell acknowledge this criticism with an illustration: A legal rule imposes higher damages on yacht owners in tort yachting accidents, and as a result, yachting and perhaps leisure generally will seem a bit less attractive to high-income individuals. *See* Kaplow & Shavell, *Clarifying the Role*, *supra* note 1, at 825–26. By decreasing the attractiveness of leisure time, the rule counteracts whatever distortion a redistributive income tax has on work incentives. *See id.* The second distortion mitigates the first. Consequently, the mere possibility that redistributive legal rules create more distortions than a redistributive income tax does not necessarily prove that a redistributive income tax is preferable. *See id.* Although Kaplow and Shavell acknowledge that redistributive legal rules discouraging leisure and encouraging work might improve an income tax system, they nonetheless claim that an excise tax on yachting or similar wealthy leisure activities would be a more efficient way to discourage high-income leisure and redistribute to low-income individuals. *See id.* at 827; Kaplow & Shavell, *Why the Legal System*, *supra* note 1, at 681.

Kaplow and Shavell briefly discuss other reasons the tax system is better suited than legal rules to redistribute wealth. They note that if legal rules inflict greater burdens upon a particular party in an attempt to redistribute, parties can often contract around the law.⁷⁶

They also note that legal rules are haphazard, because they redistribute wealth based on factors other than income⁷⁷—for example whether someone is a landlord or a tenant. While these bases for redistribution may often be directly correlated with wealth, legal rules may be over or underinclusive, for example by redistributing from the occasional poor landlord to the occasional wealthy tenant. By contrast, a redistributive income tax can redistribute wealth from all rich individuals to all poor individuals.⁷⁸

both an analysis of what damages would minimize aggregate costs, to set the tort standard, and then a separate inquiry into the appropriate amount of redistribution through the tax system. See Mark A. Geistfeld, Efficiency, Fairness, and the Economic Analysis of Tort Law, in Theoretical Foundations of Law and Economics 234, 247–48 (Mark D. White ed., 2009).

⁷⁶ See Kaplow & Shavell, Why the Legal System, supra note 1, at 674. For example, a legal rule that redistributes by burdening landlords through pro-tenant housing laws could be contracted around by raising the rent. See Tomer Blumkin & Yoram Margalioth, On the Limits of Redistributive Taxation: Establishing a Case for Equity-Informed Legal Rules, 25 VA. TAX REV. 1, 4 (2005).

77 Rules that redistribute based on factors other than income present a challenge for Kaplow and Shavell because the double distortion criticism applies only to income-based legal rules. For example, in addition to varying in income, people may vary in ability to take precautions and avoid tort accidents, like boat collisions. Particularly clumsy individuals are in at least one sense less well off than more dexterous boaters. The government could choose to redistribute welfare by lowering damages for boat collisions below the efficient amount, thereby redistributing wealth—and welfare—from dexterous boaters to clumsy boaters, because clumsy boaters are more frequently defendants in boating accidents, while dexterous boaters are more frequently plaintiffs. According to this argument, the ability to avoid accidents is an immutable trait, not a choice, so the lower damages would not result in clumsy boaters or dexterous boaters taking less care, thereby avoiding any distortion in behavior. See Blumkin & Margalioth, supra note 76, at 10-11 (summarizing the challenge to Kaplow and Shavell over how to redistribute in the case of ability to take precautions); Sanchirico, supra note 73, at 802, 804 (referring to the immutability of ability and effects of lowering damages below an efficient rate, respectively). Kaplow and Shavell respond that deviating from an efficient rule could favor the rich, depending on the direction of the adjustment. For example, if wealthy yachters tend to be clumsy while low-income fishermen tend to be dexterous, a legal rule designed to redistribute based on the ability to avoid accidents would favor wealthy yachters over poor fishermen. Because wealthy yachters would commonly be defendants against dexterous fisherman plaintiffs, a legal rule lowering damages would redistribute wealth from the poor to the rich. See Kaplow & Shavell, Clarifying the Role, supra note 1, at 828-29. But see Sanchirico, supra note 72, at 1034 (explaining that a redistributive legal rule should be designed to redistribute to the less well off, so clumsy yachters should be favored by a legal rule only if the sum of all factors, including ability to take care and income, render them less well off than the poor fishermen).

⁷⁸ See Kaplow & Shavell, Why the Legal System, supra note 1, at 674–75. But see Daphna Lewinsohn-Zamir, In Defense of Redistribution Through Private Law, 91 Minn. L. Rev. 326, 329 n.9, 335–36 (2006) (noting that taxes are also often overinclusive or

Kaplow and Shavell thus present several reasons the tax system is superior to common law rules in redistributing income. But their argument covers more than common law rules; when discussing legal rules, they sometimes include regulations as well. The next section discusses how their approach applies to regulation.

B. Regulatory Policy

While Kaplow and Shavell focus on common law rules, they do not restrict their analysis to this area. Their definition of legal rules is expansive, including any "rules other than those that define the income tax and welfare system."⁷⁹ Government regulation clearly falls within this definition. Moreover, in their later works, Kaplow and Shavell specifically refer to "government decisionmakers" and the Food and Drug Administration (FDA) as entities that should employ "welfare economics"—a framework that incorporates their earlier writing about redistribution through the tax system.80 Other scholars have also interpreted Kaplow and Shavell as arguing that government policy decisions, not just common law rules, should focus on efficiency rather than redistribution.81 Government officials with decisionmaking authority, Kaplow and Shavell say, should promulgate policies and regulations that maximize social welfare.82 Here too, the argument goes, the best regulation is the most efficient one—the one with the greatest net benefits. If an efficient policy or regulation's costs

underinclusive); Kyle Logue & Ronen Avraham, *Redistributing Optimally: Of Tax Rules, Legal Rules, and Insurance*, 56 Tax L. Rev. 157, 185–86 (2003) (arguing that the redistributive reach of legal rules is not limited to litigation parties, as legal rules also affect ex ante incentives of potential injurers and victims).

⁷⁹ See Kaplow & Shavell, Why the Legal System, supra note 1, at 667 n.1.

⁸⁰ See Kaplow & Shavell, supra note 1, at 396–401; Kaplow & Shavell, Fairness, supra note 1, at 1318–24 (explaining that government decisionmakers should make policy based on welfare economics, not perceptions of fairness). When explaining what factors a decisionmaker should weigh in welfare economics, they note that a legal rule with unfavorable redistributive effects may be corrected by a tax and transfer system. See Kaplow & Shavell, supra note 1, at 17; Kaplow & Shavell, Fairness, supra note 1, at 978–79.

⁸¹ See Nicholas L. Georgakopoulos, Solutions to the Intractability of Distributional Concerns, 33 Rutgers L.J. 279, 295 n.23 (2002) (responding to Kaplow and Shavell's distortion concerns with public law examples, like bottle laws and legalizing abortion); Cass R. Sunstein, The Value of a Statistical Life: Some Clarifications and Puzzles, 4 J. Benefit-Cost Analysis 237, 238 (2013) (suggesting "[i]t is important to see that the best response to unjustified inequality is a redistributive income tax, not regulation—which is a crude and potentially counterproductive redistributive tool" and citing Kaplow and Shavell in support of this assertion).

⁸² See Kaplow & Shavell, supra note 1, at 396–98; Kaplow & Shavell, Fairness, supra note 1, at 1318–20. Because welfare is a difficult product to measure, the authors note that wealth maximization and efficiency can serve as proxies for maximizing welfare. See Kaplow & Shavell, supra note 1, at 37; Kaplow & Shavell, Fairness, supra note 1, at 997.

happen to rest disproportionately on an already disadvantaged group, those burdens can be lightened when the disadvantaged members receive proportional rates or credits through the tax system.⁸³

Consider an example of a government public works decision: A government official has some funds to improve roads. One road in a poor neighborhood is run-down; repaving the road will avoid ten accidents per year. A second road in a wealthy neighborhood is also run-down, but since there is more traffic on this road, the funds will make a greater difference, avoiding twenty accidents per year. Assuming that a car accident costs drivers in either neighborhood equally, Kaplow and Shavell would presumably urge the official to repair the road in the affluent neighborhood because it is the most efficient use of funds. Rather than improving the welfare of the poor neighborhood by choosing to repave their road, the official can design an income tax that redistributes income so that wealthy individuals in the affluent neighborhood will pay higher taxes, while low-income individuals in the poor neighborhood will receive tax credits compensating them for the loss in wealth they might suffer from the dilapidated road.⁸⁴

When discussing redistribution, Kaplow and Shavell focus on redistributing from the rich to the poor.⁸⁵ Their tort examples assume that the main difference between the welfare of the two actors is their income and that any other inequity caused by the tort can be ameliorated through damages equal to the harm imposed.⁸⁶ But Kaplow and

⁸³ See Kaplow & Shavell, Why the Legal System, supra note 1, at 668 (describing a potential tax scheme redistributing from rich to poor).

⁸⁴ Kaplow and Shavell do not analyze the underlying values behind legal entitlements, however. *See* David Blankfein-Tabachnick & Kevin A. Kordana, *Kaplow and Shavell and the Priority of Income Taxation and Transfer*, 69 HASTINGS L.J. 1, 8 (2018). Blankfein-Tabachnick and Kordana point out that in a regime where property rights are initially created to maximize wealth, changing the initial legal entitlement may be more efficient than layering a redistributive tax on top of the existing system. *Id.* at 9 (discussing how to maximize the welfare of the least well off with regard to a private beach and concluding that recategorizing the beach as public may be more efficient than keeping the beach private and levying a redistributive tax).

⁸⁵ See Kaplow & Shavell, supra note 1, at 16–17 (offering a comprehensive view of welfare, but then focusing on legal rules' distributive effects as defined by how they affect people of differing income levels, rather than people differing in welfare in other ways); Kaplow & Shavell, Fairness, supra note 1, at 978–79 (same); Kaplow & Shavell, Clarifying the Role, supra note 1, at 828–30 & n.17 (noting that Sanchirico's critique does not equate the less well off with those who have lower income and contrasting this perspective with the view of most legal experts when they consider whether legal rules should redistribute to the poor); Kaplow & Shavell, Why the Legal System, supra note 1, at 668 (using an illustration that focuses on high-income and low-income parties).

⁸⁶ See Kaplow & Shavell, Why the Legal System, supra note 1, at 669–73 (using a tort example in which the actors differ in income and in which no other differences are mentioned). Kaplow and Shavell acknowledge that actors may also differ in political power, but they seem to consider these differences would play out within the context of

Shavell do acknowledge the possibility that individuals' welfare might differ in ways not reflected in income. For example, if wealthy yachters are klutzier and less able to avoid accidents than poorer fishermen, Kaplow and Shavell accept that the yachters could possibly have lower welfare than the fishermen, despite their income advantage.⁸⁷

Kaplow and Shavell do not suggest, however, that legal rules should be adjusted to take these kinds of welfare differences into account.⁸⁸ They argue that it would be too complicated to determine exactly how a legal rule should be adjusted;⁸⁹ that empirical analysis would be unlikely to shed much light on this question;⁹⁰ and that qualifications about non-income-based welfare have been known for decades, probably because they are "not very important."⁹¹ If such differences in welfare were in fact significant, Kaplow and Shavell suggest that "broader adjustments to government policy" would be preferable to changing legal rules, but they do not discuss what such adjustments would look like.⁹²

Thus, under Kaplow and Shavell's regime, the efficient legal rule should presumably be followed even if inequities unrelated to income are involved. Consider a regulatory example⁹³: A city must determine

- 88 See id. at 832.
- 89 See id.
- ⁹⁰ See id. at 833.
- ⁹¹ See id. at 833-34.

differences in wealth: The discussion comes directly after a wealth-based passage, and they do not discuss the income tax as having any difficulty in detecting such differences in political power, a suggestion that the inequity is couched in income. *See id.* at 674–75.

⁸⁷ See Kaplow & Shavell, Clarifying the Role, supra note 1, at 828–30 & n.17 (discussing this example).

⁹² See id. at 834. In later work, Kaplow and Shavell say "distributive concerns are relevant under welfare economics and should be addressed in whatever manner turns out to be best." See Kaplow & Shavell, supra note 1, at 34 n.38; Kaplow & Shavell, Fairness, supra note 1, at 995 n.65. But they do not offer a means of addressing inequities unrelated to income or wealth. Rather, they define distribution as addressing differences in "the overall allocation of income or wealth." See Kaplow & Shavell, supra note 1, at 37; Kaplow & Shavell, Fairness, supra note 1, at 998. When they discuss efficient legal rules with undesirable distributive consequences, Kaplow and Shavell say efficient legal rules with significant distributive downsides should not be adopted, but they emphasize income tax and transfer programs as desirable tools to correct such rules. See Kaplow & Shavell, supra note 1, at 17; Kaplow & Shavell, Fairness, supra note 1, at 979.

⁹³ This Article focuses on regulation rather than tort liability. Shavell has identified four factors that determine when regulation or tort liability may be better suited to mitigate social harms. See Steven Shavell, Liability for Harm Versus Regulation of Safety, 13 J. Legal Stud. 357, 359–64 (1984). First, if private parties have more information than regulating entities do, tort liability is favorable, while regulation is favorable if the reverse is true. See id. at 359. Second, if parties are unable to pay damages, regulation may be more appropriate than liability. See id. at 360–61. Third, if parties are not likely to face suit (perhaps because of the passage of a long period of time before a harm manifests),

how stringently to regulate pollution from a factory in a low-income neighborhood. Requiring a cutting-edge scrubber results in a cost of \$90 per scrubber and reductions of medical costs of \$100 per scrubber. By contrast, requiring the market-standard scrubber results in a cost of only \$20 per scrubber and reductions of medical costs of \$40 per scrubber. Because benefits outweigh costs by \$20 instead of \$10, the second regulation is more efficient. But choosing the second rule over the first means that the wealthy plant operator keeps more money, while residents of low-income neighborhoods give up significant value in health benefits. Again, Kaplow and Shavell would presumably favor the efficient rule and argue wealth could be redistributed to the poor residents through the income tax system.

Although it is clear Kaplow and Shavell believe legal rules should not generally be adjusted to resolve non-income-based inequities,94 it is unclear whether they believe the tax system is as well suited to address non-income-based inequities as income-based inequities. They embrace a comprehensive theory of welfare that includes individuals' "material comfort, but also their degree of aesthetic fulfillment, their feelings for others, and anything else that they might value, however intangible."95 Nonetheless, when discussing which legal rules should be chosen, Kaplow and Shavell suggest that the default choice should be the most efficient legal rule, and they offer the tax and transfer system as the preferred way to correct for undesirable distributive effects of efficient legal rules.⁹⁶ Although they refer to income redistribution, rather than well-being redistribution, they claim to have all-encompassing distributive concerns in mind.⁹⁷ Thus, it seems plausible they believe the tax system is generally the best way to address non-income-based harms. On the other hand, Kaplow and Shavell acknowledge, without going into detail, that there may be situations in which the income tax is unable to adequately redistribute, and that in such cases, if the redistributive effects are grave enough, it may be inappropriate to follow the most efficient

regulation may be preferred. See id. at 363. Finally, costs involved with bringing suit versus administering regulation may point toward one or the other means of compensating harm; often this factor points toward liability, since costs are only realized if a harm actually occurs. See id. at 363–64. This Article relies upon examples where regulation is appropriate.

⁹⁴ See supra notes 88-92 and accompanying text.

⁹⁵ See Kaplow & Shavell, supra note 1, at 4; Kaplow & Shavell, Fairness, supra note 1, at 968.

⁹⁶ See Kaplow & Shavell, supra note 1, at 17; Kaplow & Shavell, Fairness, supra note 1, at 979.

 $^{^{97}}$ See Kaplow & Shavell, supra note 1, at 28 n.25; Kaplow & Shavell, Fairness, supra note 1, at 989 n.52.

legal rule.⁹⁸ It is possible that they would consider all non-incomebased inequities as poorly addressed by the tax system. Regardless of their view, this Article aims to offer clear examples of redistributive situations where the tax system flounders.

C. Influence

A significant group of legal scholars and economists has found Kaplow and Shavell's work persuasive.⁹⁹ As Kyle Logue and Ronen Avraham have said, "[I]t is a safe bet that a majority of legal economists hold the following view: Whatever amount of redistribution is deemed appropriate or desirable, the exclusive policy tool for redistributing to reduce income or wealth inequality should always be the tax-and-transfer system."¹⁰⁰ Similarly, Eric Posner has observed that the "general argument that liability rules should not be used to redistribute wealth" has "become very common."¹⁰¹

The theory has also earned a significant place in influential text-book discussions of welfare distribution. In the bibliography to *An Introduction to Law and Economics*, A. Mitchell Polinsky recommends reading Kaplow and Shavell's *Fairness Versus Welfare* for a discussion of "whether legal rules should be based on efficiency or equity," and expresses support for their perspective asserting that "it is often impossible to redistribute income through the choice of legal rules and . . . even when it is possible, redistribution through the government's tax and transfer system may be cheaper and is likely to be more precise." Along the same lines, Robert Cooter and Thomas Ulen's *Law and Economics* explicitly rejects a redistributive approach to private law and seems to take a dim view of redistribution

⁹⁸ See Kaplow & Shavell, supra note 1, at 17, 34 n.38, 245 n.45; Kaplow & Shavell, Fairness, supra note 1, at 979, 995 n.65, 1183 & n.524.

⁹⁹ See Logue & Avraham, supra note 78, at 166 ("Thus with respect to dealing with income inequality, we generally side with those who believe the lion's share of income redistribution should be done through the tax-and-transfer system, although there may be a relatively small, supplementary role for the legal system in redistributing income."); see also Blankfein-Tabachnick & Kordana, supra note 84, at 7 (calling Kaplow and Shavell's claim "one of the most prominent claims in private law and tax policy scholarship"); Blumkin & Margalioth, supra note 76, at 2 (stating that redistribution through the tax system is "the prevailing norm in the law and economics literature"); Sunstein, supra note 81, at 238; supra text accompanying note 81.

¹⁰⁰ Logue & Avraham, supra note 78, at 158.

¹⁰¹ Eric A. Posner, Contract Law in the Welfare State: A Defense of the Unconscionability Doctrine, Usury Laws, and Related Limitations on the Freedom to Contract, 24 J. Legal Stud. 283, 284 n.1 (1995) (citing Kaplow and Shavell's Why the Legal System along with other sources as arguing that redistribution can be best handled through the tax and transfer system).

¹⁰² POLINSKY, supra note 55, at 181.

¹⁰³ *Id.* at 10.

through regulation, noting that regulators seldom show sufficient attention to underlying economics to appropriately target individuals for redistribution.¹⁰⁴ The authors then single out Kaplow and Shavell's *Fairness Versus Welfare* for the view that only efficiency should matter when making and applying law.¹⁰⁵

In summary, Kaplow and Shavell urge administrative agencies not to take distributional considerations into account in fashioning regulatory policy. Instead, they argue, agencies should seek to maximize social welfare, regardless of the distributional consequences. Then, distributional adjustments should be done by Congress through the tax system.

II Challenging the Orthodoxy

Even if the income tax system were theoretically better positioned to redistribute income under certain conditions, it works poorly in the current political environment to compensate for the distributional consequences of environmental, health, and safety regulation, which are by far the most significant categories of regulatory activity. First, perhaps the most important benefit of environmental, health, and safety regulation is the prevention of premature mortality, and the income tax system is poorly suited to deal with such

¹⁰⁴ COOTER & ULEN, supra note 55, at 9-11.

¹⁰⁵ See id. at 11.

¹⁰⁶ Agencies addressing environmental, health, and safety regulation received eighty-two percent of the total regulatory budget in fiscal year 2017. See Susan Dudley & Melinda Warren, Regulatory Studies Ctr., Regulators' Budget from Eisenhower to Obama 3 (2016), https://regulatorystudies.columbian.gwu.edu/sites/regulatorystudies.columbian.gwu.edu/files/downloads/2017_Regulators_Budget_05-17-2016.pdf. These agencies have accounted for the majority of the federal regulatory budget dating back at least to President Eisenhower. See id. at 1. According to the U.S. Government Accountability Office, the Environmental Protection Agency, Occupational Safety and Health Administration, and the Department of Health and Human Services issued 547 of the 1578 final major rules published in the Federal Register between January 1995 and the end of July 2018. This number does not include environmental, health, and safety regulations promulgated by other agencies. See Congressional Review Act, U.S. Gov't Accountability Office, http://www.gao.gov/legal/congressional-review-act/overview (last visited Sept. 30, 2018).

¹⁰⁷ See, e.g., John D. Graham, Savings Lives Through Administrative Law and Economics, 157 U. PA. L. REV. 395, 397 (2008) (noting that health, safety, and environmental regulations are sometimes referred to in shorthand as "'lifesaving' regulation"); Dan Farber, Opinion, Tangling Life-Saving Regulations in Red Tape, HILL (July 5, 2017), http://thehill.com/blogs/congress-blog/politics/340689-tangling-life-saving-regulations-in-red-tape (noting that slowing health, safety, and environmental regulations with further procedure could risk lives, as in the Flint, Michigan water crisis). Agencies' cost-benefit analyses also reflect the importance of premature deaths avoided. See, e.g., EPA BCA, supra note 10.

distributional consequences that are not income-based. Second, the gridlock that has bedeviled Congress over the last few decades makes it unlikely that the income tax system would be modified to address the negative distributional consequences of regulatory activity.¹⁰⁸

A. Compensating Nonmonetary Harms

An income tax system that redistributes money from high-income individuals to low-income individuals is ill suited to compensate non-monetary harms. ¹⁰⁹ Consider, for example, a community exposed to many years of pollution from a nearby refinery. Community members have an increased risk of developing cancer in the future, growing too sick to work at some point in their lives, and dying an early death. As a result, the community members' expected welfare will decrease relative to healthy individuals. ¹¹⁰ A society may wish to redistribute welfare to these people, but an income tax is poorly equipped to do so. To

108 In addition to gridlock, interest groups also pose a challenge to achieving redistribution, either through legislation or through regulation. For example, small groups with high stakes may be especially likely to band together and lobby legislators or the executive branch while the majority of stakeholders remain disorganized and relatively underrepresented. See Mancur Olson, The Logic of Collective Action: Public GOODS AND THE THEORY OF GROUPS 56-65 (1965). Interest groups have put significant pressure on proposed legislation and regulation over the years. See Kenneth M. Goldstein, Interest Groups, Lobbying, and Participation in America 63–64 (2011) (detailing how both unions and business coalitions lobbied legislators over the enactment of NAFTA); Andrew Cheon & Johannes Urpelainen, How Do Competing Interest Groups Influence Environmental Policy? The Case of Renewable Electricity in Industrialized Democracies, 1989-2007, 61 Pol. Stud. 874, 891-92 (2013) (demonstrating that heavy industry interest groups have been found to have a negative effect on government support for renewable energy, the general public's interest in renewables notwithstanding); Martin Gilens & Benjamin I. Page, Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens, 12 Persp. on Pol. 564, 575 (2014) (finding interest groups representing business interests have greater political power than the average American voter). Thus, interest groups are likely to factor into any kind of comprehensive redistributive regime, legislative or regulatory.

¹⁰⁹ In general, redistributive tax systems, including Kaplow and Shavell's, are premised on the notion that the marginal utility of a dollar is greater for low-income people than high-income people. *See* Fennell & McAdams, *supra* note 60, at 1059–60. However, for welfare disparities that are not wealth-based, the same difference in utility does not necessarily apply. For example, someone with a greater risk of getting cancer does not necessarily gain more marginal utility from a dollar than someone with a lower risk of getting cancer. Thus, it is not surprising that income-based tax systems fail to respond adequately to some disparities in welfare.

110 See Matthew D. Adler, Risk, Death and Harm: The Normative Foundations of Risk Regulations, 87 Minn. L. Rev. 1293, 1429–31 (2003). Adler notes that in some cases, risk itself may be a harm if it produces a burden of fear regardless of whether the feared event occurs. See id. at 1430–31. For example, if someone exposed to pollution has a higher risk of dying prematurely and therefore spends more time fearing premature death than those unexposed, she may suffer a harm—namely fear—even if she never dies prematurely. See id. But because risk is not easily observable for the purposes of the tax system, we do not focus on it here.

understand why, it is useful to consider each of the three phases of harm members of this hypothetical community suffer: first, latency, the period in which it is uncertain who will develop cancer; second, morbidity, the period in which some members of the community become severely sick with cancer; and finally, death and the subsequent years following the premature death of a community member, during which the individual would have been alive were it not for the premature death caused by cancer.

First, members experience a latency period, during which it is uncertain who will develop cancer, how severe the cancer will be, and when the onset will begin. Imagine that exposed community members have a one in one thousand probability of dying from cancer. If the community has ten thousand residents, ten will ultimately die as a result of the nearby refinery's pollution. Perhaps epidemiologists and toxicologists could identify high-risk individuals, but they could not predict with certainty who would ultimately die from cancer. And the income tax system has no means of identifying even high-risk individuals. These people cannot identify themselves to the tax system through their income tax returns because they do not know whether they are at risk of developing cancer, and they certainly do not know whether they will die from the disease.

Theoretically, a tax analyst could calculate the average risk of cancer associated with living next to a polluting refinery, assign a monetary value to that risk, and compensate individuals who have a greater probability of developing cancer through tax credits. But the current income tax does not compensate individuals for probabilistic latent harms, and based on the current structure of the income tax, a design of this sort is implausible. The situation requires a decisionmaker to calculate the risk of the average community member and monetize that risk.

Tax and welfare programs do sometimes redistribute wealth in more targeted ways than simply redistributing based on the amount of income individuals earn. For example, the Trade Readjustment Allowance offers weekly income support payments for workers who have lost their jobs due to foreign competition. Employers who hire

¹¹¹ See id. at 1423–24 ("[O]ur tax-and-transfer system is seemingly far too insensitive to individual circumstances to warrant risk regulators in believing that inequities . . . will be corrected elsewhere."); Logue & Avraham, *supra* note 78, at 213–14 (discussing the administrative costs that would hypothetically be involved in identifying citizens with high-risk disease genes in order to help them through the tax system).

¹¹² See Benjamin Collins, Cong. Research Serv., Trade Adjustment Assistance for Workers and the TAA Reauthorization Act of 2015 (2016), https://fas.org/sgp/crs/misc/R44153.pdf.

employees from specific groups, such as qualified veterans, ex-felons, and food stamp recipients, can take advantage of the Work Opportunity Tax Credit.¹¹³ Individual and corporate investors that invest in financial intermediaries targeting development in low-income communities can receive a New Markets Tax Credit.¹¹⁴ Clearly, in some cases, the tax system can be targeted in its redistribution. Nonetheless, the tax system seldom targets probabilistic latent harms, and is generally not well designed to do so.¹¹⁵

The tax system is ill designed for this kind of redistribution because it generally redistributes on an ex post basis, considering losses and gains already realized, rather than those that might come to be. Such risk calculations have been the traditional domain of regulatory agencies. These agencies routinely calculate risk and monetize potential harms through cost-benefit analyses when promulgating regulations. In contrast, the income tax system rarely conducts this sort of risk analysis and is ill suited to do so.

Even without this kind of predictive expertise, the Internal Revenue Code does sometimes tax probabilistic gains or harms,

¹¹³ See Work Opportunity Tax Credit: Employers, U.S. DEP'T OF LAB., https://www.doleta.gov/business/incentives/opptax/wotcEmployers.cfm (last updated Mar. 22, 2018).

¹¹⁴ See New Markets Tax Credit, U.S. DEP'T OF TREASURY, https://www.cdfifund.gov/programs-training/Programs/new-markets-tax-credit/Pages/default.aspx (last visited Sept. 30, 2018).

¹¹⁵ Moreover, as Cass Sunstein has noted, providing monetary compensation for some kinds of loss may be inappropriate or even offensive. *See* Cass R. Sunstein, *Incommensurability and Valuation in Law*, 92 Mich. L. Rev. 779, 785–89 (1994) (explaining that under some circumstances "the offer of cash would be perceived as an insult rather than as compensation").

¹¹⁶ See, e.g., Conducting an Ecological Risk Assessment, U.S. Envil. Protection Agency, https://www.epa.gov/risk/conducting-ecological-risk-assessment (last updated Sept. 23, 2016) (laying out steps to ecological risk assessment); The OSHA Rulemaking Process, U.S. Occupational Safety & Health Admin., https://www.osha.gov/OSHA_FlowChart.pdf (last updated Oct. 15, 2012) (laying out the steps to an OSHA rulemaking, including risk assessment stages in developing the final rule). Effective redistribution through regulation depends on correctly assigning legal entitlements because of the divergence between two measurements: willingness to pay to avoid harm and willingness to accept a payment for forfeiting the right to be harm-free. Mark A. Geistfeld, The Tort Entitlement to Physical Security as the Distributive Basis for Environmental, Health, and Safety Regulations, 15 Theoretical Inquiries L. 387, 393–94, 408–14 (2014). The right to be free from physical harm can be derived from the tort system. See id. at 408–10.

¹¹⁷ See Helen G. Boutrous, Regulatory Review in the Obama Administration: Cost-Benefit Analysis for Everyone, 62 Admin. L. Rev. 243, 243 (2010) (suggesting that cost-benefit analysis is an entrenched part of regulatory review); Don Bradford Hardin, Jr., Why Cost-Benefit Analysis? A Question (and Some Answers) About the Legal Academy, 59 Ala. L. Rev. 1135, 1147–49 (2008) (referring to the "Reagan Revolution," which ushered in cost-benefit analysis's prominence in promulgating regulations).

despite its tendency to tax ex post.¹¹⁸ The tax system deals in probabilistic harms when taxing life insurance, for example. Purchasing life insurance is a form of investment similar to purchasing a home.¹¹⁹ While mortgage payments are tax deductible in the year payments are made,¹²⁰ insurance premiums are not, creating a functional tax on the front end of insurance policies.¹²¹ Without any deductions, each insurance purchaser pays a premium proportional to her likelihood of death and the amount of her contractual insurance payout.¹²² But if the insurance assignee dies, the Internal Revenue Service (IRS) does not consider the life insurance payout as part of the assignee's gross income and therefore does not tax the payout.¹²³ Assuming the premiums are equal to an assignee's eventual payout, the government's lack of tax deductions for premiums ex ante is correctly offset by not taxing the payout on the back end.¹²⁴

But this ex ante tax approach is problematic. Not all insurance holders die at the end of their policy's term and so they may not receive a contractual payment. The tax system does not compensate those who paid premiums without tax deductions on the front end but receive no payout.¹²⁵ Thus, the government's ex ante regime can lead to significant undercompensation of individual taxpayers. The life insurance regime demonstrates that even when the tax system endeavors to take an ex ante view, the result can be a rather blunt instrument. Theoretically, the government could collect enough information to offer deductions to those who do not realize the benefits of their life insurance policies, but this is not the Code's current approach.

It is theoretically conceivable that the IRS could increase its expertise in making predictions about probabilistic harms to rival the expertise of agencies like the Environmental Protection Agency (EPA). Absent that kind of predictive expertise, the IRS could theo-

¹¹⁸ See Reed Shuldiner, A General Approach to the Taxation of Financial Instruments, 71 Tex. L. Rev. 243, 264 n.76 (1992).

¹¹⁹ See Douglas A. Kahn & Lawrence W. Waggoner, Federal Taxation of the Assignment of Life Insurance, 1977 DUKE L.J. 941, 944–45 (describing the investment aspect of whole-life insurance); Kelly J. Bozanic, Comment, An Investment to Die for: From Life Insurance to Death Bonds, the Evolution and Legality of the Life Settlement Industry, 113 Penn St. L. Rev. 229, 234 n.33 (2008) (comparing a life insurance policy to a home because of its annual consumption aspect and its investment aspect).

¹²⁰ See I.R.C. § 163(h) (2012).

¹²¹ See Shuldiner, supra note 118, at 264 n.76.

¹²² See Kahn & Waggoner, supra note 119, at 943-45.

¹²³ See I.R.C. § 101(a)(1); Thomas J. Gallagher, Jr., A Primer on Section 101—Federal Income Taxation of Life Insurance Proceeds, 49 Temple L.Q. 831, 831 (1976).

¹²⁴ See Shuldiner, supra note 118, at 264 n.76.

¹²⁵ See id.

retically collect more information from taxpayers, allowing it to correct an imperfect ex ante approach by adjusting taxes on the back end once harms or benefits have actually occurred. But building up predictive expertise or information-gathering ability would involve significant changes to the IRS, which seem unlikely. Thus, regulatory agencies are better equipped to address latent probabilistic harms.

The second harm experienced by the community members living close to a polluting refinery is morbidity. Eventually, often decades after the initial exposure, some members of the community develop cancer. 126 For some, the cancer is severe enough that they enter a morbidity period during which they need significant medical attention and must quit their jobs. When these individuals report their loss of income and medical expenses on their tax returns, the income tax may give them tax credits to help them through unemployment. The patients may also deduct from their tax payments any medical expenses beyond a certain percentage of their incomes.¹²⁷ But even in this phase, the tax system is not designed to address any nonmonetary decreases in welfare. For example, in addition to loss of income or medical expenses, community members might have pain related to the cancer. The income tax cannot identify this harm because it would not be reflected in their medical bills or tax returns. The morbidity period, therefore, represents a phase during which the income tax can correct some forms of diminished welfare experienced by the community members, but not others.

When community members enter the third phase of harm and die from cancer, the tax system will cease to help them altogether. Because the community members exposed to pollution are dead, they

¹²⁶ See U.S. Envtl. Prot. Agency, Guidelines for Carcinogen Risk Assessment 2–14 (2005), https://www3.epa.gov/airtoxics/cancer_guidelines_final_3-25-05.pdf ("[A] latent period of up to 20 years or longer is often associated with cancer development in adults."); Matthew D. Adler, Fear Assessment: Cost-Benefit Analysis and the Pricing of Fear and Anxiety, 79 Chi.-Kent L. Rev. 977, 1021 n.129 (2004) (describing the lost utility associated with living in fear of latent harms). For a specific example in the context of kidney cancer, see Yan Yuan et al., Kidney Cancer Mortality: Fifty-Year Latency Patterns Related to Arsenic Exposure, 21 Epidemiology 103 (2010).

¹²⁷ See I.R.C. § 213(a). The tax-and-transfer system notably provides significant programs for reimbursing medical expenses through Medicaid and Medicare, but these programs only compensate costs reflected in medical bills, not harms like physical pain or the harm of dying young. See Medicaid Overview, MedicareInteractive.Org, https://www.medicareinteractive.org/get-answers/programs-for-people-with-limited-income/medicaid-and-medicare/what-is-medicaid (last visited Sept. 30, 2018) (describing Medicaid as a program that covers medical care); Original Medicare, MedicareInteractive.Org, https://www.medicareinteractive.org/get-answers/how-original-medicare-works/original-medicare-defined/what-is-original-medicare (last visited Sept. 30, 2018) (describing the federal government's direct payments for medical services received). Regulation offers more promise in compensating harms that are not directly reflected in financial costs.

cannot benefit from redistribution. Nonetheless, if they have surviving families, the families could hypothetically receive the redistributed wealth to compensate for the community members' deaths, as happens in wrongful death suits and civil actions on behalf of the deceased. But the tax system is not designed to identify the cause of someone's death, calculate the number of years of life lost to pollution, and redistribute income to relatives on this basis. 129

This refinery example deals with carcinogens found in the environment. But carcinogens might also be found in the workplace: for example, in the worksites of construction workers. Again, the tax system is poorly adapted to assess the potential injury that accompanies a particular occupation, monetize the risk, and distribute it to the workers accordingly. The tax system can compensate unemployed workers during their morbidity period when they cannot perform their jobs and pay medical bills while they are ill, but after death, the tax system has no mechanism of compensating the deceased or their survivors.

The same pattern arises in a consumer product context involving carcinogens. For example, the FDA might approve a cosmetic product with a potential long-term carcinogenic risk.¹³¹ During the latency period, the tax system is poorly equipped to identify everyone who uses a particular cosmetic product and calculate and monetize the associated risk. During the morbidity period, the tax system can compensate victims for loss of work or medical expenses. But after death,

¹²⁸ See Steven H. Steinglass, Wrongful Death Actions and Section 1983, 60 Ind. L.J. 559, 575 (1985) (describing survival statutes and causes of action for wrongful death); Meredith A. Wegener, Purposeful Uniformity: Wrongful Death Damages for Unmarried, Childless Adults, 51 S. Tex. L. Rev. 339, 346 (2009) (noting that damages in wrongful death actions are usually awarded based on the loss to the survivor, which is measured as the contribution the deceased would have made to the survivor had he lived); see also John Fabian Witt, From Loss of Services to Loss of Support: The Wrongful Death Statutes, the Origins of Modern Tort Law, and the Making of the Nineteenth-Century Family, 25 L. & Soc. Inquiry 717, 720 (2000) (describing the origins of wrongful death actions).

¹²⁹ See supra text accompanying notes 110–15. To the extent the dead engage with the tax system at all, it is through the estate tax, but as of 2017, only estates worth more than \$5.49 million need to file returns. See Estate Tax, Internal Revenue Serv., https://www.irs.gov/businesses/small-businesses-self-employed/estate-tax (last updated May 9, 2018); Julie Garber, Learn About the Taxes Due After Someone's Death, Balance (May 13, 2018), https://www.thebalance.com/what-types-of-taxes-are-due-after-someone-dies-3505057.

¹³⁰ See Eileen Wang et al., Mortality Among North Carolina Construction Workers, 1988–1994, 14 Applied Occupational & Envil. Hygiene 45, 45 (1999).

¹³¹ See Cosmetics, Am. Cancer Soc'y, https://www.cancer.org/cancer/cancer-causes/cosmetics.html (last updated May 28, 2014) (noting that FDA approval of a cosmetic product does not require testing of long-term health effects).

the tax system will be unable to identify victims of premature death for compensation.

Even for situations in which the majority of the harm is financial, the tax system may be inadequate. Consider, for example, coal miners who lose their jobs after a mine closes. Their lost income can be detected and compensated through the tax system. But they may suffer other, nonfinancial welfare loss associated with unemployment, including loss of a personal sense of usefulness or dignity, loss of a sense of purpose, and loss of coworker companionship. Arthur C. Brooks, President of the American Enterprise Institute, calls the lack of purpose following unemployment the "dignity deficit." The income tax-and-transfer system does not provide a means of compensating the dignity deficit or any similar loss of welfare from unemployment. A regulatory regime, meanwhile, could take a more holistic view of welfare and take such losses into account.

These examples illustrate a broader theme: The income tax system is likely to flounder in attempts to identify individuals suffering a non-income-based harm, especially if it is a probabilistic latent one. The income tax system's limitations laid out above apply to environmental, health, and safety regulations. In any of these cases, the tax system is poorly suited to identify individuals during their latency period or after their premature deaths. In short, the tax system is ill equipped to identify victims suffering nonmonetary harms and to compensate them accordingly. And, if the tax system cannot do this distributional work well, the focus should turn back to the regulatory process itself.

The above examples demonstrate that the tax system is not always well suited to address distributional concerns. The following section discusses another obstacle to redistributing in this manner: congressional gridlock.

B. Gridlock in Congress

The Constitution bestows the power to tax upon Congress.¹³⁴ It is well established that any federal tax reform must pass through

¹³² See Jon Elster, Making Sense of Marx 521–22 (1985); Andrea Veltman, Meaningful Work 2–4 (2016). Even controlling for other factors, personal unemployment and the general rate of unemployment are both correlated with personal unhappiness. See Rafael Di Tella et al., Preferences over Inflation and Unemployment: Evidence from Surveys of Happiness, 91 Am. Econ. Rev. 335, 336 (2001).

¹³³ See Arthur C. Brooks, *The Dignity Deficit: Reclaiming Americans' Sense of Purpose*, Am. Enterprise Inst. (Feb. 13, 2017, 5:00 PM), http://www.aei.org/publication/the-dignity-deficit-reclaiming-americans-sense-of-purpose/.

¹³⁴ U.S. Const. art. I. § 8, cl. 1.

Congress to be enacted.¹³⁵ Even if the optimal income tax were well equipped to address nonmonetary harms through redistribution, it is unlikely that Congress would be able to put such a tax into effect.

At the end of 2017, Congress passed a bill overhauling the tax system. The Republican-championed tax bill passed without any Democratic support, demonstrating that significant legislation can be realized even in an atmosphere filled with significant party polarization. Nonetheless, gridlock in today's Congress is relevant to the evaluation of Kaplow and Shavell's prescription to address distribution through the tax system. They do not advocate for a static tax system—one that would not get adjusted in response to the distributional consequences of subsequent regulatory measures. Such a scheme would face considerable challenges. Congress would need to determine the optimal distribution, not only in light of the legal rules existing at a particular time, but also the legal rules likely to be adopted in the future.

Instead of endorsing a static approach of this sort, Kaplow and Shavell have in mind an income tax that is more fluid, adjusting to correct for undesirable distributive effects of legal rules as they arise. In their first article, they explain how to adjust an income tax to redistribute in light of an efficient legal rule. Their equation for the "new income tax" incorporates the total accident costs of the proposed inefficient, redistributive legal rule. ¹³⁹ Under their approach, to adjust the income tax accurately, one must first have a specific inefficient legal rule in mind and understand what redistributive effects it would have. ¹⁴⁰ Thus, Kaplow and Shavell's income tax is one that responds to legal rules, rather than one that anticipates the redistributive consequences of any potential future legal rule.

Similarly, in their explanation of welfare economics, Kaplow and Shavell suggest that the income tax could—and should—respond to legal rules with distributive consequences that run counter to society's redistributive goals.¹⁴¹ They say that an analyst should choose a legal

¹³⁵ See supra note 9.

¹³⁶ See Naomi Jagoda, Trump Signs Tax Bill into Law, Hill (Dec. 22, 2017, 11:03 AM), http://thehill.com/homenews/administration/366148-trump-signs-tax-bill-into-law.

¹³⁷ See Sarah Almukhtar et al., How Each House Member Voted on the Tax Bill, N.Y. TIMES, https://www.nytimes.com/interactive/2017/12/19/us/politics/tax-bill-house-live-vote.html (last visited Sept. 30, 2018); Jasmine C. Lee & Sarah Simon, How Every Senator Voted on the Tax Bill, N.Y. TIMES (Dec. 19, 2017), https://www.nytimes.com/interactive/2017/12/19/us/politics/tax-bill-senate-live-vote.html.

¹³⁸ See infra notes 139-42 and accompanying text.

¹³⁹ See Kaplow & Shavell, Why the Legal System, supra note 1, at 678.

¹⁴⁰ See id

¹⁴¹ See Kaplow & Shavell, supra note 1, at 17, 33–34 & nn.37–38; Kaplow & Shavell, Fairness, supra note 1, at 979, 993–95.

rule with undesirable distributive consequences "only if the adverse effect on distribution were modest relative to its other benefits, or if there were some other way (notably, through income taxes and transfer programs) to compensate the poor."¹⁴² Kaplow and Shavell's optimal income tax would not be a "one and done" endeavor. Thus, their tax system would have to be sculpted and repeatedly refined by Congress;¹⁴³ it would require not just one tax bill of the sort passed at the end of 2017, but a stream of such bills. Continual redistributive tax reforms of this sort are not a realistic possibility because of the current gridlock in Congress—a phenomenon that has attracted considerable scholarly attention.¹⁴⁴

Congressional gridlock has trended upward since the mid-twentieth century. Congressional gridlock is enough of a popular concern to fill newspaper articles and editorials aimed at the public. *The Week* ran an opinion piece predicting that the 115th Congress (2017–2019) would be the least productive in 164 years, despite the

¹⁴² See Kaplow & Shavell, supra note 1, at 17; Kaplow & Shavell, Fairness, supra note 1, at 979.

¹⁴³ See supra note 9 (explaining that Congress carries out tax reform).

¹⁴⁴ See generally Sarah Binder, Ctr. for Effective Pub. Mgmt., Polarized We Govern? (2014) (analyzing which Congresses have been the most gridlocked since the mid-twentieth century); Christopher McGrory Klyza & David J. Sousa, American Environmental Policy, 1990–2006: Beyond Gridlock (2008) (discussing how environmental policy can progress despite gridlock); Thomas E. Mann & Norman J. Ornstein, It's Even Worse than It Looks (2012) (relating the causes and consequences of polarization and gridlock in Congress); Cynthia J. Bowling & Margaret R. Ferguson, Divided Government, Interest Representation, and Policy Differences: Competing Explanations of Gridlock in the Fifty States, 63 J. Pol. 182 (2001) (discussing potential causes of gridlock); Joseph P. Tomain, Gridlock, Lobbying, and Democracy, 7 Wake Forest J.L. & Pol'y 87 (2017) (covering the effects of gridlock and lobbying on government).

¹⁴⁵ See Binder, supra note 144, at 10 (showing an upward trend in gridlock between 1947 and 2012); Jody Freeman & David B. Spence, Old Statutes, New Problems, 163 U. PA. L. REV. 1, 6 (2014) ("[C]ongressional gridlock has reached levels unseen in the last fifty years."); Molly Reynolds et al., Brookings Inst., Vital Statistics on Congress: DATA ON THE U.S. CONGRESS tbl.6-2 (May 21, 2018), https://www.brookings.edu/multichapter-report/vital-statistics-on-congress/ (showing that the five lowest ratios of passed bills to bills introduced in the Senate since 1947 all occurred since 2001). Recent Congresses have been some of the most deadlocked in modern history; the 106th Congress (1999-2000) and the 112th Congress (2011-2012) have been called the least productive Congresses between 1947 and 2012, with the 112th Congress failing to pass seventy-one percent of the most salient legislative items on its agenda. See BINDER, supra note 144, at 2, 9-10. To identify the most salient issues of a given Congress, Binder included issues that were mentioned five or more times in the New York Times editorial pages during the tenure of that Congress. The five least productive Senates in the past sixty years—in terms of the ratio of bills passed to bills introduced—have all served since 2001, with the three least productive since 2007. See REYNOLDS ET AL., supra, at tbl.6-2.

passage of the tax legislation.¹⁴⁶ Though in the current Congress roughly forty bills were signed into law by June 2017, the *Washington Post* wrote that sixty percent of the bills were only one page long—more typical of ceremonial bills renaming courthouses than bills introducing comprehensive policy changes.¹⁴⁷ Using length as a proxy for significance, the article reported that this Congress has passed fewer significant bills during its first six months than most Congresses since 1993.¹⁴⁸

Even congressional leaders bemoan the worsening gridlock. After Senator John McCain returned to the Senate following surgery and a diagnosis of brain cancer in the summer of 2017, he gave a speech to the Senate chastising his colleagues for "getting nothing done" and speaking nostalgically of the Senate's more productive past, repeatedly urging Congress to "return to regular order." The New York Times ran an entire article in January 2018 simply quoting legislators of both congressional houses expressing frustration with Congress's lack of productivity. To give only a couple of examples: Senator Ben Sasse, a Republican from Nebraska, called Congress "weaker than it has been in decades," and Senator Angus King, an independent from Maine, said, "[t]he Senate has literally forgotten how to function." During a month when the government briefly shut down because of disagreement over immigration policy, 153

¹⁴⁶ See David Faris, Opinion, Why the GOP Congress Will Be the Most Unproductive in 164 Years, Week (July 18, 2017), http://theweek.com/articles/711503/why-gop-congress-most-unproductive-164-years (blaming polarization between parties and within the Republican party for gridlock).

¹⁴⁷ See Philip Bump, 60 Percent of the Bills Trump Has Signed into Law Have Been One Page Long, Wash. Post (July 5, 2017), https://www.washingtonpost.com/news/politics/wp/2017/07/05/60-percent-of-the-bills-trump-has-signed-into-law-have-been-one-page-long/.

¹⁴⁸ See id. The average length of bills passed since 1993 is 5.9 pages, so Bump counted the number of bills six pages or longer passed by this Congress during its first six months as compared to past Congresses' first six months. The article notes that some of Trump's signed laws were undoing President Obama's policies through Congressional Review Act bills, which require fewer words than new, original measures. *Id.*

¹⁴⁹ John McCain's Speech on the Senate Floor, U.S. News & World Rep. (July 25, 2017), https://www.usnews.com/news/articles/2017-07-25/read-john-mccains-remarks-on-the-senate-floor-after-cancer-diagnosis [hereinafter McCain's Speech]; see Jennifer Steinhauer, McCain Returns to Cast Vote to Help the President Who Derided Him, N.Y. Times (July 25, 2017), https://www.nytimes.com/2017/07/25/us/politics/mccain-health-care-brain-cancer.html.

¹⁵⁰ McCain's Speech, supra note 149.

¹⁵¹ See Sheryl Gay Stolberg & Nicholas Fandos, As Gridlock Deepens in Congress, Only Gloom Is Bipartisan, N.Y. Times (Jan. 27, 2018), https://www.nytimes.com/2018/01/27/us/politics/congress-dysfunction-conspiracies-trump.html.

¹⁵² See id.

¹⁵³ See James Hohmann, The Daily 202: Government Shutdown Foreshadows a 2018 of Inaction and Gridlock, Wash. Post: PowerPost (Jan. 22, 2018), https://www.washingtonpost.com/news/powerpost/paloma/daily-202/2018/01/22/daily-202-government-

Congress's incompetence seemed to be one area of bipartisan agreement.

The current level of congressional gridlock is generally associated with a number of distinct political and social phenomena.¹⁵⁴ First, between 1955 and 1990, divided government occurred two-thirds of the time, up from fourteen percent of the time between 1897 and 1954,¹⁵⁵ and between 1990 and 2016, the same party has controlled the House, Senate, and Presidency for only three full congressional terms.¹⁵⁶ Recent studies suggest that divided government does in fact increase gridlock under certain conditions.¹⁵⁷

Second, congressional members are more polarized than they were in the mid-twentieth century: the average Republican and Democrat's political ideologies are further apart, and there is less overlap between the two parties' platforms.¹⁵⁸ When there are fewer moderates in Congress, gridlock tends to increase because it is less likely parties will reach a deal that each party prefers over no deal at all.¹⁵⁹

shutdown-foreshadows-a-2018-of-inaction-and-gridlock/5a65417230fb0469e88402a8/. In the wake of the government shutdown, Senator John Neely Kennedy, a Republican from Louisiana, told reporters, "[o]ur country was founded by geniuses, but it's run by idiots." *Id.*

¹⁵⁴ See Klyza & Sousa, supra note 144, at 19–35; Mann & Ornstein, supra note 144, at 44–68; Bowling & Ferguson, supra note 144, at 183–84.

155 See BINDER, supra note 144, at 4.

¹⁵⁶ See Art Swift, In U.S., Preference for Divided Government Lowest in 15 Years, Gallup (Sept. 28, 2016), http://www.gallup.com/poll/195857/ preference-divided-government-lowest-years.aspx.

¹⁵⁷ See Sarah A. Binder, The Dynamics of Legislative Gridlock, 1947–96, 93 Am. Pol. Sci. Rev. 519, 530 (1999); Fang-Yi Chiou & Lawrence S. Rothenberg, When Pivotal Politics Meets Partisan Politics, 47 Am. J. Pol. Sci. 503, 517–18 (2003); John J. Coleman, Unified Government, Divided Government, and Party Responsiveness, 93 Am. Pol. Sci. Rev. 821, 825–26, 832 (1999).

158 One commonly referenced measure uses voting records to position each Congress member on a scale between extreme liberalism at -1 and extreme conservatism at 1, thus allowing for a maximum distance between political stances of 2. See Keith T. Poole & Howard Rosenthal, A Spatial Model for Legislative Roll Call Analysis, 29 Am. J. Pol. Sci. 357, 366 (1985). Researchers found that the distance between the mean political positions of the two parties in both chambers of Congress was lower than 0.6 in 1974. See Michael J. Barber & Nolan McCarty, Causes and Consequences of Polarization, in Solutions to Polarization in America 15, 17, 19 (Nathaniel Persily ed., 2015). By contrast, in 2011, the distance between the parties' ideological means was roughly 0.8 in the Senate and greater than 1.0 in the House. Id.; Christopher Hare et al., Polarization in Congress Has Risen Sharply. Where Is It Going Next?, Wash. Post (Feb. 13, 2014), https://www.washingtonpost.com/news/monkey-cage/wp/2014/02/13/polarization-in-congress-hasrisen-sharply-where-is-it-going-next.

¹⁵⁹ See Brian F. Schaffner, Party Polarization, in The Oxford Handbook of the American Congress 527, 539–42 (George C. Edwards III et al. eds., 2011) (summarizing influential studies that have found a connection between polarization and gridlock); Barbara Sinclair, Is Congress Now the Broken Branch?, 2014 Utah L. Rev. 703, 716–18

Third, congressional districts are becoming less competitive, ¹⁶⁰ in part because of gerrymandering. ¹⁶¹ Gerrymandering increases polarization because congressional representatives become more concerned about primary challengers than challengers from the opposing party and therefore move toward ideological poles. ¹⁶² Bipartisan solutions then become less likely, ¹⁶³ leading to gridlock if neither party has full control of the government.

Fourth, people have significantly more options for where to get their news than they did forty years ago, when more than seventy percent of Americans watched three television networks with middle-of-the-road "point-counterpoint perspective[s]." Today, a bounty of cable news channels and online news sources cater to the political leanings of their audiences, encouraging polarization among voters. 165

(noting that greater difference between party preferences makes compromise less likely, and that this made passing a budget difficult for former House Speaker John Boehner). But see Richard H. Pildes, Romanticizing Democracy, Political Fragmentation, and the Decline of American Government, 124 YALE L.J. 804, 809–10 (2014) (arguing that contemporary political fragmentation, or the inability of party leaders to cajole their members into banding together to cut deals, may hinder political action more than party polarization).

160 See Elaine C. Kamarck, Brookings Inst., Increasing Turnout in Congressional Primaries 3–4 (2014), https://www.brookings.edu/wp-content/uploads/2016/06/KamarckIncreasing-Turnout-in-Congressional-Primaries72614.pdf; Jeffrey M. Stonecash et al., Diverging Parties: Social Change, Realignment, and Party Polarization 19 (2003); Gary C. Jacobson, Competition in U.S. Congressional Elections, in The Marketplace of Democracy 27 (Michael P. McDonald & John Samples eds., 2006). In fact, a trend in decreasing competitiveness for House seats since the late 1800s was noticed in the 1960s and 1970s, though early research focused on the growing advantages of House incumbents. See Thomas E. Mann, Polarizing the House of Representatives: How Much Does Gerrymandering Matter?, in 1 Red and Blue Nation? Characteristics and Causes of America's Polarized Politics 263, 268–69 (Pietro S. Nivola & David W. Brady eds., 2006).

¹⁶¹ See Daryl J. Levinson & Richard H. Pildes, Separation of Parties, Not Powers, 119 HARV. L. REV. 2311, 2335 (2006).

¹⁶² See Jamie L. Carson et al., Redistricting and Party Polarization in the U.S. House of Representatives, 35 Am. Pol. Res. 878, 894–95 (2007) (showing that gerrymandering has contributed to increasing House polarization); Schaffner, supra note 159, at 534 (noting that politicians in homogenous districts may become more ideologically extreme to appeal to primary constituencies, and that redistricting may exacerbate this problem).

¹⁶³ See Mann, supra note 160, at 266–67; Schaffner, supra note 159, at 535; Thomas Stratmann, Congressional Voting over Legislative Careers: Shifting Positions and Changing Constraints, 94 Am. Pol. Sci. Rev. 665, 672 (2000).

¹⁶⁴ Shanto Iyengar & Kyu S. Hahn, *Red Media, Blue Media: Evidence of Ideological Selectivity in Media Use*, 59 J. Comm. 19, 20 (2009); *see also* Mann & Ornstein, *supra* note 144, at 58.

¹⁶⁵ See Mann & Ornstein, supra note 144, at 59–67; Barbara Sinclair, Party Wars: Polarization and the Politics of National Policy Making 63–64 (2006). Polarization from media choice is most pronounced in those who are politically engaged. See Nicholas T. Davis & Johanna L. Dunaway, Party Polarization, Media Choice, and Mass Partisan-Ideological Sorting, 80 Pub. Opinion Q. 272, 292 (2016).

Research suggests that when media are more partisan, gridlock increases. In a politicized media landscape, the minority party can propose self-serving policy or block socially beneficial policy, counting on cover from partisan news outlets.¹⁶⁶

Fifth, as a result of recent court decisions removing most restraints on political spending, there has been a sharp influx of outside cash into politics. This phenomenon raises the stakes for politicians concerned about displeasing donors or other well-financed spending groups. For certain salient issues, if a politician pleases a political spending group, she stands to gain virtually unlimited support in political dollars; if she challenges a group, she runs the risk of political attacks financed by a bottomless purse. This lack of flexibility on the part of politicians may block compromise, leading to gridlock, on the part of politicians may block compromise, leading to gridlock, unless a single party has unified government control with a strong majority whose donors favor similar policies.

An analysis of the contribution of each of these factors to gridlock is beyond the scope of this Article, largely because the phenomenon, rather than its causes, is what matters for the determination that the income tax system is not a plausible vehicle for effecting the type of redistribution that Kaplow and Shavell have in mind. In contrast, as discussed in Part IV, targeting the issue through the regulatory process is far more likely to be successful.

In sum, the tax system is ill suited to address some redistributive issues, like those that result from uncertain latent harms leading to premature deaths. Moreover, even if it were significantly revamped, efforts at redistribution through this mechanism would be hampered by a gridlocked Congress. Because of the inability of the tax system to effect redistribution, groups disfavored by a legal rule may try to

¹⁶⁶ See Daniel F. Stone, Media and Gridlock, 101 J. Pub. Econ. 94, 101 (2013).

¹⁶⁷ See Daniel I. Weiner, Brennan Ctr. for Justice, Citizens United Five Years Later 4 (2015), https://www.brennancenter.org/sites/default/files/publications/Citizens_United_%205_%20Years_%20Later.pdf.

¹⁶⁸ See Mann & Ornstein, supra note 144, at 77–79 (discussing how politicians fear negative ad campaigns and other forms of retribution from super Political Action Committees (PACs)); Ruben J. Garcia, Politics at Work After Citizens United, 49 Loy. L.A. L. Rev. 1, 9–10 (2016) (naming Citizens United and campaign finance as a cause of gridlock in Washington and describing how gridlock has blocked legislation that would help a large number of low-income citizens); Ray La Raja, The Supreme Court Might Strike Down Overall Contribution Limits. And That's Okay., Wash. Post (Oct. 9, 2013), https://www.washingtonpost.com/news/monkey-cage/wp/2013/10/09/the-supreme-court-might-strike-down-overall-contribution-limits-and-thats-okay/ (blaming Washington's stalemate in part on politicians feeling beholden to super PACs).

¹⁶⁹ See Mann & Ornstein, supra note 144, at 80; Gerard N. Magliocca, Don't Be So Impatient, 88 Notre Dame L. Rev. 2157, 2160 & n.16 (2013).

oppose the rule altogether, even if the rule is on the whole beneficial to society. Part III explores case studies of such obstructionist efforts.

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INEFFECTIVE APPROACHES TO ADDRESSING DISTRIBUTIONAL CONCERNS

As noted above, even though environmental justice advocates and coal miners seem like strange bedfellows at first glance, both groups have tried to derail programs to control greenhouse gases through flexible regulatory tools because of concerns about the disproportionate negative impacts that would accrue to their respective communities. Over the last half century, the concerns of these two groups have been addressed in disparate ways: the former, through environmental justice measures, and the latter, through programs designed to bring economic assistance to communities that lose a large proportion of their jobs as a result of regulatory measures. Neither approach has been successful.

Section A explores three important efforts designed to prevent disproportionate environmental harms: Title VI of the Civil Rights Act provides remedies for minority communities that have been disproportionately harmed by government action;¹⁷¹ Executive Order 12,898, the Clinton administration's most significant environmental justice measure, requires that administrative agencies consider and avoid harms to especially vulnerable communities prior to issuing new regulations;¹⁷² and Executive Order 13,563, promulgated by President Obama, seeks to increase attention to distributional concerns in the regulatory impact analyses accompanying federal regulations.¹⁷³ Unfortunately, these efforts to ameliorate adverse distributional consequences of government action have been largely unsuccessful.

Section B outlines existing efforts to compensate communities that lose a significant proportion of their jobs as a result of environmental regulations. The focus here has been on the Clean Air Act's impact on coal mining jobs. Neither legislative efforts undertaken in connection with the Clean Air Amendments of 1990 nor administrative programs developed during the Obama administration have made a lasting difference.

¹⁷⁰ See supra text accompanying notes 25-40.

¹⁷¹ 42 U.S.C. § 2000d-1 (2012).

¹⁷² Exec. Order No. 12,898, 3 C.F.R. § 859 (1994), reprinted as amended in 42 U.S.C. § 4321 app. at 278–80 (2012).

 $^{^{173}}$ Exec. Order No. 13,563, 3 C.F.R. \S 215 (2012), reprinted in 5 U.S.C. \S 601 app. at 816–17 (2012).

A. Environmental Justice Measures

The environmental justice movement has primarily focused its attention on the siting and permitting of environmentally hazardous facilities, maintaining that such facilities disproportionately affect minority and poor communities.¹⁷⁴ It has also directed its attacks against the regulatory measures and enforcement practices that inadequately protect disadvantaged communities.¹⁷⁵ Over the last twenty-five years, environmental justice concerns have resulted in the adoption of a number of measures designed to address the resulting unfairness, but the results have been limited.

1. Title VI

Title VI of the Civil Rights Act provides some statutory safeguards against racial discrimination with respect to projects that receive federal financial assistance. In particular, section 602 directs federal agencies to issue regulations prohibiting recipients of their funding from engaging in discrimination.¹⁷⁶ In 1973, the EPA, which has made the most significant efforts to implement this provision,¹⁷⁷ issued regulations that go beyond the statute's prohibition on intentional discrimination to also disallow actions that have a discriminatory impact.¹⁷⁸ Under these regulations, the EPA bars federal funding recipients from, among other things, making siting decisions or administering their programs in ways that have a discriminatory effect.¹⁷⁹ In 2001, the Supreme Court decided that individuals have no private right of action to enforce such disparate impact regulations under Title VI.¹⁸⁰ Therefore, the sole practical avenue for environ-

¹⁷⁴ See Robert D. Bullard, Dumping in Dixie: Race, Class, and Environmental Quality 45–78 (1990); Comm'n for Racial Justice, Toxic Wastes and Race in the United States, at xi–xiv (1987); Robert D. Bullard, Anatomy of Environmental Racism and the Environmental Justice Movement, in Confronting Environmental Racism, Voices from the Grassroots 15, 24 (Robert D. Bullard ed., 1993).

¹⁷⁵ See Comm'n for Racial Justice, supra note 174, at i-x.

^{176 42} U.S.C. § 2000d-1.

¹⁷⁷ Although environmental justice complaints are often filed with agencies other than the EPA—including the Departments of the Interior, Transportation, and Housing and Urban Development—a 2003 report noted that the "EPA receives the bulk of Title VI complaints that raise environmental justice concerns and has taken the lead in providing guidance to environmental stakeholders." U.S. Comm'n on Civil Rights, Not in My Backyard: Executive Order 12,898 and Title VI as Tools for Achieving Environmental Justice 75 (2003), https://www.usccr.gov/pubs/envjust/ej0104.pdf.

¹⁷⁸ See 40 C.F.R. § 7.35 (2015); 40 C.F.R. § 7.30 (2015).

¹⁷⁹ See 40 C.F.R. § 7.35.

¹⁸⁰ See Alexander v. Sandoval, 532 U.S. 275 (2001) (holding that there is no implied private right of action to enforce disparate impact regulations promulgated under section 602).

mental justice plaintiffs seeking relief under Title VI is to file an administrative complaint with the EPA.¹⁸¹

Title VI complaints filed with the EPA typically allege discriminatory impacts from permitting, siting, and zoning decisions concerning sources of pollution such as refineries, landfills, and waste processing facilities. The funding recipients accused of discrimination commonly include state and local agencies responsible for environmental protection, air quality, public health, and regulation of toxic substances. If the EPA finds that a funding recipient has violated the regulations, it may deny or terminate the funding.

For environmental justice advocates, the EPA's Title VI regulations held the promise of directing federal attention to problems to which local governments are unresponsive, providing incentives for EPA funding recipients nationwide to be more attentive to civil rights issues, and directing more of the EPA's scientific resources to the study of local environmental harms and concerns. However, Title VI complaints to the EPA have had very little success. Even though the EPA promulgated its Title VI regulations in 1973, it did not begin enforcing them against recipients until the mid-1990s out of concern that terminating funding to state and local agencies would undermine those agencies' ability to support the EPA in reducing pollution. 187

¹⁸¹ See Note, After Sandoval: Judicial Challenges and Administrative Possibilities in Title VI Enforcement, 116 HARV. L. REV. 1774, 1779 (2003) ("After Sandoval, a claimant alleging a Title VI disparate impact violation must either seek administrative remedies under section 602, or attempt to bring a § 1983 action in court."). In a later decision, the Supreme Court effectively foreclosed private enforcement of disparate impact regulations using § 1983. See Gonzaga Univ. v. Doe, 536 U.S. 273, 282–86 (2002).

¹⁸² See Yue Qiu & Talia Buford, Environmental Justice, Denied: Decades of Inaction, Ctr. for Pub. Integrity (Aug. 3, 2015, 5:00 AM), https://www.publicintegrity.org/2015/08/03/17726/decades-inaction (compiling data from the EPA). Other common allegations include that a local zoning or land use plan evinces a broader pattern of discrimination, that the local agency failed to consider the concerns of minority communities, and that minority communities were denied an equal opportunity to participate in local land use decisions. *Id.*

¹⁸³ See id.; see also James H. Colopy, Note, The Road Less Traveled: Pursuing Environmental Justice Through Title VI of the Civil Rights Act of 1964, 13 Stan. Envtl. L.J. 125, 154 (1994) ("A typical recipient is a state environmental agency, such as the Louisiana Department of Environmental Quality, that receives federal funding to enforce state environmental laws and to fund specific programs within the state.").

¹⁸⁴ See 40 C.F.R. § 7.130 (2015).

¹⁸⁵ See Tony LoPresti, Realizing the Promise of Environmental Civil Rights: The Renewed Effort to Enforce Title VI of The Civil Rights Act of 1964, 65 Admin. L. Rev. 757, 770–74 (2013).

¹⁸⁶ See id. at 774–80.

 $^{^{187}}$ Bradford Mank, Title VI and the Warren County Protests, 1 Golden Gate U. Envtl. L.J. 73, 78 (2007).

Between 1996 and 2013, the EPA received 265 Title VI complaints. The agency rejected 61% of these complaints without an investigation, and rejected a further 20% after an investigation. Fewer than 5% of cases were resolved, primarily through agreements and settlements. Even when complaints were resolved, it was almost never through a formal finding against the recipient of EPA funds: As of June 2016, the EPA had made only one preliminary finding of discrimination and had never made a final finding of noncompliance that would trigger the suspension of funds to a recipient. 190

The EPA has also struggled to process Title VI complaints in a timely fashion, often failing to comply with the timelines set out in the agency's regulations.¹⁹¹ For example, EPA regulations indicate that the agency will decide whether to accept a complaint for investigation within twenty days of receiving it,¹⁹² but according to one analysis, between 1996 and 2013 the EPA took an average of 254 days, not including weekends and holidays, to decide whether to accept a complaint.¹⁹³

¹⁸⁸ Qiu & Buford, *supra* note 182 (follow "Download our data" hyperlink).

¹⁸⁹ *Id.* (follow "Download our data" hyperlink) (using the available raw data to compute the statistics); *see also How We Acquired and Analyzed Data for "Environmental Justice, Denied,"* CTR. FOR PUB. INTEGRITY (Aug. 3, 2015, 5:00 AM), https://www.publicintegrity.org/2015/08/03/17724/how-we-acquired-and-analyzed-data-environmental-justice-denied (providing definitions of the adjudication categories). The remaining complaints were withdrawn by the party, referred to another agency, or are still pending resolution. *See* Qiu & Buford, *supra* note 182 (follow "Download our data" hyperlink).

¹⁹⁰ U.S. Comm'n on Civil Rights, Environmental Justice: Examining the Environmental Protection Agency's Compliance and Enforcement of Title VI and Executive Order 12,898, at 4 (2016), https://www.usccr.gov/pubs/2016/Statutory_Enforcement_Report2016.pdf. The EPA has, however, resolved several complaints through post-investigation settlements and informal agreements reached before the conclusion of the investigation, including at least twelve such resolutions between 1996 and 2013. See Qiu & Buford, supra note 182 (follow "Download our data" hyperlink). More recently, in early 2017, the EPA sent several critical letters to funding recipients subject to Title VI complaints without making preliminary findings against those recipients. See, e.g., Letter from Lilian S. Dorka, Dir., U.S. Envtl. Prot. Agency External Civil Rights Compliance Office, to William G. Ross, Jr., Acting Sec'y, N.C. Dep't of Envtl. Quality (Jan. 12, 2017), https://perma.cc/AM7L-VFMG; Letter from Lilian S. Dorka, Dir., U.S. Envtl. Prot. Agency External Civil Rights Compliance Office, to Heidi Grether, Dir., Mich. Dep't of Envtl. Quality (Jan. 19, 2017), https://perma.cc/EJ5D-G2V5.

¹⁹¹ See 40 C.F.R. § 7.115 (2015); 40 C.F.R. § 7.120 (2015).

¹⁹² 40 C.F.R. § 7.115(c).

¹⁹³ Kristen Lombardi et al., Environmental Justice, Denied: Environmental Racism Persists, and the EPA Is One Reason Why, CTR. FOR PUB. INTEGRITY (Sept. 4, 2015, 4:55 PM), https://www.publicintegrity.org/2015/08/03/17668/environmental-racism-persists-and-epa-one-reason-why. Similarly, a 2011 report found that the EPA had complied with its twenty-day target for acknowledging Title VI complaints in only six percent of cases. Deloitte Consulting LLP, Evaluation of the EPA Office of Civil Rights 19 (2011), https://archive.epa.gov/epahome/ocr-statement/web/pdf/epa-ocr_20110321_finalreport.pdf [hereinafter Deloitte Report]. In 2009, the U.S. Court of Appeals for the

Environmental justice advocates have criticized the EPA's enforcement of its Title VI regulations as ineffectual. ¹⁹⁴ Government of its Title VI regulations as ineffectual. ¹⁹⁵ Government of and government-commissioned of reports have been similarly critical. In 2016, the U.S. Commission on Civil Rights criticized the EPA's "inability to timely process or resolve Title VI complaints" and its "timid (if not entirely lacking) enforcement." Despite the agency's repeated efforts to empower and improve its Title VI enforcement program, including the recent adoption of structural changes to the program under the Obama administration, ¹⁹⁸ the program has continued to disappoint environmental justice advocates. Some have gone as far as to state that, "no legal tool has inspired such high hopes—and such deep disappointment—as Title VI of the Civil Rights Act of 1964." ¹⁹⁹

There are a number of barriers to effective implementation of Title VI protections, including a limited role for complainants in the administrative complaint process and limited affirmative obligations for funding recipients to review or disclose environmental justice issues.²⁰⁰ For the purpose of this discussion, however, the most relevant shortcomings are the limited jurisdiction Title VI provides and the blunt remedies available to the EPA.

The EPA's Title VI regulations cover only a subset of potential environmental justice complaints. Because the regulations prohibit

Ninth Circuit condemned the EPA's delay in processing a Title VI complaint. *See* Rosemere Neighborhood Ass'n v. U.S. Envtl. Prot. Agency, 581 F.3d 1169, 1175 (9th Cir. 2009). The EPA eventually settled the case by agreeing, among other things, to timely respond to future complaints from the plaintiffs. *See* Settlement Agreement between the Rosemere Neighborhood Ass'n, the Envtl. Prot. Agency, and EPA Adm'r Lisa P. Jackson (Mar. 18, 2010), http://www.rosemerena.org/home/wp-content/uploads/2010/03/Signed-Settlement-Agmt-Rosemere-v-EPA.pdf.

- ¹⁹⁴ See Lombardi et al., supra note 193 (describing several advocates' disappointment with the EPA's Title VI program and quoting a Baton Rouge environmental justice activist as saying, "[a]ll of these complaints to EPA have gotten us nothing—zero").
 - 195 See U.S. Comm'n on Civil Rights, supra note 190, at 15.
- ¹⁹⁶ See Deloitte Report, supra note 193, at 1 (finding that the EPA's civil rights office had "not adequately adjudicated Title VI complaints").
 - 197 U.S. COMM'N ON CIVIL RIGHTS, *supra* note 190, at 2–3.
- ¹⁹⁸ During the Obama administration, the EPA took steps to raise the profile of civil rights issues within the agency and accelerate the processing of Title VI complaints, eventually restructuring its Office of Civil Rights and relocating it within the Office of General Counsel. *See* Civil Rights Exec. Comm., Developing a Model Civil Rights Program for the Environmental Protection Agency 12–15 (2012), https://archive.epa.gov/epahome/ocr-statement/web/pdf/executive_committee_final_report.pdf; Memorandum from Gina McCarthy, Adm'r, U.S. Envtl. Prot. Agency, on Relocations within EPA to Further Elevate Agency Focus on Federal Civil Rights Responsibilities and Intergovernmental Relations (Dec. 7, 2016) (on file with author).
 - 199 LoPresti, supra note 185, at 757.
 - ²⁰⁰ See id. at 784–808 (describing these barriers in detail).

discrimination based on race, color, national origin, and in some cases sex, they offer no direct remedy to potential complainants alleging discrimination based on other classifications, such as wealth or income.²⁰¹

Moreover, the EPA is authorized to enforce these regulations only against recipients of its financial assistance. Therefore, Title VI generally offers no relief for environmental justice complainants concerned about discrimination by entities that do not receive EPA funds.²⁰² One analysis found that of the 256 civil rights complaints filed with the agency between 1996 and 2013, the EPA dismissed 95 because the entity in question did not receive EPA funding.²⁰³

In practice, even entities that receive permits from EPA funding recipients may lie outside the reach of the EPA's Title VI enforcement. Agency guidance provides that its investigation of Title VI complaints "primarily concerns the actions of recipients rather than permittees." This restriction is significant, because much of the EPA's regulatory authority is exercised through the permitting process. ²⁰⁵

²⁰¹ See 40 C.F.R. § 7.35 (2015); 40 C.F.R. § 7.30 (2015); Scott Michael Edson, Note, *Title VI or Bust? A Practical Evaluation of Title VI of the 1964 Civil Rights Act as an Environmental Justice Remedy*, 16 FORDHAM ENVTL. L. REV. 141, 172–73 (2004); see also Letter from Karen D. Higginbotham, Dir., U.S. Envtl. Prot. Agency, Office of Civil Rights, to Steven Brittle, President, Don't Waste Arizona, Inc. (July 30, 2009), https://www.epa.gov/sites/production/files/2015-01/documents/10r-07-r9_accept_cmplt_redacted. pdf (dismissing an allegation that Maricopa County's issuance of a permit for a facility that would emit hydrogen fluoride in low-income communities constituted intentional discrimination, because the "EPA's nondiscrimination regulations do not cover discrimination on the basis of low-income status").

²⁰² See David A. Dana & Deborah Tuerkheimer, After Flint: Environmental Justice as Equal Protection, 111 Nw. U. L. Rev. Online 93, 101 (2017), http://www.northwesternlawreview.org/online/author/544&httpsredir=1&article=1241&context=nulr_online.

²⁰³ Lombardi et al., *supra* note 193 ("The EPA rejected complaints for a host of procedural reasons, records show. The most common reason (95 cases), complaints were denied was because the EPA said their targets did not receive agency funding, as is required by law."). Since 1996, complaints rejected by the EPA for lack of a funding nexus have concerned, for example, federally administered agencies and programs (e.g., the Los Alamos National Laboratory), city development agencies, state correctional facilities, and local housing authorities, hospitals, city governments, and school boards. *See* Qiu & Buford, *supra* note 182.

²⁰⁴ Draft Title VI Guidance for EPA Assistance Recipients Administering Environmental Permitting Programs (Draft Recipient Guidance) and Draft Revised Guidance for Investigating Title VI Administrative Complaints Challenging Permits (Draft Revised Investigation Guidance), 65 Fed. Reg. 39,650, 39,651 (June 15, 2000) [hereinafter Draft Recipient Guidance and Revised Investigation Guidance].

²⁰⁵ See generally Richard J. Lazarus & Stephanie Tai, *Integrating Environmental Justice into EPA Permitting Authority*, 26 Ecology L.Q. 617 (1999) (discussing the importance of permitting authority as part of the EPA's regulatory capacity).

Even when the EPA has jurisdiction over an entity, the remedies available are ill suited to advance the goals of environmental justice. The main remedy available under Title VI and the EPA's implementing regulations is the termination of financial assistance to the funding recipient, the specific program, or the activity in question.²⁰⁶ This remedy is often inadequate to resolve complainants' concerns.

Most importantly, it is a poorly tailored remedy for addressing cumulative risks and harms. As the EPA has noted in guidance documents, it is rare for "the permit that triggered the complaint [to be] the sole reason a discriminatory effect exists," so withdrawing funds for the particular permit in question "will not necessarily be an appropriate solution" for complainants' concerns.²⁰⁷

Also, where a complaint alleges environmental harms that have already occurred or challenges a permit for a facility that has already been constructed, the funding termination remedy may not provide much relief to complainants.²⁰⁸ Neither the statute nor the regulations appear to allow for retroactive relief in the form of money damages.²⁰⁹ Moreover, the EPA is authorized to take remedial action only after a lengthy process, including an investigation and opportunities for the recipient to rebut the EPA's findings and request a hearing.²¹⁰ Therefore, the agency's final decision to terminate funds may come too late to affect the particular action challenged in the complaint.²¹¹

 $^{^{206}}$ See 40 C.F.R. § 7.130 (2015) (outlining the actions available for EPA to obtain compliance). In addition to cutting off funding, the EPA is also authorized to "use any other means authorized by law to get compliance, including a referral of the matter to the Department of Justice." *Id.* at § 7.130(a).

²⁰⁷ Draft Recipient Guidance and Revised Investigation Guidance, *supra* note 204, at 39.653.

²⁰⁸ The EPA may have the power to provide remedies beyond funding termination. *See* 40 C.F.R. § 7.130(a) ("If compliance with this part cannot be assured by informal means, EPA may terminate or refuse to award or to continue assistance. EPA may also use any other means authorized by law to get compliance, including a referral of the matter to the Department of Justice."). At least one commentator has suggested that the EPA's regulatory authority to use "other means authorized by law" to ensure compliance by recipients can be used flexibly to impose remedies other than funding termination. LoPresti, *supra* note 185, at 787–89.

 $^{^{209}}$ See Title VI of the Civil Rights Act of 1964, 42 U.S.C. $\$ 2000d (2012); 40 C.F.R. $\$ 7.130 (2015) (establishing remedies available to the EPA for noncompliance).

²¹⁰ See 40 C.F.R. §§ 7.115–7.120 (2015).

²¹¹ Complainants have proposed that the EPA overcome this timing issue by using its authority to "use any other means authorized by law to get compliance" to impose creative and more aggressive remedies. 40 C.F.R. § 7.130(a). One complainant, for example, proposed that the EPA condition future financial assistance to the recipient on the revocation of the already-issued permit at the heart of the complaint. *See* Letter from Maria M. Laverde, Attorney, S. N.M. Legal Servs., Inc., to Michael Mattheisen, U.S. Envtl. Prot. Agency, Office of Civil Rights (July 23, 2002) (on file with author) (requesting that the EPA "immediately suspend all financial and other assistance" to the New Mexico Environment Department unless and until the Department revokes a landfill permit).

The funds termination remedy also carries significant downsides for the EPA. The agency relies on state and local funding recipients, such as state environmental agencies, to help implement most major environmental laws.²¹² Aggressive use of Title VI remedies can imperil this relationship.²¹³ Since 1996, the EPA has investigated Title VI complaints against state agencies that are responsible for issuing permits under the Clean Air Act, setting water quality standards under the Clean Water Act, and assisting in the cleanup of contaminated sites under the EPA's Superfund program.²¹⁴ Some complaints specifically allege discrimination in a local agency's implementation of a federal program, for example during the issuance of a permit for emissions of a hazardous air pollutant under the Clean Air Act, or in the permitting hearings for a hazardous waste storage facility under the Resource Conservation and Recovery Act.²¹⁵ While the EPA could hypothetically enforce Title VI by terminating funding in such instances, doing so may very well undermine implementation of major environmental laws by state and local governments.

Moreover, robust use of the funding termination remedy risks dragging the EPA into broader political tensions with local governments and other stakeholders. For example, when the agency investigated a complaint concerning a proposed steel plant in Michigan in 1998, groups including the U.S. Conference of Mayors and the U.S. Chamber of Commerce criticized the EPA for allegedly impairing economic development, intruding into state and local decisionmaking, and functioning as a "national zoning board."²¹⁶

For these reasons, the EPA may be reluctant to terminate funds to recipients.²¹⁷ For the first twenty years after the EPA adopted its Title VI regulations in 1973, the agency did not enforce these regulations, in part out of concern over hurting its relationships with local

²¹² See Hubert H. Humphrey III & LeRoy C. Paddock, The Federal and State Roles in Environmental Enforcement: A Proposal for a More Effective and More Efficient Relationship, 14 HARV. ENVIL. L. REV. 7, 13 (1990); Mank, supra note 187, at 78.

²¹³ Humphrey & Paddock, supra note 212, at 39.

²¹⁴ Qiu & Buford, *supra* note 182. These entities include regional air pollution control agencies, local solid waste authorities, city governments, and the main environmental agencies in states including Illinois, Louisiana, Indiana, South Dakota, California, New York, and Oklahoma, among other states. *Id.*

²¹⁵ *Id.*; *see also* Letter from Karen D. Higginbotham to Steven Brittle, *supra* note 201; Letter from Luke W. Cole, Dir., Ctr. on Race, Poverty & the Env't, to Carol Browner, Adm'r., U.S. Envtl. Prot. Agency 10 (Aug. 26, 2000), https://archive.epa.gov/civilrights/docs/t6com/web/pdf/t6com2000_071.pdf (alleging discrimination by state agencies in environmental law enforcement).

²¹⁶ LoPresti, supra note 185, at 809.

²¹⁷ See id. at 784. LoPresti, citing anonymous interviews, notes that the EPA's civil rights officials "do not view this remedy as a realistic option," which helps explain the agency's "over-reli[ance] on informal resolution and voluntary compliance" Id. at 785.

agencies and hampering their role in reducing pollution.²¹⁸ The EPA began to enforce the regulations during the Clinton administration by investigating complaints against local permitting schemes and siting decisions.²¹⁹ Nevertheless, to date, the EPA has never terminated funds to any recipient or program for a Title VI violation.²²⁰

Turning specifically to this Article's focus on marketable permit systems, experience with Title VI protections suggests that they are ill suited to address the problem of discriminatory outcomes of permit trading. One commentator notes that because EPA regulations require the alleged discrimination to have occurred within 180 days of the petition being filed, there is difficulty in assessing the disparate impact of such trading permits over time.²²¹ For example, a 2012 complaint filed with the EPA alleged that the California Air Resources Board, as a recipient of federal financial assistance from the EPA, was in violation of the EPA's Title VI implementing regulations by approving the California cap-and-trade program.²²² Petitioners requested that the EPA condition federal funding on the use of "less discriminatory alternatives . . . such as direct regulations."223 The agency ultimately dismissed the claims on the grounds that they were not yet ripe.²²⁴ And the EPA's reluctance to terminate the funding of state agencies applies with equal force in this context.

As it currently stands, the EPA lacks the authority and tools to adequately address environmental justice claims. The EPA's limited authority to enforce Title VI regulations against funding recipients

²¹⁸ See Mank, supra note 187, at 78; see also Michael Fisher, Environmental Racism Claims Brought Under Title VI of the Civil Rights Act, 25 ENVTL. L. 285, 314 (1995) ("From the EPA's perspective, an irreconcilable conflict existed between its task and the demands of Title VI, because the agency could discipline discriminatory recipients of funding only by terminating their grants and deferring the existing pollution problem."); Colopy, supra note 183, at 183 (noting that as of 1983, "[t]he EPA had taken no measures to enforce Title VI, and agency staff preferred maintaining good relations with funding recipients over enforcing antidiscrimination laws").

²¹⁹ Fisher, *supra* note 218, at 315.

²²⁰ U.S. COMM'N ON CIVIL RIGHTS, supra note 190, at 4.

²²¹ See Lily N. Chinn, Can the Market Be Fair and Efficient–An Environmental Justice Critique of Emissions Trading, 26 Ecology L.Q. 80, 106 (1999) ("What could be deemed a disparate impact within the 180 day investigatory window, might not be disparate after another 180 days of trading.").

²²² See Complaint Under Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000d and 40 C.F.R. Part 7 at 2, Coal. for a Safe Env't v. Cal. Air Res. Bd., EPA File No. 09R-12-R9 (2012), http://ggucuel.org/wp-content/uploads/6.8.12-CSE-v.-CARB-TItle-VI-complaint2. pdf

²²³ Id. at 29.

²²⁴ Letter from Rafael Deleón, Dir., U.S. Envtl. Prot. Agency, to Mary Nichols, Chairman, Cal. Air Ress. Bd. (July 12, 2012), http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2012/20120712_docket-09R-12-R9_letter.pdf.

leaves them ill equipped to address environmental justice claims against permittees. Furthermore, the EPA is not inclined to enforce Title VI against funding recipients, because doing so puts their partnerships with valuable stakeholders, like states and local governments, at risk. And, as the next section shows, the executive orders on environmental justice and distribution were not successful either.

2. Executive Orders on Environmental Justice and Distribution

Responding to criticism from environmental justice activists and organizations regarding the inequitable distribution of environmental hazards, President Clinton signed Executive Order 12,898 in 1994.²²⁵ The Executive Order instructs federal agencies to identify and address disproportionately high and adverse human health or environmental impacts on minority and low-income communities in the process of rulemaking and permitting as an ex ante supplement to ex post Title VI protections.²²⁶ To this end, the Executive Order requires the establishment of an interagency working group tasked with developing an environmental justice strategy across federal agencies, collecting and analyzing relevant data for rulemaking, and soliciting comments from minority and low-income communities in the rulemaking process.²²⁷ The implementation of the Executive Order relies primarily on presidential control and oversight of executive agencies.²²⁸ The political

²²⁵ See David M. Konisky, The Federal Government's Response to Environmental Inequality, in Failed Promises: Evaluating the Federal Government's Response to Environmental Justice 29, 30 (David M. Konisky ed., 2015) ("In many respects, EO 12898 represented the culmination of a sustained effort by a dedicated group of civil rights leaders, community organizers, and scholar-activists to push the federal government to respond to what they believed was overwhelming and indisputable evidence that minority and low-income groups faced disproportionate environmental risks.").

²²⁶ Exec. Order No. 12,898, 3 C.F.R. § 859 (1994), reprinted in 42 U.S.C. § 4321 app. at 278–80 (2012); see also Memorandum from President William Clinton on Exec. Order on Fed. Actions to Address Envtl. Justice in Populations & Low-Income Populations to the Heads of all Dep'ts & Agencies (Feb. 11, 1994), https://perma.cc/A55T-5DWX [hereinafter Memorandum on Environmental Justice] (pointing to existing statutory provisions, such as Title VI and the National Environmental Policy Act of 1969, and asking agencies to take measures during administrative decisionmaking to ensure the statutory provisions are in accordance with existing statutory provisions and there are no undue burdens imposed on minority and low-income populations).

²²⁷ Exec. Order No. 12,898.

²²⁸ The Executive Order requires an initial report to be written on implementation strategy by the interagency working group to the president by way of the Deputy Assistant to the President for Environmental Policy and also requires commitment and oversight by agency heads stating, "The head of each Federal agency shall be responsible for ensuring compliance with this order. Each Federal agency shall conduct internal reviews and take such other steps as may be necessary to monitor compliance with this order." *Id.* § 6–601.

commitment to the goals of the Executive Order has varied across different presidencies.²²⁹

Commentators criticized the Order's initial implementation during the Clinton administration because distributional effects of environmental regulations were insufficiently incorporated into the EPA permitting practices.²³⁰ The Environmental Appeals Board (EAB), which reviews the EPA's administrative enforcement decisions and appeals from permit decisions,²³¹ stated that EPA permitting officials should "exercise [their] discretion to implement the Executive Order to the greatest extent practicable."²³² However, this pronouncement was undercut by the degree of deference that the EAB continued to give to permit officials' decisions.²³³ Analysis of EPA practice during the Clinton administration shows that relief was denied by the EAB in all ten cases in which the Executive Order was invoked.²³⁴

Denial of environmental justice claims by the EAB during the Clinton administration took two forms. In some cases, the EAB denied environmental justice claims by pointing to the requirements of the relevant statutory provision and indicating that there was no discretion for the EPA to address such concerns.²³⁵ As long as the applicant met the statute's permitting requirements, the EAB could not push the agency to exercise discretion to deny the claim.²³⁶ In

²²⁹ See David M. Konisky, Federal Environmental Justice Policy: Lessons Learned, in Failed Promises: Evaluating the Federal Government's Response to Environmental Justice, supra note 225, at 233, 233 (discussing development of federal environmental justice policy across multiple presidencies).

²³⁰ See Denis Binder et al., A Survey of Federal Agency Response to President Clinton's Executive Order No. 12898 on Environmental Justice, 31 Envtl. L. Rev. 11,133, 11,141 (2001) (finding that the Environmental Appeals Board rejected environmental justice claims in all ten permitting disputes in which the issue was raised); Eileen Gauna, Federal Environmental Justice in Permitting, in Failed Promises: Evaluating the Federal Government's Response to Environmental Justice, supra note 225, at 57, 61–63 (arguing that the EPA has been perhaps overly cautious in finding legal authority to include environmental justice concerns in permitting); Lazarus & Tai, supra note 205, at 619 (arguing that the EPA can take a more aggressive approach by including environmental justice in permitting decisions).

²³¹ U.S. Envil. Prot. Agency, The Environmental Appeals Board Practice Manual 1 (2013), https://yosemite.epa.gov/oa/EAB_Web_Docket.nsf/8f612ee7fc725edd852570760071cb8e/381acd4d3ab4ca358525803c00499ab0/\$FILE/Practice%20Manual%20August%202013.pdf.

²³² Chem. Waste Mgmt. of Ind., Inc., 6 E.A.D. 66, 72 (EAB 1995).

²³³ See Gauna, supra note 230, at 61-63.

²³⁴ Binder et al., *supra* note 230, at 11,141.

²³⁵ See, e.g., Envotech, L.P., 6 E.A.D. 260, 264 (EAB 1996) (finding that costs relevant to the statute and safety of drinking water are the only costs that may be considered).

²³⁶ *Id.* at 279 ("Under RCRA, the Agency is *required* to issue a permit to an applicant who meets the requirements of the statute and its implementing regulations.").

other cases, the EAB denied claims that challenged the strength of the EPA's empirical support for concluding there would be no disproportionate burdens placed on protected communities, thus failing to push the agency to collect better data.²³⁷

Problems with the Executive Order's implementation continued through the Bush administration. The EPA's Inspector General issued a report in 2004 criticizing the agency's ineffective and inconsistent implementation of the Executive Order.²³⁸ The report pointed to the lack of environmental justice definitions, criteria, and standards to guide agency decisionmaking as undermining the objectives of the Executive Order.²³⁹ The Inspector General indicated that there was a failure to identify relevant protected communities or to define disproportionality.²⁴⁰

As evidence of the failure to identify relevant protected communities, the report directed attention to then EPA Administrator Christine Todd Whitman's memorandum that defined environmental justice as "fair treatment of people of all races, cultures, and incomes with respect to the development, implementation, and enforcement of environmental laws and policies." The memorandum's definition of environmental justice shifted focus away from low-income and minority communities, which were the Executive Order's intended focus. Even when regional offices identified negative impacts on low-income and minority communities, no standards were provided to consistently measure disproportionality in the distribution of environ-

²³⁷ In one case, petitioners challenged the decision not to produce a quantitative risk assessment in arriving at the conclusion that the location would not disproportionately impose burdens on Native American populations in northern Oklahoma. The EAB held that, "[n]either the Executive Order nor EPA's strategy [to implement the Executive Order] specifically requires that quantitative risk assessment, as opposed to other means, be used to identify the potential for disproportionate impacts on minority populations [T]he failure to perform such calculations is not a 'violation' or even a deviation from federal environmental justice policy." Ash Grove Cement Co., 7 E.A.D. 387, 413 (EAB 1997); see also Gauna, supra note 230, at 64 ("EPA permitting officials must conduct . . . an environmental justice analysis [T]he permitting official can then rely on that analysis to conclude either that the permit in question does not implicate an environmental justice community, or that because of compliance with a health-based standard, there is no adverse impact.").

²³⁸ Office of Inspector Gen., Report No. 2004-P-00007, Evaluation Report: EPA Needs to Consistently Implement the Intent of the Executive Order on Environmental Justice (2004).

²³⁹ Id. at i-ii.

²⁴⁰ Id. at 7.

²⁴¹ Id. at 35.

²⁴² See Memorandum on Environmental Justice, supra note 226 (stating that the "order is designed to focus Federal attention on the environmental and human health conditions in minority communities and low-income communities with the goal of achieving environmental justice").

mental hazards. The lack of standards left regional offices without useful guidance on how to take these concerns more seriously, and as a result, they undertook implementation of the Executive Order in different ways.243 Although the White House Council on Environmental Quality prepared guidelines during the Clinton administration,²⁴⁴ the EPA did not, in turn, prepare guidance for its regional offices on how to make these assessments.²⁴⁵ The Inspector General's report indicated that without clear national requirements and a baseline to which regional offices could refer, some regions insufficiently addressed disproportionate impact on low-income and minority communities.²⁴⁶ The report also leveled criticism at the lack of personnel committed to environmental justice and inadequate oversight as further exacerbating the underlying lack of commitment to vulnerable low-income and minority communities.²⁴⁷ Ultimately, the EPA rejected most of the Inspector General's recommendations.²⁴⁸ The EPA under President Bush failed to provide meaningful criteria by

²⁴³ For example, Region 1 defined relevant minority communities as a community whose minority fraction ranks in the upper 85th percentile statewide, while Region 5 identified these groups as twice the statewide average for minority population. *See* Office of Inspector Gen., *supra* note 238, at 23. With respect to income, Region 1 placed the threshold at communities who rank in the 85th percentile in terms of the percentage of the population having an income below twice the Federal Poverty Level, while Region 5 placed the threshold at twice the state average for percentage of the population with income below twice the Federal Poverty Level. *See id.*

²⁴⁴ COUNCIL ON ENVIL. QUALITY, ENVIRONMENTAL JUSTICE: GUIDANCE UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT (1997), https://www.epa.gov/sites/production/files/2015-04/documents/ej-guidance-nepa.pdf.

²⁴⁵ See id. at 1 (stipulating that further procedures may be implemented, even though the Council on Environmental Quality provided guidelines); Office of Inspector Gen., supra note 238, at 7 (stating that the Office of Environmental Justice did not provide sufficient guidance to regional offices).

²⁴⁶ OFFICE OF INSPECTOR GEN., *supra* note 238, at 15 ("From a Regional standpoint, more focus needs to be placed on those Regions that are 'less aggressive' about their focus on [environmental justice]. . . . [S]ome Regions do not even account for disproportional impact.").

²⁴⁷ *Id.* at 14. Because staffing at the regional level depends on the Assistant Administrator or Regional Administrator, there were significant disparities in employment of personnel committed to environmental justice. The report indicates that Regions 2, 3, 5, 7, and 10 each had fewer than five environmental justice full-time employees, while Region 1 had twelve and Region 9 had over fifty. *Id.* at 14–15.

²⁴⁸ See id. at 46–47 (responding to the Inspector General's report by rejecting the recommendation to provide regional offices with a standard definition for an environmental justice area and arguing that the use of a quantifiable threshold for minority populations in identifying environmental justice communities is too simplistic to properly further environmental justice goals); see also id. at 49 (concurring with the Inspector General's recommendation that a comprehensive study be conducted to ensure that adequate resources are available to fully implement the agency's environmental justice program, but also indicating that the Office of Environmental Justice cannot dictate how regions and program offices spend their money).

which environmental justice could be defined, measured, and implemented, and progress integrating environmental justice in EPA regulations came to a halt.²⁴⁹

During the Obama administration, the pendulum began to swing back in the direction of progress toward more fully addressing environmental justice concerns. The EPA adopted "Plan EJ 2014" to more seriously weave the Executive Order and environmental justice into the fabric of EPA decisionmaking.²⁵⁰ In particular, the Plan sought to better incorporate environmental justice concerns into EPA permitting decisions²⁵¹ and to more seriously include them in rulemaking.²⁵²

Plan EJ 2014 gave environmental justice a bigger role in permitting decisions, and led to some effort to more seriously hold EPA regional offices accountable for faithful application of the Executive Order's requirements.²⁵³ During the Obama administration, the EAB rejected two permits issued by the regional EPA office for Alaska because of inadequate compliance with the requirements of the Executive Order.²⁵⁴

²⁴⁹ See U.S. Gov't Accountability Office, GAO-05-289, EPA Should Devote More Attention to Environmental Justice When Developing Clean Air Rules 3–5 (2005) (finding that EPA had devoted little attention to environmental justice in drafting three significant clean air rules between 2000 and 2004); Office of Inspector Gen., Report No. 2006-P-00034, EPA Needs to Conduct Environmental Justice Reviews of Its Programs, Policies, and Activities 5 (2006) (criticizing EPA two years later for insufficiently directing program and regional offices to conduct environmental justice reviews).

²⁵⁰ U.S. Envil. Prot. Agency, Plan EJ 2014 (2011), https://nepis.epa.gov/Exe/ZyPDF.cgi/P100DFCQ.PDF?Dockey=P100DFCQ.pdf.

²⁵¹ See U.S. Envtl. Prot. Agency, Considering Environmental Justice in Permitting: Implementation Plan 2 (2011), https://nepis.epa.gov/Exe/ZyPDF.cgi/P100ETRR.PDF?Dockey=P100ETRR.PDF (outlining measures to ensure environmental justice consideration).

²⁵² See U.S. Envtl. Prot. Agency, Plan EJ 2014: Incorporating Environmental Justice in Rulemaking 1, 3–4 (2015), https://nepis.epa.gov/Exe/ZyPDF.cgi/P100DFCA. PDF?Dockey=P100DFCA.PDF (providing overview of efforts to better consider environmental justice in rulemaking).

 $^{^{253}}$ See generally Gauna, supra note 230, at 70–74 (discussing Plan EJ 2014's permitting programs).

²⁵⁴ See Shell Gulf of Mex., Inc., 15 E.A.D. 103, 104 (EAB 2010) (remanding permitting decision on two oil exploration permits, stating that, "the Region clearly erred when it relied solely on demonstrated compliance with the then-existing annual NO₂ NAAQS as sufficient to find that the Alaska Native population would not experience disproportionately high and adverse human health or environmental effects from the permitted activity"); see also Gauna, supra note 230, at 65 ("[Shell Gulf of Mexico]] also held out the possibility that the Board could be persuaded to undertake a more searching review of the adequacy of the permitting agency's environmental justice analysis."). But see id. ("This victory for the environmental justice challengers was short-lived. On appeal after remand, the Board endorsed the Region's supplemental twenty-page environmental justice analysis.").

With respect to rulemaking, guidance issued as part of Plan EJ 2014 sheds light on how agencies should attempt to consider environmental justice and distributional concerns.²⁵⁵ The guidance stated that new rules require an analysis of disproportionate and adverse impacts on minority, low-income, and indigenous populations.²⁵⁶ This analysis includes identifying new disparate impacts, the exacerbation of existing disparate impacts, and opportunities to address such impacts.²⁵⁷ Moreover, the guidance requires that the EPA provide meaningful opportunity for minority, low-income, and indigenous populations to participate in rulemaking proceedings.²⁵⁸

There were at least a few cases in which, as a result of Plan EJ 2014, the EPA explicitly considered the distributional effects of some regulations. Two examples include a newly published definition of solid waste²⁵⁹ and regulations on particulate matter.²⁶⁰ In 2009, the Sierra Club submitted an administrative complaint requesting that the EPA revoke the 2008 Definition of Solid Waste Rule arguing in part that the EPA failed to properly support its conclusion that the rule would not impose disproportionate impacts to minority or low-income communities.²⁶¹ In response to the complaint, the EPA produced an in-depth analysis of the disproportionate effects of the 2008 rule.²⁶² After the EPA's analysis finding some disproportionate costs imposed on minority and low-income communities, the agency revised the rule to mitigate disproportionate effects.²⁶³

Most significantly, the EPA restricted the use of spatial averaging for particulate matter,²⁶⁴ a practice that had been criticized since its

²⁵⁵ U.S. ENVTL. PROT. AGENCY, supra note 250, at 2.

²⁵⁶ *Id.* at 1 nn.1, 8–9.

²⁵⁷ Id. at 10–12.

²⁵⁸ Id. at 14.

²⁵⁹ Definition of Solid Waste, 40 C.F.R. § 261.2 (2015); see also U.S. Envtl. Prot. Agency, Potential Adverse Impacts Under the Definition of Solid Waste Exclusions (Including Potential Disproportionate Adverse Impacts to Minority and Low-Income Populations) (2014) (providing in-depth analysis of the adverse environmental effects of the previous rule).

²⁶⁰ National Primary and Secondary Ambient Air Quality Standards, 40 C.F.R. § 50 (2016); *see also* U.S. Envil. Prot. Agency, Regulatory Impact Analysis for the Final Revisions to the National Ambient Air Quality Standards for Particulate Matter (2012).

²⁶¹ Sierra Club, Petition for Reconsideration of "Revisions to the Definition of Solid Waste," 73 Fed. Reg. 64,668 (Oct. 30, 2008) and Request for Stay (Jan. 29, 2009), https://www.regulations.gov/document?D=EPA-HQ-RCRA-2009-0315-0002.

²⁶² U.S. Envtl. Prot. Agency, *supra* note 259.

²⁶³ See id.

²⁶⁴ 40 C.F.R. § 50 (specifically restricting spatial averaging for PM_{2.5}).

initial implementation.²⁶⁵ Spatial averaging allows areas to comply with ambient air quality standards by aggregating and averaging findings from multiple monitoring sites within a region.²⁶⁶ EPA requirements could be met under this scheme even when some communities within a region were subject to greater exposure than allowed by the ambient air quality standards.²⁶⁷ Thus, restriction of spatial averaging removed an important contributing factor to inequitable distribution of environmental hazards.

Despite these positive developments, environmental justice concerns appear not to be fully integrated into the EPA's decisionmaking. Some observers criticized Plan EJ 2014 as inadequate, arguing that the steps it has taken towards promoting environmental justice goals are either too small or have been inadequately institutionalized.²⁶⁸ Indeed, of the nearly 4000 rules the EPA promulgated during the Obama administration,²⁶⁹ the agency referred to only seven as ones taking environmental justice concerns into account.²⁷⁰

²⁶⁵ See National Ambient Air Quality Standards for Particulate Matter, 71 Fed. Reg. 61,144, 61,167 (Oct. 17, 2006) (addressing criticism from the American Lung Association regarding spatial averaging).

²⁶⁶ See generally Philip E. Karmel & Thomas N. FitzGibbon, *PM*_{2.5}: Federal and California Regulation of Fine Particulate Air Pollution, 2002 CAL. ENVTL. L. REP. 302, reprinted in Philip E. Karmel & Thomas N. FitzGibbon, Bryan Cave LLP, PM_{2.5}: Federal and California Regulation of Fine Particulate Air Pollution 7 (2002), https://www.bryancave.com/images/content/6/3/v2/637/Env-Article-KarmelEnvLawinCA8-02.pdf ("[Spatial averaging effectively] relaxes the stringency of the PM_{2.5} standard because it allows monitoring sites whose average concentrations exceed the annual standard to be offset by nearby monitoring sites whose average concentrations are sufficiently below the annual standard as to bring the average of the sites within the standard.").

²⁶⁷ See American Lung Association, Comments of the American Lung Association on EPA's Policy Assessment for the Review of the Particulate Matter National Ambient Air Quality Standards 5 (Aug. 16, 2010), https://www.regulations.gov/document?D=EPA-HQ-OAR-2007-0492-0222 ("Spatial averaging could potentially allow areas with hotspots of particulate matter concentrations to avoid nonattainment designations and cleanup requirements.").

²⁶⁸ See, e.g., U.S. Gov't Accountability Office, GAO-12-77, EPA Needs to Take Additional Actions to Help Ensure Effective Implementation 31–32 (2011) (finding that the EPA had not sufficiently defined key terms relating to environmental justice, articulated states' roles in ongoing planning and environmental justice integration efforts, or developed performance measures for eight of nine implementation plans to track agency progress); see also Geltman et al., supra note 49, at 149 (evaluating the effectiveness of Plan EJ 2014 and concluding that it is a step forward but ultimately insufficient to adequately advance environmental justice concerns); Konisky, supra note 229, at 251–52 (suggesting that Plan EJ 2014 might not endure).

²⁶⁹ A Review of EPA's Regulatory Activity During the Obama Administration: Energy and Industrial Sectors: Hearing Before the S. Subcomm. on Energy and Power, 114th Cong. 33–34 (2016).

²⁷⁰ See Plan EJ 2014: Incorporating Environmental Justice into Rulemaking, U.S. ENVTL. PROTECTION AGENCY, https://www.epa.gov/environmentaljustice/plan-ej-2014-incorporating-environmental-justice-rulemaking (last visited Sept. 30, 2018) (pointing to

Additionally, President Obama issued Executive Order 13,563 to include values like "equity, human dignity, fairness and distributive impacts"²⁷¹ alongside cost-benefit analysis in regulatory review.²⁷² The approach of Executive Order 13,563 to the qualitative description of costs and benefits built on that of Executive Order 12,866,273 but with slight variations. Executive Order 12,866 had allowed agencies to consider "qualitative measures of costs and benefits that are difficult to quantify" and directed agencies that "in choosing among alternative regulatory approaches, agencies should select those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach."274 Executive Order 13,563 reinforced this approach, but added two new concepts for consideration: human dignity and fairness. It stated that "[w]here appropriate and permitted by law," agencies "may consider (and discuss qualitatively) values that are difficult or impossible to quantify, including equity, human dignity, fairness, and distributive impacts."275

For the most part, agencies did not change their behavior in response to this Executive Order.²⁷⁶ Agencies still attempted to mone-

seven rules which have included evaluation of environmental justice concerns); see also Lisa A. Robinson et al., Attention to Distribution in U.S. Regulatory Analyses, 10 Rev. Envil. Econ. & Pol'y 308, 316 (2016) ("Our review suggests that federal agencies largely ignore, and the OMB does not enforce, the guidance on distributional analysis contained in Executive Orders 12866 and 13563").

 $^{^{271}}$ Exec. Order No. 13,563 $\$ 1(c), 3 C.F.R. $\$ 215 (2012), reprinted in 5 U.S.C. $\$ 601 app. at 816–17 (2012).

²⁷² The Order reinforced the core principles of Executive Order 12,866. Both executive orders required agencies to consider the costs and benefits of a regulation, and directed agencies to only propose or adopt regulation that was cost-justified and that maximized net benefits. If the costs and benefits were not susceptible to quantification, agencies were to describe the costs and benefits qualitatively. See id. at § 1(b) (noting that "[t]his order is supplemental to and reaffirms the principles, structures, and definitions governing contemporary regulatory review that were established in Executive Order 12866 of September 30, 1993"); Exec. Order No. 12,866, 3 C.F.R. § 638 (1993), reprinted in 5 U.S.C. § 601 app. at 557–61 (1994); see also Memorandum from Cass R. Sunstein, Adm'r, Office of Info. & Regulatory Affairs, to the Heads of Exec. Dep'ts and Agencies, and of Indep. Regulatory Agencies (Feb. 2, 2011), https://slidelegend.com/memorandum-for-the-heads-of-executive-whitehousegov_5b5976a4097c475e1c8b458a.html ("Executive Order 13563 is designed to affirm and to supplement Executive Order 12866; it adds to and amplifies the provisions of Executive Order 12866, rather than displacing or qualifying them.").

²⁷³ See supra text accompanying notes 44–50 (describing Executive Order 12,866's costbenefit framework).

²⁷⁴ Exec. Order No. 12,866 § 1(a).

²⁷⁵ Exec. Order No. 13,563 § 1(b).

²⁷⁶ Cass Sunstein explained that the references to equity and distributive impacts meant that agencies could consider whether the costs or benefits of a rule would accrue to people who are "struggling particularly really hard." *Federal Regulation – 2011: A Review of*

tize the costs and benefits of regulations, and agencies rarely promulgated regulations where the monetized costs outweighed the regulation's monetized benefits. The Regulatory Impact Analyses conducted by agencies after Executive Order 13,563 was issued demonstrate that for the most part, agencies' approach to regulatory review remained the same as prior to the Order.²⁷⁷ On occasion, some agencies—particularly the Department of Justice—included a qualitative assessment of the impact of a regulation on values like dignity, equity, fairness, and distributive concerns.²⁷⁸ They tended to do so only when the monetized costs of a regulation outweighed the regulation's benefits.²⁷⁹ But most agencies did not take the values into account at all, or at most gave them a cursory treatment.²⁸⁰

Legislative Proposals - Part I: Hearing Before the S. Comm. on Homeland Sec. & Governmental Affairs, 112th Cong. 70 (2011), https://www.gpo.gov/fdsys/pkg/CHRG-112shrg67634/html/CHRG-112shrg67634.htm (testimony of Cass R. Sunstein, Administrator, Office of Information and Regulatory Affairs). His explanations of "dignity" almost always rely on two examples: The Water Closet Clearance Rule, which set new accessibility requirements for bathrooms in public accommodations intended to solve problems facing wheelchair users, and The National Standards to Prevent, Detect, and Respond to Prison Rape, which established standards to effectively implement the Prison Rape Elimination Act. See Cass R. Sunstein, The Office of Information and Regulatory Affairs: Myths and Realities, 126 HARV. L. REV. 1838, 1866–67 (2013) (highlighting these two rules as examples of when agencies have taken human dignity into account). However, these examples are far from evidence that agencies changed their behavior in significant ways.

²⁷⁷ See Lisa Heinzerling, Inside EPA: A Former Insider's Reflections on the Relationship Between the Obama EPA and the Obama White House, 31 PACE ENVIL. L. REV. 325, 340–41 (2014) ("Any hope that President Obama would use the new executive order as an occasion to fundamentally reshape the relationship between the White House and the agencies, or to loosen the grip of cost-benefit analysis on regulatory policy, was dashed.").

²⁷⁸ See, e.g., U.S Dep't of Justice, Final Regulatory Impact Analysis of the Final Revised Regulations Implementing Titles II and III of the ADA, Including Revised ADA Standards for Accessible Design 138 (2010), https://www.ada.gov/regs2010/RIA_2010regs/DOJ%20ADA%20Final%20RIA.pdf (providing qualitative analysis of human dignity concerns in light of quantifiable costs outweighing quantifiable benefits).

²⁷⁹ See Office of Mgmt. & Budget, Exec. Office of the President, 2016 Draft Report to Congress on the Benefits and Costs of Federal Regulations and Agency Compliance with the Unfunded Mandates Reform Act 23 tbl.1-6(a) (2016), https://obamawhitehouse.archives.gov/sites/default/files/omb/assets/legislative_reports/draft_2016_cost_benefit_report_12_14_2016_2.pdf.

²⁸⁰ The FDA's approach is characteristic of most agencies. The FDA's Regulatory Impact Analyses generally do not discuss the values at all, or simply quote the language from EO 13,563. *See, e.g.*, U.S. FOOD & DRUG ADMIN., FDA-2011-F-0172, FOOD LABELING: NUTRITION LABELING OF STANDARD MENU ITEMS IN RESTAURANTS AND SIMILAR RETAIL FOOD ESTABLISHMENTS 4 (2014); U.S. FOOD & DRUG ADMIN., FDA-2011-F-0171, FOOD LABELING: CALORIE LABELING OF ARTICLES OF FOOD IN VENDING MACHINES 3 (2014); U.S. FOOD & DRUG ADMIN., FDA-2008-N-0424, POSTMARKETING SAFETY REPORTING FOR COMBINATION PRODUCTS 3 (2016); U.S. FOOD & DRUG ADMIN., FDA-2013-N-0125, USE OF SYMBOLS IN LABELING 3 (2013).

The Trump presidency ushered in a new wave of concerns from environmental justice advocates.²⁸¹ Early signs do not bode well for the prospects of a more serious commitment to environmental justice in the near future. President Trump's first budget proposed eliminating the Office of Environmental Justice in its entirety.²⁸² While Congress has not been receptive to the deep cuts to EPA programs proposed in President Trump's budget, it nonetheless appears willing to reduce the EPA's appropriations.²⁸³ With respect to internal management of agency programs, the Trump EPA seems poised to shift focus away from minority and low-income communities once again, as was the case during the Bush administration.²⁸⁴ Additionally, there are indications that suggest that the EPA under the Trump administration is less active when it comes to environmental enforcement.²⁸⁵ Although it is too early to evaluate President Trump's environmental justice record, there is little reason for environmental justice advocates to be optimistic.

In sum, the major federal environmental justice initiatives have not yet succeeded at adequately addressing the adverse distributional consequences of government action. And, as discussed in the next section, the efforts of coal mining communities, which are often thought of as being on the opposite side of the political spectrum from environmental justice advocates, have been similarly unsuccessful.

B. Coal Miner Compensation

This Section looks at attempts by both the legislative and executive branches to identify and compensate eastern coal miners burdened by the distributive impacts of environmental regulations

²⁸¹ See Talia Buford, Has the Moment for Environmental Justice Been Lost?, Propublica (July 24, 2017), https://www.propublica.org/article/has-the-moment-for-environmental-justice-been-lost?wpisrc=nl_energy202&wpmm=1; Yessenia Funes, What a Trump Presidency Means for Environmental Justice Leaders, ColorLines (Nov. 23, 2016), http://www.colorlines.com/articles/trump-presidency-through-words-environmental-justice-leaders.

²⁸² See U.S. Envtl. Prot. Agency, FY 2018 EPA Budget in Brief 33 (2017); see also Trump Wants to Kill the EPA's Environmental Justice Program, Nat. Resources Def. Counsel (June 1, 2017), https://www.nrdc.org/trump-watch/trump-wants-kill-epasenvironmental-justice-program (describing the proposed cuts).

²⁸³ See Devin Henry, Committee Approves \$31.4B Interior, EPA Spending Bill, HILL (July 18, 2017), http://thehill.com/policy/energy-environment/342654-committee-approves-314b-interior-epa-spending-bill (describing congressional efforts to cut EPA funding by \$528 million).

²⁸⁴ See Buford, supra note 281 (discussing the Trump administration's generally adverse disposition toward environmental justice concerns and stating that "the younger Bush's administration began to erode environmental justice programs").

 $^{^{285}}$ For example, the number of prosecutions indicates a decline from both the Obama and George W. Bush administrations. *See id.*

affecting coal-fired power plants. Both a legislative program adopted in the 1990s and an administrative program implemented during the Obama administration ultimately provided only limited relief and were each in effect for only a few years.

1. Clean Air Act Amendments of 1990

In 1970, Congress enacted the modern version of the Clean Air Act,²⁸⁶ which requires the EPA to promulgate national emissions limitations for new stationary sources.²⁸⁷ Under the 1970 amendments, the EPA must set emission standards for categories of new stationary sources that "may contribute significantly to air pollution which causes or contributes to the endangerment of public health or welfare."²⁸⁸ These emission standards must reflect "the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such emission reduction) the Administrator determines has been adequately demonstrated."²⁸⁹

Accordingly, in 1971 the EPA promulgated new source performance standards for coal-fired power plants.²⁹⁰ In determining these standards, the Administrator chose scrubbing technology as the "best system of emission reduction . . . adequately demonstrated."²⁹¹ The Administrator examined the scrubbers in use at the time—there were only three in the United States in 1971—and determined that it was adequately demonstrated that scrubbers had the capacity to eliminate about 70% of the sulfur oxides released when coal was burned.²⁹² Multiplying this 70% reduction rate by the average sulfur content of coal found in eastern regions, the Administrator set the emissions ceiling at 1.2 pounds of sulfur dioxide per MBTU (million British thermal units).²⁹³

This limitation on sulfur emissions from coal burning had differential effects on coal producers across the United States. The sulfur content of America's coal reserves varies significantly by region—reserves in areas west of the Mississippi contain mostly low sulfur

 $^{^{286}}$ Clean Air Amendments of 1970, Pub. L. No. 91-604, 84 Stat. 1676 (codified as amended at 42 U.S.C. \S 7401–7431 (2012)).

²⁸⁷ See id. § 111.

²⁸⁸ *Id.* § 111(b)(1)(A).

²⁸⁹ Id. § 111(a)(1).

²⁹⁰ Standards of Performance for New Stationary Sources, 40 C.F.R. § 60 (1972).

²⁹¹ See Bruce A. Ackerman & William T. Hassler, Beyond the New Deal: Coal and the Clean Air Act, 89 Yale L.J. 1466, 1478, 1481–82 (1980).

²⁹² Id. at 1481–82.

²⁹³ Standards of Performance for New Stationary Sources, 37 Fed. Reg. 5767, 5768–69 (Mar. 1, 1972); Ackerman & Hassler, *supra* note 291, at 1485.

coal, while eastern reserves from Appalachia and the Midwest contain mostly high sulfur coal.²⁹⁴ Thus, the 1.2-pound standard could be met by installing expensive scrubbers and burning eastern coal, or it could be met simply by burning western lower-sulfur coal with no emission controls.²⁹⁵ Many power plants in the East that used local coal found it cheaper to meet these standards by importing low-sulfur coal from the West and thereby forgoing the need to install scrubbers.²⁹⁶

This state of affairs was opposed by both environmentalists and eastern coal producers.²⁹⁷ Environmentalists, seeking stricter pollution controls, sought universal scrubbing to cut sulfur emissions even further.²⁹⁸ Eastern coal interests also wanted universal scrubbing, though for a different reason: to impose additional costs on western coal, thereby counteracting the competitive advantage that it had received as a result of the 1971 regulation.²⁹⁹

Responding to these different constituencies, the Clean Air Act Amendments of 1977³⁰⁰ added a provision requiring a percentage reduction in emissions regardless of the coal's sulfur content.³⁰¹ These changes reduced the market advantage that the 1971 regulation had conferred on lower-sulfur western coal at the expense of higher-sulfur eastern coal, because coal plants had to take on measures to treat emissions even when burning lower-sulfur coal.³⁰²

But in 1990, Congress reversed course, repealing this provision and eliminating the market advantage that had been conferred on eastern coal by the 1977 amendments.³⁰³ The EPA estimated that, as a

²⁹⁴ Ackerman & Hassler, *supra* note 291, at 1483–84 & nn.66–67.

²⁹⁵ Id. at 1485.

²⁹⁶ See David W. Hercher, New Source Performance Standards for Coal-Fired Electric Power Plants, 8 Ecology L.Q. 748, 749 (1980).

²⁹⁷ See Ackerman & Hassler, supra note 291, at 1497–500 (tracing the rise of an unlikely alliance between environmentalists and eastern coal producers prior to the 1977 amendments); Hercher, supra note 296, at 750 (discussing the development of technology-based standards in response to concerns of environmentalists and eastern coal interests).

²⁹⁸ Ackerman & Hassler, *supra* note 291, at 1500.

²⁹⁹ Id. at 1497.

 $^{^{300}}$ Clean Air Act Amendments of 1977, Pub. L. No. 95-95, 91 Stat. 685 (codified as amended at 42 U.S.C. \S 7401 (2012)).

³⁰¹ Pub. L. No. 95-95, 91 Stat. 699–700 (codified as amended at 42 U.S.C. § 7411 (2012)).

³⁰² A House Report criticized the sulfur standards because they "give a competitive advantage to those States with cheaper low-sulfur coal and . . . operate as a disincentive to the improvement of technology of new sources, since untreated fuels could be burned instead of using such new, more effective technology." Envil. Policy Div., Cong. Research Serv., No. 95-16, A Legislative History of the Clean Air Act Amendments of 1977, at 323 (1978).

³⁰³ Clean Air Act Amendments of 1990, § 403, Pub. L. No. 101-549, 104 Stat. 2399, 2631.

result, there would be a decline of 35% in total employment in high-sulfur coal mining.³⁰⁴

To counteract the negative consequences of these job losses, Senator Robert Byrd, a Democrat from West Virginia, sought to include in the Clean Air Act Amendments of 1990 a compensation scheme to support miners who lost their jobs as a result of restrictions on the sulfur emissions of coal-fired power plants.³⁰⁵ Under his original proposal, displaced miners would receive, for six years, between 50% and 100% of their final year's salary.³⁰⁶ The proposal also included financial incentives for unemployed miners to enter certified job training and education programs.³⁰⁷ The total cost of this proposed program would have been between \$825 million and \$1.375 billion.³⁰⁸

Concerns by various senators about the high cost of the program led Senator Byrd to amend his initial proposal by reducing the total number of years of assistance to four years or the number of years during which the individual was employed as a coal miner, whichever was less.³⁰⁹ Benefit amounts were also cut to between 50% and 80% of a miner's final year's salary.³¹⁰

Nonetheless, several senators continued to question the wisdom of the compensation scheme, which would cost hundreds of millions of dollars to assist 5000 people who lost their jobs in the coal industry.³¹¹

³⁰⁴ 136 Cong. Rec. 3897 (1990) (statement of Sen. Byrd) (remarking that the EPA estimates there will be 3000 to 5000 coal mining jobs lost by 1995, and between 14,000 and 16,000 jobs lost by the year 2000, representing a 35% decline in total high-sulfur coal mining employment from current levels due to the 1990 legislation).

³⁰⁵ *Id.* at 3948–49 (statement of Sen. Byrd).

³⁰⁶ These miners would receive benefits equal to 100% of their salary for the first two years of unemployment, 75% of their salary for the next two years, and 50% of their salary for the final two years. Miners who entered job training programs would be eligible for additional benefits equal to 25% of their annual salary for the third to sixth years of unemployment. *Id.*

 $^{^{307}}$ Id. at 3900 ("Additionally, these provisions provide an incentive designed to encourage these workers to enter into fulltime retraining and education programs . . . certified by the Secretary of Labor. These programs will enable affected coal mine workers to learn other skills so that they may find new employment after losing their jobs.").

³⁰⁸ *Id*.

³⁰⁹ See id. at 3948–49 (explaining proposed amendments to coal miner assistance); see also id. at 3955–56 (statement of Sen. Domenici) (expressing concerns about the cost of Senator Byrd's proposal); id. at 3957 (statement of Sen. Dole) (stating with respect to Senator Byrd's proposal, "[i]f we are going to complete this bill and keep the agreement that we made, then we are going to demand parity on each side. We are not going to stand aside because a powerful Member has an amendment").

³¹⁰ Under this first modification, miners would receive 80% of their salary for the first year of unemployment, 70% the second year, 60% the third year, and 50% the fourth year. *Id.* at 3948–49 (statement of Sen. Byrd).

³¹¹ See id. at 3950 (statement of Sen. Dole) (expressing concern about the compensation scheme being directed at a small group of geographically concentrated workers at such great cost); see also id. at 3953 (statement of Sen. Gramm) ("[I]f we make a decision to

For example, one senator argued that setting a precedent under which the government compensated people who lose their livelihoods due to federal legislation could "kill a lot of actions by Government in the future that affect people's lives." Other objections focused on the unfairness of asking taxpayers to contribute to large payouts for the miners, and on the potential inclusion in the compensation scheme of miners who lost their jobs due to automation and other industry shifts rather than environmental regulation. A last ditch attempt by Senator Byrd to further reduce the unemployment benefits—this time to three years at 70% of the miner's previous salary in the first year of unemployment, 60% in the second year, and 50% in the third year—was still opposed by senators who continued to view the unemployment benefits as unreasonably high and unfairly targeted to only one subset of individuals who might lose their jobs as a result of regulatory actions.

Part of the Senate opposition was also based on the concern that President Bush would carry out his threat to veto the entire Clean Air Act amendment package if it contained the costly Byrd amendment.³¹⁶ Despite Senator Byrd's insistence that there were precedents for a compensation proposal of this sort³¹⁷ and the broad support that

adopt this amendment, we should be prepared to vote on an amendment that extends these benefits to every worker in America that loses his or her job as a result of the adoption of this bill.").

- 312 Id. at 3954 (statement of Sen. Gramm).
- 313 *Id.* at 3952–53 (statement of Sen. Nickles).

³¹⁵ See id. at 5838–39 (statement of Sen. Chafee) (expressing concern that other fragile industries facing international competition would be receiving less compensation).

³¹⁶ Senator Dole stated during the debate: "But again I would repeat I am not . . . trying to scare anybody or intimidate anybody to repeat what I was told by a high source with the administration: that this bill is dead if this amendment is adopted." *Id.* at 3950 (statement of Sen. Dole); *see also* Philip Shabecoff, *Senate Rejects Plan on Aid to Miners*, N.Y. TIMES (Mar. 30, 1990), http://www.nytimes.com/1990/03/30/us/senate-rejects-plan-on-aid-to-miners.html ("At least two Senators who said they planned to vote for the proposal reversed themselves after they were told by the White House Chief of Staff, John H. Sununu, that President Bush would veto the clean air bill if the proposal was included.").

³¹⁷ See 136 Cong. Rec. at 5839–40 (statement of Sen. Byrd) (discussing the compensation schemes of the Regional Rail Reorganization Act of 1973 and the Redwood National Park Expansion Act of 1978).

³¹⁴ See id. at 3952 (statement of Sen. Chafee). Senator Chafee noted that "[i]n 1950 there were 483,000 coal miners. In 1980, there were 230,000 coal miners... now there are 141,000 coal miners." Id.; see also id. at 3956 (statement of Sen. Dole) (indicating that eligibility for assistance should, if anything, mirror Trade Adjustment Assistance, which only is provided after exhausting unemployment insurance); id. at 3955–56 (statement of Sen. Domenici) ("[M]illions of people have changed jobs because one part of America's economy phased out and another phased in. Some of us were here when that happened in the automobile industry. An old plant closed, a new one opened. The new one had new equipment and hired 1,000 fewer people.").

it enjoyed among interest groups,³¹⁸ fears that the amendment would become a "bill killer" turned out to be fatal: the Senate narrowly voted down the Byrd amendment, 50–49.³¹⁹

Members of the House of Representatives also expressed concerns about the miners who might lose their jobs as a result of the Clean Air Act Amendments.³²⁰ In response to these concerns, Representative Robert Wise, another Democrat from West Virginia, proposed the Clean Air Employment Transition Assistance Program, to provide compensation to workers across all industries who lost their jobs as a result of the Clean Air Act's new regulatory regime following the 1990 amendments.³²¹ Under this proposal, these workers would receive an additional six months of unemployment benefits for a total of one year, up to two years of supported job training, and a relocation allowance.322 The additional benefits would be equal to the amount collected by the worker during the first six months through unemployment compensation,³²³ and payments for training would be the greater of the unemployment benefit amounts or the weekly allowance for such training that the worker would be entitled to under any federal training law.³²⁴ In order to be eligible for these additional benefits, an employee had to have worked in the affected industry at least 26 weeks in the 52-week period before the unemployment began, collecting at least \$30 or more per week in wages.³²⁵ Wise's amendment was limited to a duration of five years and had a maximum total

³¹⁸ The Byrd amendment had the support of the AFL-CIO. *See id.* at 5833. The bill also enjoyed the support of the National Clean Air Coalition, which noted that amendments addressing job losses remove rhetorical weapons from the hands of polluters given that "[t]he utility industry used the threat of minor job losses to weaken air pollution controls in Midwestern states under the 1970 law, resulting in the pollution control failure that make the current amendments necessary." *Id.* at 5844–45.

³¹⁹ See id. at 5860; Shabecoff, supra note 316 (explaining that Senators Joe Biden and Al D'Amato, who were planning on voting for the amendment, ended up voting against it after the White House Chief of Staff told them that President Bush would veto the entire legislation if the amendment was included).

 $^{^{320}}$ See 136 Cong. Rec. at 4760 (statement of Rep. Poshard); id. at 6653 (statement of Rep. Lukens).

³²¹ Clean Air Act of 1990, Pub. L. No. 101-549, 104 Stat. 2709 (codified as amended at 29 U.S.C. § 1662e (2012)).

³²² See id.; 136 Cong. Rec. at 11,373, 11,936-41 (statement of Rep. Wise).

³²³ 29 U.S.C. § 1662e(f)(1) (providing payment in the event that one does not qualify or has ceased to qualify for unemployment compensation; has been enrolled in training within the required statutory period; and is participating in training or education programs under the section).

^{324 136} CONG. REC. at 11,938.

³²⁵ Id. at 11.937.

cost of \$250 million,³²⁶ as compared to the cost of between \$825 million and \$1.375 billion for the first version of the Byrd amendment.³²⁷

Representative Wise addressed many of the concerns that Senators raised regarding the Byrd amendment, which had failed two months earlier.³²⁸ In particular, Wise stressed that the assistance was neither industry nor region-specific, and that it did not entail the creation of a new program, but rather involved only the extension of existing ones.³²⁹ He also noted that it very closely tracked the Trade Adjustment Assistance program under the Trade Act of 1974, which helped workers who lost their jobs as a result of trade liberalization.³³⁰

Despite these changes, opponents called the Wise amendment "the Byrd amendment in sheep's clothing,"³³¹ and complained about the precedent-setting nature of an amendment that could lead to the inclusion of labor protection provisions in all subsequent environmental legislation.³³² And some representatives also expressed concern that the cost of the program, though lower than that of the Byrd amendment, would still lead to a presidential veto.³³³ Nonetheless, support for the Wise amendment was strong enough that it passed in the House, 274 to 146,³³⁴ and was included in the final Clean Air Act legislation, which the President signed despite the prior veto threat.³³⁵

The Clean Air Employment and Training Act, which established the Clean Air Employment Transition Assistance Program, operated between 1992 and 1993 and allocated almost \$25 million to assist workers facing unemployment, but the program was discontinued after 1993 because Congress failed to appropriate additional money to fund it.³³⁶ Subsequently, the Department of Labor (DOL) continued

³²⁶ *Id.* at 11,373.

³²⁷ Id. at 3900.

³²⁸ See Shabecoff, supra note 316 (describing the Byrd amendment's failure).

^{329 136} Cong. Rec. at 11,373 (statement of Rep. Wise).

³³⁰ *Id.*; see also J.F. Hornbeck, Cong. Research Serv., R41922, Trade Adjustment Assistance (TAA) and Its Role in U.S. Trade Policy 1–3 (2013) (discussing the role of Trade Adjustment Assistance as a central program in the effort to liberalize trade by compensating those losing out from competition).

^{331 136} Cong. Rec. at 11,946 (statement of Rep. Frenzel).

³³² Id. at 11,942 (statement of Rep. Lent).

³³³ *Id.* at 11,947 (statement of Rep. Frenzel) (quoting letter from John Sununu, President's Chief of Staff, & William Reilly, Adm'r, U.S. Envtl. Prot. Agency, to Thomas S. Foley, Speaker, U.S. House of Representatives (May 22, 1990)).

³³⁴ *Id.* at 11,958 (reporting the vote total).

³³⁵ See 29 U.S.C. § 1662e (2012).

³³⁶ See U.S. Envtl. Prot. Agency, Impacts of the Acid Rain Program on Coal Industry Employment 15–16 & n.5 (2001), https://www.gao.gov/assets/110/105422.pdf (analyzing the use of the Clean Air Employment and Training Act and the Department of Labor discretionary fund); U.S. Gen. Accounting Office, GAO/T-HEHS-94-120, Multiple Employment Training Programs: Conflicting Requirements

to provide assistance through a discretionary fund in the Job Training Partnership Act.³³⁷ Between 1992 and 1996, coal mining companies, states, and the United Mine Workers of America received over \$82 million from the federal government for vocational training, needs-related payments, and job counseling.³³⁸ The program, however, ended after the Job Partnership Training Act was repealed in 1998.³³⁹ Between the Clean Air Employment and Training Act and the discretionary funds provided by the Secretary of Labor, over 6000 coal miners received assistance, the majority of whom were located in eastern and midwestern states.³⁴⁰

Following the end of this legislative program to address adverse impacts on coal mining communities, attention eventually shifted to possible action within the executive branch. The next section details the most sustained effort of this sort.

2. POWER Initiative and POWER+ Plan

During the Obama presidency, coal production and jobs in the coal industry continued to decline.³⁴¹ The shift of energy production away from coal is primarily attributable to decreases in the cost of energy production from using natural gas.³⁴² However, additional environmental regulations, including the Transport Rule, Mercury Air Toxics Standards, and the Clean Power Plan, had an effect as well.³⁴³ Recognizing that changes in the pattern of energy production would continue to further displace coal industry workers, the Obama administration sought to compensate coal-producing communities.³⁴⁴ To

UNDERSCORE NEED FOR CHANGE 16–17 (1994) (indicating that no funding was appropriated for Clean Air Employment Transition Assistance in 1994).

³³⁷ U.S. Envtl. Prot. Agency, *supra* note 336, at 15 (discussing the Department of Labor Assistance through the Joint Training Partnership Act).

³³⁸ Id.

³³⁹ Workforce Investment Act of 1998, Pub. L. No. 105-220, § 199(b), 112 Stat. 936, 1059.

³⁴⁰ U.S. Envtl. Prot. Agency, *supra* note 336, at 15–16 ("Workers in eastern and midwestern states received the majority of grants and funding.").

³⁴¹ See generally Richard L. Revesz & Jack Lienke, Struggling for Air: Power Plants and the "War on Coal" 141, 146–54 (2016) (discussing the Transport Rule, Mercury Air Toxics Standards, and the Clean Power Plan as Obama era regulations that pushed energy providers away from coal).

³⁴² See Jason P. Brown & Andres Kodaka, Fed. Reserve Bank of Kan. City, U.S. Electricity Prices in the Wake of Growing Natural Gas Production, MAIN STREET ECONOMIST, no. 2, 2014, at 1, https://www.kansascityfed.org/publicat/mse/MSE_0214.pdf.

³⁴³ See Revesz & Lienke, supra note 341, at 146–54 (describing the effect of the Transport Rule, Mercury and Air Toxics Standards, and the Clean Power Plan in increasing the cost of operating coal plants).

³⁴⁴ See Office of Mgmt. & Budget, Exec. Office of the President, Investing in Coal Communities, Workers, and Technology: The POWER+ Plan 2–3 (2015), https://obamawhitehouse.archives.gov/sites/default/files/omb/budget/fy2016/assets/

pursue this goal, it implemented the Partnerships for Opportunity and Workforce and Economic Revitalization (POWER) Initiative on March 27, 2015, just months prior to the announcement of the Clean Power Plan.³⁴⁵ The POWER Initiative billed itself as an innovative program targeting grants and funding to Appalachian state and local governments in an effort to invest in the economies of communities that previously relied heavily on the coal industry.³⁴⁶

The POWER Initiative provided funds³⁴⁷ through the Economic Development Administration, the Department of Labor, the Appalachian Regional Commission, the Department of Commerce, the Environmental Protection Agency, and the Department of Agriculture to help Appalachian coal workers who lost their jobs.³⁴⁸ The Economic Development Administration took the lead role and coordinated across other federal agencies to ensure that the funding was properly targeted and nonduplicative.349 The program gave planning and implementation grants to communities without "robust and/ or recent comprehensive and integrated economic development strategic plans in place"350 that could demonstrate that they would suffer significant job losses as a result of changes in the coal economy.³⁵¹ POWER Initiative grants targeted funding for economic development programs including the creation of a drone-operator workforce, enhancement of infrastructure relating to the outdoor recreation industry, and transformation of a freight station into a high-tech incubator.352

fact_sheets/investing-in-coal-communities-workers-and-technology-the-power-plan.pdf [hereinafter Investing in Coal].

³⁴⁵ Press Release, The White House, Fact Sheet: The Partnerships for Opportunity and Workforce and Economic Revitalization (POWER) Initiative (Mar. 27, 2015), https://obamawhitehouse.archives.gov/the-press-office/2015/03/27/fact-sheet-partnerships-opportunity-and-workforce-and-economic-revitaliz [hereinafter POWER Initiative Press Release]; Press Release, The White House, Remarks by the President in Announcing the Clean Power Plan (Aug. 3, 2015), https://obamawhitehouse.archives.gov/the-press-office/2015/08/03/remarks-president-announcing-clean-power-plan.

³⁴⁶ See Investing in Coal, supra note 344, at 1-4.

³⁴⁷ *Id.* at 2 ("These funds will help communities to: diversify their economies; create good jobs in existing or new industries; attract new sources of job-creating investment; and provide reemployment services and job training to dislocated workers in order to connect them to high-quality, in-demand jobs.").

³⁴⁸ *Id.* at 2–3.

³⁴⁹ See The Partnerships for Opportunity and Workforce and Economic Revitalization (POWER) Initiative, U.S. Econ. Dev. Admin., https://www.eda.gov/archives/2016/power/ (last visited Sept. 30, 2018).

³⁵⁰ POWER Initiative Press Release, *supra* note 345.

³⁵¹ Id

³⁵² Press Release, The White House, Fact Sheet: Administration Announces Additional Economic and Workforce Development Resources for Coal Communities through POWER Initiative (Oct. 26, 2016), https://obamawhitehouse.archives.gov/the-press-office/

The initial round of funding under the POWER Initiative, undertaken in 2015, proposed to award up to \$38 million in grants during the program's first year, of which \$28 million was actually awarded.³⁵³ The Initiative has continued to receive approximately \$50 million each year in appropriations in fiscal years 2016–2018.³⁵⁴

The POWER Initiative was accompanied by a POWER+ Plan proposal, which sought the appropriation of additional funds for economic development projects in communities that experienced the loss of coal jobs. President Obama's proposed 2016 budget included a request that \$1 billion over five years from the unappropriated balance of the Abandoned Mine Reclamation Fund be used to provide money for the "health, safety, environment and economic development" of such communities.355 Expenditures would have been distributed through a newly created "Abandoned Mine Land Economic Revitalization (AMLER) Program,"356 which would have directed unappropriated funds to further economic revitalization and job growth.357 The POWER+ Plan proposal also sought to provide additional funding to the United Mine Workers of America Health and Retirement Funds, to benefit workers whose health benefits were reduced as a result of coal industry bankruptcies, and to transfer funds from the Pension Benefit Guaranty Corporation for the purpose of protecting the nearly insolvent 1974 United Mine Workers of America Pension Plan.³⁵⁸ The proposal received a tepid reception among congressional Republicans, who were in the midst of an election year in which displacement of former coal jobs had become an important part of the political narrative.359 Reaching bipartisan agreement on com-

^{2016/10/26/}fact-sheet-administration-announces-additional-economic-and-workforce [hereinafter Press Release on Additional Resources for Coal Communities].

³⁵³ Id

³⁵⁴ See Legislative Update: FY 2018 Omnibus Appropriations Includes \$155 Million for ARC, Appalachian Regional Commission (Mar. 2018), https://www.arc.gov/news/article.asp?ARTICLE_ID=623; Legislative Update: President Obama Signs FY 2016 Omnibus Appropriations Legislation, Appalachian Reg'l Comm'n (Dec. 2015), https://www.arc.gov/news/article.asp?ARTICLE_ID=545; Legislative Update: President Trump Signs FY 2017 Omnibus Appropriations Legislation, Appalachian Reg'l Comm'n (May 2017), https://www.arc.gov/news/article.asp?ARTICLE_ID=594.

³⁵⁵ Investing in Coal, supra note 344, at 4.

³⁵⁶ Id.

³⁵⁷ Id.

³⁵⁸ *Id* at 4

³⁵⁹ See James Higdon, The Obama Idea to Save Coal Country, POLITICO (Mar. 8, 2017), http://www.politico.com/magazine/story/2017/03/the-obama-administration-idea-to-save-coal-country-214885.

pensation for displaced coal jobs would undermine their opposition to the Clean Power Plan.³⁶⁰

Nonetheless, measures similar to those in the POWER+ Plan were proposed by congressional Republicans representing eastern coal communities. Consistent with the Obama administration's proposal to appropriate funds from the Abandoned Mine Reclamation Fund, Representative Harold Rogers, a Republican from Kentucky, chair of the House Appropriations Committee,³⁶¹ proposed the Revitalizing the Economy of Coal Communities by Leveraging Local Activities and Investing More (RECLAIM) Act.³⁶² The bill had Democratic cosponsors,³⁶³ and it received support from some environmental organizations, including the Sierra Club.³⁶⁴

The bill ultimately failed to gain traction after Wyoming Governor Matt Mead led a concerted effort to defeat it.³⁶⁵ In a letter to Wyoming's congressional delegation, Governor Mead characterized the appropriation change in the bill as increasing costs on the coal industry in Wyoming and nationally.³⁶⁶ Wyoming's opposition stemmed largely from its status as the largest recipient under the Abandoned Mine Land Fund, which could lose funding as a result of the proposed change in allocation.³⁶⁷ Indeed, at present, funding is collected through a tax on coal,³⁶⁸ which means that Wyoming as the largest coal-producing state in the country is both the biggest contributor and beneficiary.³⁶⁹ Current expenditures under the program pri-

³⁶⁰ See Coral Davenport, McConnell Urges States to Help Thwart Obama's 'War on Coal,' N.Y. Times (Mar. 19, 2015), https://www.nytimes.com/2015/03/20/us/politics/mitch-mcconnell-urges-states-to-help-thwart-obamas-war-on-coal.html (discussing strategic efforts to undermine support for the Clean Power Plan).

³⁶¹ See Biography, U.S. Congressman Hal Rogers, https://halrogers.house.gov/biography (last visited Sept. 30, 2018) (indicating Harold Rogers was Chairman of the House Appropriations Committee from 2011 to 2016).

³⁶² RECLAIM Act of 2016, H.R. 4456, 114th Cong. (2016).

³⁶³ See Cosponsors: H.R. 4456—RECLAIM Act of 2016, Congress.gov, https://www.congress.gov/bill/114th-congress/house-bill/4456/cosponsors (last visited Sept. 30, 2018). Original cosponsors include Matt Cartwright (D-PA), Evan Jenkins (R-W.Va), Morgan Griffith (R-VA), and Donald Beyer, Jr. (D-VA). *Id.*

³⁶⁴ Editorial, *How Do We Ditch Dirty Coal Power Without Sending Miners to the Unemployment Line?*, L.A. TIMES (Mar. 4, 2016), http://www.latimes.com/opinion/editorials/la-ed-adv-coal-mines-jobs-20160303-story.html.

³⁶⁵ See Higdon, supra note 359.

³⁶⁶ Letter from Matthew H. Mead, Governor of Wyo., to Wyo. Cong. Delegation (Mar. 1, 2016), https://www.eenews.net/assets/2016/03/04/document_daily_03.pdf.

³⁶⁷ See Dylan Brown, \$1B Cleanup and Aid Bill Attempts to Bridge East-West Divide, E&E News: Greenwire (Sept. 29, 2016), https://www.eenews.net/stories/1060043632.

³⁶⁸ See 30 U.S.C. §§ 1231–32 (2012).

³⁶⁹ See Office of Surface Mining, Reclamation, & Enf't, Annual Report 2012, at 13 (2012), https://www.osmre.gov/resources/reports/2012.pdf.

marily go to the states in which the revenues were generated.³⁷⁰ Proposed changes in funding would allow for withdrawal from the unappropriated balance of the fund to states for economic redevelopment projects.³⁷¹ In the short term, Wyoming would not lose funding, since the reallocated funds had been unappropriated for years.³⁷² Regardless, because Wyoming's coal mine operators contribute disproportionately to the current fund, changes in the funding model would constitute a subsidy to states with declining coal production, primarily West Virginia and Kentucky.³⁷³ For that reason, states like Wyoming might fear that tweaking the funding model may result in more money leaving the state than coming back in the long term.

The RECLAIM Act was reintroduced in 2017,³⁷⁴ but the bill has similarly failed to gain traction. During a hearing in the Committee on Appropriations, Representative Alan Lowenthal, a Democrat from California, indicated skepticism regarding the lack of conditions attached to the funding³⁷⁵ given that Wyoming had been criticized for using such funds to support programs unrelated to coal or the coal economy.³⁷⁶ The bill has not moved past the committee phase.³⁷⁷ Senator Joe Manchin of West Virginia introduced a companion bill of

³⁷⁰ Abandoned Mine Land Reclamation Program, U.S. DEP'T OF INTERIOR, https://useiti.doi.gov/how-it-works/aml-reclamation-program/ (last visited Sept. 30, 2018) (stating that 50% of funding goes to the states that originate the funding, 30% to states that have historically mined but do not currently produce revenues, and 20% to additional federal expenditures).

³⁷¹ See Investing in Coal, supra note 344.

³⁷² See Abandoned Mine Land Reclamation Program, supra note 370 (showing the growth of the Abandoned Mine Land fund's unappropriated balance since 1989, now amounting to over \$2 billion).

³⁷³ See Coal Data Browser, U.S. Energy Info. Admin., https://www.eia.gov/beta/coal/data/browser/ (last visited Sept. 30, 2018) (showing that West Virginia's aggregate coal mine production declined nearly 42% between 2001 and 2015 and declined nearly 55% in Kentucky during the same period; conversely, Wyoming's production was marginally higher over the same period, albeit down 19% from a high in 2008).

³⁷⁴ See RECLAIM Act of 2017, H.R. 1731, 115th Cong. (2017).

³⁷⁵ Revitalizing the Economy of Coal Communities by Leveraging Local Activities and Investing More (RECLAIM) Act of 2017: Hearing on H.R. 1731 Before Subcomm. on Energy and Mineral Resources of the H. Comm. on Natural Resources, 115th Cong. 2–3 (2017) (statement of Rep. Lowenthal).

³⁷⁶ OFFICE OF INSPECTOR GEN., REPORT NO. 2016-EAU-007, OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT'S OVERSIGHT OF THE ABANDONED MINE LANDS PROGRAM 5 (2017), https://www.doioig.gov/sites/doioig.gov/files/FinalEvaluationReport%20_OSMRE%20AML_033017_Public.pdf ("Wyoming, Montana, and Texas... continually spend significant portions of their... grant money on non-coal projects while hazardous coal projects remain unfunded... Wyoming is diverting... grant funds to other projects instead of giving coal reclamation projects top priority.").

³⁷⁷ Cosponsors: H.R. 1731—RECLAIM Act of 2017, Congress.gov, https://www.congress.gov/bill/115th-congress/house-bill/1731/cosponsors (last visited Sept. 30, 2018) [hereinafter Cosponsors: RECLAIM Act of 2017].

the same name, but it has not moved beyond a referral to the Senate Committee on Energy and Natural Resources.³⁷⁸

In summary, while the Obama Administration's POWER Initiative distributed some already appropriated funds to compensate coal communities experiencing job losses, it does not appear that the program will survive the change of administrations in a meaningful way. And legislative efforts to appropriate additional funds for these purposes appear to be foundered, despite bipartisan support in Congress.³⁷⁹ This stalled legislative action underscores the obstacles facing congressional responses to populations burdened by environmental regulation. The POWER Initiative, however, provides a model for an executive branch response. The next Part argues for institutionalizing a process for identifying distributional harms caused by regulations, and for designing and implementing executive branch responses.

IV EMPOWERING THE EXECUTIVE BRANCH

This Part argues for a greater role for the executive branch in compensating populations disproportionately burdened by regulation. A new institutional structure is needed to proactively monitor economically significant regulations for unusually large negative distributional effects on particular groups and to coordinate appropriate executive responses.

Although the authority to enact laws and approve spending resides in Congress, the President wields substantial tools for unilateral policymaking through the federal bureaucracy. Indeed, the trend over the last few decades has been one of increasing unilateral action by the President.³⁸⁰ Much of the literature on the President's institutional capacity emphasizes control over the regulatory activities of federal agencies.³⁸¹

This Article moves the literature in a new direction in two different ways. First, contrary to the Kaplow and Shavell orthodoxy, it argues that in certain instances, regulatory action should pay greater attention to distributional concerns, and suggests an institutional

³⁷⁸ RECLAIM Act of 2017, S. 738, 115th Cong. (2017).

³⁷⁹ See Cosponsors: RECLAIM Act of 2017, supra note 377 (reporting that of the twenty-five cosponsors, twenty-two are from states within the Appalachian region).

³⁸⁰ See Terry M. Moe & William G. Howell, *The Presidential Power of Unilateral Action*, 15 J.L. Econ. & Org. 132, 156–61 (1999).

³⁸¹ See Elena Kagan, Presidential Administration, 114 HARV. L. REV. 2245, 2246–53 (2001). For an original, seminal example, see Terry M. Moe & Scott A. Wilson, Presidents and the Politics of Structure, 57 L. & CONTEMP. PROBS. 1, 15–24 (1994).

design better able to achieve this objective than prior efforts. Second, and more aggressively, it recommends the use of the President's power to direct federal resources to populations harmed by regulatory action; the focus here is on the executive power to redistribute, rather than on the power to regulate. Section A evaluates how the institutional capabilities of the executive branch can best be deployed to assist communities negatively affected by regulation. Section B proposes that the Office of Information and Regulatory Affairs (OIRA) monitor the distributional consequences of economically significant rules and argues for the creation of a standing interagency working group that could be mobilized to assist communities seriously burdened by regulatory actions.

A. Institutional Capabilities of the President

Recent scholarship on the presidency has recognized an increasingly broad ambit of unilateral presidential power, including the power to exert strong influence and control over the federal administrative bureaucracy.³⁸² This Section analyzes the types of presidential authority over agency action, which can be categorized as the powers to "centralize," "politicize," and "pool" agency resources.³⁸³ It explores the limitations of OIRA's centralizing function, arguing that it has a primarily reactive mission and lacks the institutionalized capacity for proactive policymaking.³⁸⁴ It then explores the budgetary and statutory constraints on presidential authority and the ways in which presidents have historically overcome them.

1. Centralization, Politicization, and Pooling Powers

The powers available to the President for controlling agency behavior are often discussed in terms of "politicization"³⁸⁵ and "centralization."³⁸⁶ Recent scholarship by Daphna Renan adds to these

 $^{^{382}}$ See William G. Howell, Power Without Persuasion 3–8 (2003); Kagan, supra note 381, at 2246.

³⁸³ Moe & Wilson, *supra* note 381, at 17–19; Daphna Renan, *Pooling Powers*, 115 COLUM. L. REV. 211, 213 (2015).

³⁸⁴ See Revesz & Livermore, supra note 35, at 153–57 (arguing that OIRA operates primarily to scrutinize proposed regulations rather than spur new ones).

³⁸⁵ Renan, *supra* note 383, at 243–44, 243 n.164 (citing Terry Moe as providing the "classic account" of politicization and centralization as central as "'two basic developmental thrusts' of modern presidencies"); *see* Terry M. Moe, *The Politicized Presidency, in* The New Direction in American Politics (John E. Chubb and Paul E. Peterson eds., 1985); *see also* Daniel Galvin & Colleen Shogan, *Presidential Politicization and Centralization Across the Modern-Traditional Divide*, 36 Polity 477 (2004) (arguing that the capacity and tendency for presidents to politicize and centralize is not a modern phenomenon, but can be observed in 19th century presidents as well).

³⁸⁶ Renan, *supra* note 383, at 243-44.

categories the concept of "pooling;"³⁸⁷ that is, "mixing and matching resources disbursed across the bureaucracy" to implement policies not contemplated by any particular congressional act.³⁸⁸

Politicization consists of staffing "loyal, ideologically compatible people in pivotal positions" throughout the federal bureaucracy with the ultimate goal of "ensur[ing] that important bureaucratic decisions are made, or at least overseen and monitored, by presidential agents."³⁸⁹ Thus, by exercising the appointment and removal powers, the President can assemble an administrative bureaucracy that shares his goals and is receptive to direction from the White House.

Centralization consists of establishing structures within the executive branch in order to "shift the locus of effective decisionmaking authority to the center." The principal example of centralization is OIRA review of agency rulemaking. Conducted within the Office of Management and Budget (OMB), OIRA review is the most powerful and well-established institution for executive control over administrative action. Since the Reagan administration, OIRA has been charged with reviewing economically significant agency actions—defined as those actions likely to result in an annual effect on the economy of \$100 million or more—to ensure they take cost-benefit analysis into account. Executive review has long been "justified on the grounds that it would coordinate and harmonize the activities of the disparate federal agencies."

Despite the stated goal of coordination, OIRA has traditionally behaved as a reactive body. Moreover, it is not properly resourced to

³⁸⁷ Id. at 213.

³⁸⁸ Id.

³⁸⁹ Moe & Wilson, *supra* note 381, at 18.

³⁹⁰ Id.

³⁹¹ See William F. West, Presidential Leadership and Administrative Coordination: Examining the Theory of a Unified Executive, 36 Presidential Stud. Q. 433, 449 (2006) ("[OIRA review] is the most direct and centralized mechanism [presidents] possess for influencing the exercise of delegated authority."); see also Letter from Cass R. Sunstein to Lisa Jackson, supra note 50 (conveying the President's instructions and describing OIRA's influential role in the process).

³⁹² See Exec. Order No. 12,866, 3 C.F.R. § 638 (1993), reprinted in 5 U.S.C. § 601 app. at 557–61 (1994); Exec. Order No. 12,291, 3 C.F.R. § 127 (1981), reprinted in 5 U.S.C. § 601 app. at 473–76 (1988).

¹393 See REVESZ & LIVERMORE, supra note 35, at 175. The original Reagan executive order included minimizing duplication as among the purposes of regulatory review. "The second Reagan executive order, which set out the annual regulatory planning process, also created a 'coordinated process,' to 'increase the accountability of agency heads' and to 'enhance public and Congressional understanding of the administration's regulatory objectives.'" *Id.* (quoting Exec. Order No. 12,291). President Clinton likewise promulgated a coordinative mandate for OIRA in his executive order, which "seeks 'to enhance planning and coordination' of new and existing regulation." *Id.* (quoting Exec. Order No. 12,866).

perform a coordinative or proactive policy-creation function.³⁹⁴ It has routinely failed to identify areas of potential cooperation and to spur agencies to promulgate regulations on its own initiative.³⁹⁵ The Reagan administration created OIRA regulatory review with an eye to curbing federal regulatory activity.³⁹⁶ Although subsequent administrations, including Clinton's³⁹⁷ and Obama's,³⁹⁸ issued their own executive orders to update the instructions for regulatory review, OIRA has continued to function as a clearinghouse for reviewing regulations to make sure that the "benefits of the intended regulation justify its costs."³⁹⁹ Thus, despite being the primary mechanism for centralized executive review of administrative law, OIRA's current structure is ill suited to perform a proactive policymaking function, and in particular, to be a proactive vehicle for addressing the adverse distributional consequences of regulation.

OIRA, however, is not the only mode of centralization within the executive branch. Centralization takes place whenever presidents develop policies or appoint personnel meant to oversee and direct agency behavior. 400 Efforts of this sort are facilitated in part by the

³⁹⁴ See id. at 176 ("OIRA resources have traditionally been stretched thin just in reviewing the cost-benefit analyses prepared by agencies for important rules."). Though there have been some efforts to spur regulation from within OIRA, these have mostly been informal and ad hoc. See id. at 153–57; Jason Marisam, The President's Agency Selection Powers, 65 Admin. L. Rev. 821, 851–53 (2013) (arguing that Cass Sunstein tried and failed to transform OIRA into a pro-regulatory force).

³⁹⁵ See Revesz & Livermore, supra note 35, at 153 ("OIRA mostly seeks to ensure that the agency regulation is not too stringent OIRA does not generally look into whether regulation is too lax OIRA, then, tends to act as a one-way ratchet turning regulation down but not up."); Id. at 176 ("[Regulatory review has] largely left the task of identifying potential areas of cooperation and conflict to the agencies themselves, with no centralized review of the overall regulatory effort taking place."); Marisam, supra note 394, at 853 ("OIRA analysts are mostly experts at reviewing regulations. They have little or no experience creating policy proposals that generate benefits." (citation omitted)); West, supra note 391, at 445 ("[I]nterviews with OIRA officials indicate that little if any effort is made in the review process to think about the implementation of different programs in a comprehensive and comparative way ").

³⁹⁶ See Bagley & Revesz, supra note 46, at 1263–80; Marisam, supra note 394, at 851–53; West, supra note 391, at 441–42.

³⁹⁷ Exec. Order No. 12,866, 3 C.F.R. § 638 (1993), reprinted in 5 U.S.C. § 601 app. at 557–61 (1994).

³⁹⁸ Exec. Order No. 13,563 § 1(c), 3 C.F.R. § 215 (2012), reprinted in 5 U.S.C. § 601 app. at 816–17 (2012).

³⁹⁹ Exec. Order No. 12,866; *see also* West, *supra* note 391, at 442 ("Although Bill Clinton replaced E.O. 12291 with his own E.O. 12866, the process and organizational structure of review were changed relatively little during his administration . . . "). The first executive order mandating OIRA review, issued under Reagan, mandated that benefits "outweigh" the costs. Exec. Order No. 12,291, 3 C.F.R. § 127 (1981), *reprinted in* 5 U.S.C. § 601 app. at 473–76 (1988).

⁴⁰⁰ See generally Eloise Pasachoff, The President's Budget as a Source of Agency Policy Control, 125 Yale L.J. 2182, 2188-89 (2016) (arguing that while OIRA review has been

establishment of units within the Executive Office of the President, which the President can finance with appropriated discretionary funds. The continuing existence of such units is subject to congressional approval through the appropriations process. 401 Congress, however, has historically granted broad authority to the President to organize the Executive Office of the President as he sees fit. And presidents have been relatively unconstrained in deploying this authority. 402

Recent presidents have increasingly exercised the powers of politicization and centralization. In an influential article, now Justice Elena Kagan documented a concerted effort by the Clinton administration to coordinate policy across the administrative state.⁴⁰³ In particular, President Clinton issued a strikingly higher number of directives (through executive orders) to agencies regarding rulemaking and policy than had his predecessors.⁴⁰⁴ In general, President Clinton sought both to exercise greater control over the bureaucracy and to represent agency actions as part of his administration's policy agenda, claiming credit for their actions.⁴⁰⁵

the subject of much of the literature on presidential power over agency action, the OMB's heavy involvement in "the preparation of the President's budget, the execution of the budget that Congress eventually passes . . . and the implementation of presidential management initiatives embedded in the budget" represent a substantial source of executive control over agency policy and spending).

 401 Harold C. Relyea, Cong. Research Serv., 98–606 GOV, The Executive Office of the President: An Historical Overview 10 (2008).

 402 See Moe & Wilson, supra note 381, at 14, 20–24 (citing John Hart, The Presidential Branch (1987)).

⁴⁰³ See Kagan, supra note 381, at 2282 (describing how the Clinton administration enhanced the President's power to set the policy agendas of administrative agencies, and demonstrated that "presidential supervision of administration could operate . . . to trigger, not just react to, agency action and to drive this action in a regulatory, not deregulatory, direction"); see also Robert V. Percival, Who's in Charge? Does the President Have Directive Authority over Agency Regulatory Decisions?, 79 FORDHAM L. REV. 2487, 2511–13 (2011) (describing regulatory review during the Clinton administration).

⁴⁰⁴ See Percival, supra note 403, at 2511 ("President Reagan issued only nine directives to agencies, and President George H.W. Bush issued only four... President Clinton issued 107 presidential directives, including many directing agencies to take action to address particular problems."). Kagan notes that prior presidents might have exercised power over agency heads in other ways—for example, by leveraging agency heads' loyalty to the president, and relying on the president for budgetary, legislative, and appointment matters. Kagan, supra note 381, at 2298. Nonetheless, Kagan concludes, "Clinton's use of directives at the least signified a change in the form of presidential involvement in administrative decisionmaking. The unofficial became official, the subtle blatant, and the veiled transparent" Id. at 2298–99.

⁴⁰⁵ Kagan argues that Clinton modified OIRA review to make it more pro-regulatory, and asserted ownership over agency actions (sometimes before they were completed), presenting them as the product of presidential administration and thereby exerting pressure on agencies to execute against his public messaging. Kagan, *supra* note 381, at 2299–302.

Just as President Clinton ushered in the practice of issuing directives to agency heads, President Obama innovated in a different area of presidential control: the appointment of policy "czars"—advisors, not subject to Senate confirmation, tasked with "ensur[ing] that policymakers across the executive branch work toward the President's . . . agenda."406 While Obama was not the first president to deploy White House staff to exert influence over agency decisionmaking,⁴⁰⁷ one commentator notes that his czar system was distinctive in at least three ways: Obama's czars were experts in policy rather than politics,⁴⁰⁸ they were often more highly qualified than their cabinet counterparts,⁴⁰⁹ and their policy portfolios "roughly parallel[ed] the portfolios of cabinet agencies."⁴¹⁰ Appointing such czars was a mechanism "to magnify his control over agency action in domestic policy."⁴¹¹

Finally, by "pooling" agency powers, the President can combine agency resources to augment administrative power in pursuit of a particular policy agenda, "creat[ing] a toolkit different in kind from the tools available to [any particular] agency acting alone."⁴¹² For example, one agency's legal authority could be combined with the institutional knowledge or expertise of another agency to effectuate a given policy agenda.⁴¹³ The joint rulemaking conducted by the EPA and the National Highway Traffic Safety Administration (NHTSA) to regulate automotive fuel economy standards provides an example of

⁴⁰⁶ Exec. Order No. 13,507, 74 Fed. Reg. 17,071 (Apr. 8, 2009); see also Cary Coglianese, Presidential Control of Administrative Agencies: A Debate over Law or Politics?, 12 U. Pa. J. Const. L. 637, 638–39 (2010) (noting that President Obama quickly appointed a number of "czars" following his inauguration); Aaron J. Saiger, Obama's "Czars" for Domestic Policy and the Law of the White House Staff, 79 FORDHAM L. Rev. 2577 (2011) (explaining President Obama's system of "czars" and its implications for presidential influence over agencies).

⁴⁰⁷ See Moe & Wilson, supra note 381, at 18-19.

⁴⁰⁸ See Saiger, supra note 406, at 2586-87, 2589-90.

⁴⁰⁹ See id. at 2577–78. Saiger offers the examples of highly qualified czars, including Carol Browner, who "had served as EPA Administrator in the Clinton administration and was more senior, more experienced, and better known" than Lisa Jackson, Obama's choice for EPA administrator, and Lawrence Summers, who would work opposite "his protégé" Timothy Geithner, Obama's Secretary of the Treasury. *Id.*

⁴¹⁰ Id. at 2586-89.

⁴¹¹ *Id.* at 2583. Saiger notes that Obama's czar appointments were met with congressional resistance, leading to the elimination and defunding of several czar positions. *Id.* at 2578–79 (citing Department of Defense and Full-Year Continuing Appropriations Act, H.R. 1437, 112th Cong. § 2262 (2011) (enacted) (defunding czar's offices for health, climate, the automobile industry, and urban affairs)).

⁴¹² Renan, supra note 383, at 255.

⁴¹³ See id. at 223–28, 247 ("With pooling . . . the President's canvas is the entire administrative state. The opportunities to choose among regulatory tools are no longer grounded in, or constrained by, a particular statutory scheme.").

this type of pooling.⁴¹⁴ While NHTSA was statutorily authorized to promulgate such standards, the EPA had, over years, developed expertise in automotive engineering "during a time when Congress had prohibited NHTSA from accruing such information, knowledge, and skill."⁴¹⁵ NHTSA relied on the EPA's expertise and its own statutory regulatory authority, and the joint effort "generated NHTSA's first increase in fuel economy standards for cars in nearly thirty years."⁴¹⁶ Other types of pooling include using one agency's legal capacity as a lever to enhance the regulatory capacity of another agency,⁴¹⁷ and blending legal tools to facilitate results not achievable by any agency acting alone.⁴¹⁸

A powerful, recent example of pooling can be found in the Interagency Working Group on the Social Cost of Carbon (IWG), which was established in 2009⁴¹⁹ "[t]o facilitate accounting for the costs of climate impacts, and the benefits of reducing carbon pollution."⁴²⁰ That year, the IWG developed a figure for the social cost of

⁴¹⁴ See id. at 227–28. For a thorough discussion of the legal, administrative, and public policy implications of the EPA-NHTSA joint rulemaking, see Jody Freeman, *The Obama Administration's National Auto Policy: Lessons from the "Car Deal*," 35 HARV. ENVIL. L. REV. 343 (2011).

⁴¹⁵ Renan, *supra* note 383, at 227. Following a cessation of funding for NHTSA's fuel economy standards, NHTSA "experienced a substantial expertise drain in this area, including loss of professional staff and stagnating research. Through the joint-rulemaking process, NHTSA was able to rely on expertise, including research and technical skill, which the EPA had continued to accrue during those intervening years." *Id.* (citations omitted).

⁴¹⁶ *Id.* at 228. While the EPA-NHTSA joint rulemaking provides an example of combining one agency's legal authority with another's expertise, Renan identifies at least two other methods of pooling. *Id.*

⁴¹⁷ *Id.* at 221–23 (requiring companies seeking a Federal Communications Commission license to build land fiber-optic cables to agree to a "Network Security Agreement," developed by a number of national security agencies, as a precondition to license approval).

⁴¹⁸ *Id.* at 229–30 ("The [Department of Justice] and the EPA provide trainings for OSHA officers instructing them on how environmental crime laws might be brought to bear on the workplace, and OSHA identifies high-priority candidates to those agencies for prosecution.").

⁴¹⁹ U.S. Envtl. Prot. Agency, Social Cost of Carbon 2 (2016), https://www.epa.gov/sites/production/files/2016-12/documents/social_cost_of_carbon_fact_sheet.pdf.

⁴²⁰ Interagency Working Grp. on Soc. Cost of Carbon, Response to Comments: Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12,866, at 1 (2015), https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/scc-response-to-comments-final-july-2015.pdf (explaining that the IWG was comprised of representatives from numerous federal agencies including the Council of Economic Advisers, Council on Environmental Quality, Department of Agriculture, Department of Commerce, Department of Energy, Department of Transportation, Environmental Protection Agency, National Economic Council, Office of Management and Budget, Office of Science and Technology Policy, and Department of the Treasury); Richard L. Revesz, Cost-Benefit Analysis and the Structure of the Administrative State: The Case of Financial Services Regulation, 34 Yale J. on Reg. 545, 581 (2017).

carbon, which it made available for public comment before adopting it in 2010,⁴²¹ and revising it in 2013.⁴²² By July 2015, the figure had been used in thirty-four proposed rulemakings⁴²³ performed by five agencies.⁴²⁴

The powers of the President to politicize, centralize, and pool agency resources can be leveraged to initiate novel policy agendas not specifically contemplated by the legislature. As elaborated in Section B, this Article advocates exercising these powers to address distributional harms caused by environmental regulations. Although the executive is constrained by Congress's spending power, as discussed below, there is still significant discretion within existing statutory and budgetary frameworks for unilateral executive action.

2. Spending Power

The President is constrained in exercising unilateral power to the extent that he lacks the funding or statutory authority to do so. The power of Congress to appropriate—or withhold—funds for executive initiatives is a major constraint on unilateral presidential power, as evidenced by the battle over the POWER+ Plan described above in Part III.⁴²⁵ Nevertheless, the President possesses substantial leeway and leverage with which to maneuver to secure the funding he needs, and to distribute it as he wishes.⁴²⁶

First, the President plays a central role in congressional passage of an annual budget. Since the Budget and Accounting Act of 1921 was enacted, the President has been responsible for preparing a draft budget, which is submitted to Congress each year in February.⁴²⁷ The budget is comprehensive, and vetted by the OMB to ensure that agency funding requests comport with a centralized executive policy platform.⁴²⁸ Congress relies heavily on the President's submitted budget, and the President typically supports his proposal with an active media campaign, appeals to representatives and senators, and, ultimately, the threat of veto if Congress departs significantly from the

⁴²¹ Interagency Working Grp. on Soc. Cost of Carbon, supra note 420, at 2.

⁴²² *Id*.

⁴²³ *Id.* at 4.

⁴²⁴ See Revesz, supra note 420, at 581.

⁴²⁵ See supra Section III.B.2.

⁴²⁶ See generally John Hudak, Presidential Pork: White House Influence over the Distribution of Federal Grants (2014) (arguing that presidents have substantial power to secure and direct the issuance of discretionary grants, which they often use to support their most important political constituents). "[P]residents manipulate the distribution of federal funds to advance their electoral interest." *Id.* at 3.

⁴²⁷ Christopher R. Berry et al., *The President and the Distribution of Federal Spending*, 104 Am. Pol. Sci. Rev. 783, 785 (2010).

⁴²⁸ Id.

President's proposal.⁴²⁹ Moreover, as the size of the federal government has increased, so has the length and complexity of the budget, making it less practical for Congress to carefully monitor the spending of the thousands of agencies funded.⁴³⁰ Thus, as appropriations are increasingly targeted to less specific agency functions, the President's discretion over the use of those funds increases.⁴³¹

Second, the President can coordinate already appropriated funds in the present fiscal year to serve a novel policy agenda not contemplated during the appropriation itself. Such was the case with the grants issued in fiscal year 2015 under the POWER Initiative, as is further explored below. To this end, funding, for example, can be drawn from contingency accounts—that is, funding available only under certain circumstances, like a national emergency. Such accounts are often not bound by strict legislative criteria. As to these funds, presidents often use them not to direct emergency relief programs, but instead supports projects, foreign and domestic, that Congress itself opposes. Presidents can also request moneys for popular initiatives and then, once secured, siphon off considerable portions to controversial programs and agencies that they have unilaterally created.

Relatedly, as William Howell explains, the political barriers to funding a new program are greater than appropriating funds for one

⁴²⁹ *Id.* at 785–86. Berry et al. note that when deliberating about a budget, Congress "must contend with an actively engaged president," who advocates forcefully, in public and private, for congressional deference. *Id.* at 785. "During the . . . appropriations process, the president deploys a small army of experts to testify on behalf of his budget priorities. Concurrently, the president himself weighs in with direct solicitations . . . public appeals, and ultimately the threat of a veto . . . to control the content of the final budget." *Id.* at 785–86 (citations omitted); *see also* Allen Schick, The Federal Budget: Politics, Policy, Process 84–118 (3d ed. 2008) (providing a detailed account of the executive branch's role in influencing the budget process).

⁴³⁰ Howell, *supra* note 382, at 123–24.

⁴³¹ Id. at 124.

⁴³² See William G. Howell, *Unilateral Powers: A Brief Overview*, 35 Presidential Stud. Q. 417, 428 (2005) ("[G]iven the size of the overall budget and the availability of discretionary funds, presidents occasionally find ways to secure funding for agencies and programs that even a majority of members of Congress oppose."). For a detailed description of reprogramming and transferring funds after the appropriations process, see Louis Fisher, Presidential Spending Power 75–78, 99–107 (2015).

⁴³³ See infra Section IV.B.2.

⁴³⁴ FISHER, *supra* note 432, at 66–71.

⁴³⁵ Howell, *supra* note 382, at 124–25. As Howell notes, rather than tie up these funds with strict legislative criteria, Congress tolerates occasional presidential overreach: "Electorally, it usually does not make sense for members of Congress to cut [contingency] accounts altogether. All it takes is one major disaster—an American serviceman killed or an embassy bombed—for members to lose their seats." *Id.* at 125.

⁴³⁶ *Id.* at 124.

already initiated by the President.⁴³⁷ For example, when John F. Kennedy founded the Peace Corps—despite lacking congressional approval—using a contingency account, Congress considered the question of continued funding for the program only once it had almost 400 Washington employees and 600 volunteers at work in eight countries.⁴³⁸ As Howell notes, "Congress, then, was placed in the uncomfortable position of having to either continue funding projects it opposed, or eliminate personnel who had already been hired and facilities that had already been purchased. Not surprisingly, Congress stepped up and appropriated all the funds Kennedy requested."⁴³⁹ Thus, members of Congress may feel that once a program has already taken effect, it is politically more hazardous to defund it than to reappropriate the funds; by the same token, it is *less* politically fraught to appropriate funds for an existing program than to start a new one through legislation.

Finally, although the President's regulatory and spending powers are limited to those actions that Congress has authorized, agencies—and, therefore, the President—are empowered with a breadth of discretion by legislation already on the books.⁴⁴⁰

Especially important for the purposes of this Article is the discretion the President has to control the distribution of federal discretionary grants, which are public funds made available to organizations based on statutory criteria.⁴⁴¹ The distribution of discretionary grants, which can total well over \$100 billion per year,⁴⁴² is subject to signifi-

⁴³⁷ Howell, *supra* note 432, at 427 ("[T]he appropriations process is considerably more streamlined, and hence easier to navigate, than the legislative process. It has to be, for Congress must pass a continually expanding federal budget every year").

⁴³⁸ *Id.* at 428.

⁴³⁹ Id.

⁴⁴⁰ See Moe & Wilson, supra note 381, at 23 ("[T]he president is greatly empowered through statutory law whether Congress intends it or not."). As Moe and Wilson note, the President enjoys both the explicit powers delegated to the executive by statute, as well as the implicit powers generated by statutory ambiguities: "When new statutes are passed . . . they increase the president's total responsibilities and give him a formal basis for extending his authoritative reach into new realms. At the same time, they add to the total discretion available for presidential control, as well as to the resources contained within the executive." Id. For a thorough look at congressional grants of statutory discretion to the president, see David Epstein & Sharyn O'Halloran, Delegating Powers: A Transaction Cost Politics Approach to Policy Making Under Separate Powers (1999) (using transaction cost analysis to explore the relationship between legislative and executive actors).

⁴⁴¹ See Hudak, supra note 426, at 12 ("First, grant programs are designed and developed. Second, the programs are made public and prospective applicants are invited to seek funds. Third, applications for funds are evaluated and accepted or rejected. Fourth, grant programs allocate funds to eligible applicants.").

⁴⁴² *Id.* at 7; see also id. at 38 ("[Between 1996 and 2008,] the bureaucracy doled out more than \$962,000,000,000 in grants, allocated through 3,692,084 grant disbursements.").

cant control by the President. Although executive control over discretionary grants varies by program, ⁴⁴³ it is not feasible for Congress to direct all federal spending with a high level of specificity. ⁴⁴⁴ Arguing that presidents wield discretionary grants to stay in office, one commentator finds that between 1996 and 2008, swing states received about 7.5% more grants than other states—an annual difference of tens of millions of dollars per state. ⁴⁴⁵

Although the congressional spending power formally constrains the President's ability to leverage agency resources to pursue a novel policy agenda, the President retains substantial leeway to operate within existing statutory and budgetary frameworks. This power, together with the powers to politicize, centralize, and pool agency resources, gives the President a powerful tool kit for undertaking unilateral action.

3. Using Presidential Powers to Coordinate Executive Policy

Armed with the powers of politicization, centralization, pooling, and discretionary spending, modern presidents have demonstrated the capacity to initiate and execute sweeping policy agendas by coordinating administrative activity. For example, in the early 2000s, President Bush mobilized the administrative bureaucracy to redirect over \$1 billion in aid to religious organizations. Some funds were redirected through existing programs, while others constituted new discretionary grants awarded to such organizations.

In addition, President Bush created new bureaucratic structures tasked with increasing the flow of federal grants to religious organiza-

⁴⁴³ Hudak explains that "in the Omnibus Appropriations Act of 2009, Congress authorize[d] and appropriate[d] to the Department of Justice '\$178,000,000 for discretionary grants to improve the functioning of the criminal justice system, to prevent or combat juvenile delinquency, and to assist victims of crime,'" thus delegating broad discretion to DOJ. *Id.* at 12 (quoting Omnibus Appropriations Act, 2009, Pub. L. No. 111-8, § 5, 123 Stat. 524, 580 (2009)). In contrast, other grants provide highly detailed standards as to distribution. *See id.* at 13–14 (discussing an example of congressional appropriations with significant conditions).

⁴⁴⁴ *Id.* at 11 ("Even if Congress preferred to make every federal distributive decision throughout the nation, lack of time, expertise, and staff requires that the federal bureaucracy take on much of that responsibility.").

⁴⁴⁵ *Id.* at 50–53. Hudak's data further shows that grant allocations increase by about ten percent in the two years before a presidential election, further evidencing presidential control: "If the grant distribution process were dominated by Congress, one would expect [not to see a change] because of the frequency of congressional elections." *Id.* at 50.

⁴⁴⁶ Berry et al., supra note 427, at 786.

⁴⁴⁷ *Id.*; see also Anne Farris et al., Rockefeller Inst. of Gov't, The Expanding Administrative Presidency: George W. Bush and the Faith-Based Initiative (2004) (documenting President Bush's use of executive action to advance faith-based initiatives).

tions.⁴⁴⁸ The initiative was coordinated by the White House Office of Faith-Based and Community Initiatives and executed in part by faith-based "centers" that were instituted in the Departments of Education, Labor, Justice, and Health and Human Services.⁴⁴⁹ As part of the effort, these centers offered training for religious and community organizations on how to apply for federal grants.⁴⁵⁰ The centers published a catalogue of federal aid grants, which "as of 2004 totaled more than \$50 billion, for which religious organizations could apply."⁴⁵¹ Finally, through rule changes, the centers increased access of faith-based organizations to "daycare, job-training, nutrition, anti-poverty, housing, anti-drug, and educational programs."⁴⁵²

President Bush's faith-based community initiative was motivated by the dual desires to address social welfare issues by empowering local community organizations and to strengthen collaboration between faith-based organizations and the federal government.⁴⁵³ By advancing the faith-based initiative with existing agency resources rather than seeking legislative action, Bush "bypass[ed] congressional opposition from a variety of Democrats, as well as Republicans who opposed taking on issues of poverty in ways that 'sounded like a Democratic idea.'"⁴⁵⁴

The faith-based initiative serves as a powerful example of the presidential capability, through agency direction and coordination, to unilaterally change policy and redirect federal funds. Section B argues that, in appropriate circumstances, the President should use these powers—which derive from the powers to politicize, centralize, pool, and discretionarily spend—in order to address the needs of populations disproportionately burdened by environmental regulation.

B. Addressing Distributional Inequities

This Section sets forth a blueprint for how the executive branch can leverage its considerable institutional powers to address significant negative distributional consequences arising from regulatory activity. First, the President should institutionalize the practice, within

⁴⁴⁸ Berry et al., *supra* note 427, at 786.

⁴⁴⁹ *Id*.

⁴⁵⁰ *Id*.

⁴⁵¹ *Id*.

⁴⁵² Id.

⁴⁵³ See Michael Leo Owens & Amy Yuen, The Distributive Politics of "Compassion in Action": Federal Funding, Faith-Based Organizations, and Electoral Advantage, 65 Pol. Res. Q. 422, 423–24 (2012).

⁴⁵⁴ *Id.* at 424 (quoting Michael J. Gerson, Heroic Conservatism: Why Republicans Need to Embrace America's Ideals (and Why They Deserve to Fail if They Don't) 169 (2007)).

OIRA, of identifying serious negative distributional consequences caused by economically significant rules.⁴⁵⁵ Second, an interagency working group structure, composed of representatives from across different administrative agencies, should be created and remain "on call" to respond to such findings. Third, upon a finding by OIRA of a sufficiently significant negative distributional consequence resulting from a prospective rule, the interagency working group should mobilize to coordinate an appropriate response.

There are two types of strategies this body might pursue in response to distributional inequities caused by regulation: The first approach is mitigation, exemplified by the POWER Initiative. Under this approach, a rule that satisfies cost-benefit analysis, but that nevertheless causes severe harm to some subset population, should be accompanied by a mitigation strategy—the cost of which should not exceed the margin of benefit of the rule itself—to support that population. The second approach is rule change. If the rule itself might be deemed bad policy because of the distributional inequity it entails, and if a mitigation strategy will not be adequate to compensate the harmed group, the rule should be sent back to the agency for redrafting.

The two examples that frame this Article's discussion illustrate the relative desirability of the two different strategies. With respect to marketable trading programs for greenhouse gases, the possible negative distributional consequences do not come from the concentration of greenhouse gases in poor or minority areas. Greenhouse gases are global pollutants and their adverse health effects are the same regardless of where they are emitted. But while the emission of greenhouse gases does not have local consequences, their emissions are often correlated with the emissions of local pollutants, including particulates, which have significant negative impacts on public health. Trading schemes do not necessarily create hot spots for these pollutants; in fact, depending on the costs of pollution reduction, they

⁴⁵⁵ Although OIRA already *has* the authority to consider, where appropriate, "equity, human dignity, fairness, and distributive impacts," Exec. Order No. 13,563 § 1(c), 3 C.F.R. § 215 (2012), *reprinted in* 5 U.S.C. § 601 app. at 816–17 (2012), these considerations have not been rigorously applied. *See supra* text accompanying notes 271–80 (discussing the agency response to Executive Order 13,563).

⁴⁵⁶ See David E. Adelman, *The Collective Origins of Toxic Air Pollution: Implications for Greenhouse Gas Trading and Toxic Hotspots*, 88 Ind. L.J. 273, 275 (2013) (explaining that greenhouse gases are global pollutants and do not create hot spots).

⁴⁵⁷ See Daniel A. Farber, Pollution Markets and Social Equity: Analyzing the Fairness of Cap and Trade, 39 Ecology L.Q. 1, 6, 26 (2012) (noting that power plants and motor vehicles produce a mix of pollutants in addition to fossil fuels and that less well-mixed, non-global pollutants could be concentrated in hot spots as the result of trading schemes for global pollutants).

might disperse pollution instead of concentrating it.⁴⁵⁸ But if they do, and if those hot spots are of special concern because they are placed in disadvantaged areas, then the appropriate response could be to strengthen the regulation of the local pollutants or the enforcement of already existing regulations. This response would be more direct and more likely to be successful than a compensation scheme for reasons discussed above in Section II.A.

In contrast, consider the situation of coal miners who allege that their harm comes from environmental regulation. Even if their claims are empirically grounded, responding to them by failing to promulgate environmental regulations that have large net benefits, as is the case for the Clean Power Plan,⁴⁵⁹ would not be a defensible social policy. Instead, here, the preferred distributional approach would involve mitigating the adverse consequences resulting from the loss of jobs.

For either the mitigation or the rule-change approaches, the first step is determining an appropriate trigger. Then, if the trigger is satisfied, the question becomes how best to address it by deploying executive branch resources.

1. Trigger

In order to execute ameliorative policies aimed at populations burdened by environmental regulations, there must first be a mechanism for identifying rules that are likely to cause distributional inequities. As OIRA is currently tasked with centralized review of agency rulemaking, it is well situated to consider the distributional impacts of proposed rules and to determine when mitigation of inequities is required.

As discussed more thoroughly above,⁴⁶⁰ since the Clinton administration, it has been the stated policy of the executive branch, and of the EPA, that regulations should consider distributive impacts and equity in general⁴⁶¹ and harms to disadvantaged populations in partic-

⁴⁵⁸ See id. at 30 ("[T]here is no intrinsic or abstract tendency of cap-and-trade systems to produce hot spots or differentially direct emissions reductions toward cleaner plants rather than the dirtier plants that are more likely to impact disadvantaged communities.").

⁴⁵⁹ See U.S. Envil. Prot. Agency, EPA-452/R-15-003, Regulatory Impact Analysis for the Clean Power Plan Final Rule, at ES-22 to ES-23 (2015), https://www3.epa.gov/ttnecas1/docs/ria/utilities_ria_final-clean-power-plan-existing-units_2015-08.pdf.

⁴⁶⁰ See supra text accompanying notes 44–50.

⁴⁶¹ Exec. Order No. 12,866 § 1(a), 3 C.F.R. § 638 (1994), reprinted as amended in 5 U.S.C. § 601 app. at 802–06 (2012) ("[I]n choosing among alternative regulatory approaches, agencies should select those approaches that maximize net benefits (including . . . distributive impacts; and equity)").

ular. 462 In practice, however, the EPA has not implemented a robust, standardized method of conducting distributional analysis. 463 It is worth noting that to the extent that environmental justice concerns *are* emphasized in the executive orders and guidelines, they focus on the negative impacts on certain socially disadvantaged groups—specifically, low-income people and racial minorities. 464 Such emphasis, though motivated by the necessary imperative of protecting such groups, is underinclusive, as it ignores the possibility of grossly disproportionate distribution of costs among individuals who are not members of socially disadvantaged groups. 465

The current EPA practice is to conduct cost-benefit analysis with the objective of identifying the most *efficient* rule—that is, the rule whose aggregate benefits outweigh its aggregate costs, without regard to the distribution of those costs and benefits.

There is an extensive literature, advancing a number of competing perspectives, on methods of analyzing distributional effects of federal regulations in relation to cost-benefit analysis.⁴⁶⁶ One recommendation is to incorporate distributional values into cost-benefit analysis itself so that the cost-benefit ratio produced reflects values like equity.⁴⁶⁷ For example, analysts might assign different weights to

⁴⁶² See Exec. Order No. 12,898, 3 C.F.R. § 859 (1994), reprinted as amended in 42 U.S.C. § 4321 app. at 278–80 (2012) (requiring agencies to generally develop environmental justice strategies); Exec. Order No. 13,563, 3 C.F.R. § 215 (2012), reprinted in 5 U.S.C. § 601 app. at 816–17 (2012) (affirming the factors that agencies should consider before acting); Memorandum on Environmental Justice, supra note 226 (underscoring that all federal agencies should consider the environmental impact of federal action on minority and low-income populations).

⁴⁶³ See Office of Inspector Gen., supra note 238 (finding that the EPA has not adequately implemented the requirements of the executive order).

⁴⁶⁴ Matthew D. Adler, *Risk Equity: A New Proposal*, 32 HARV. ENVTL. L. REV. 1, 6–7 (2008).

⁴⁶⁵ Adler elaborates: "For example, a deregulatory policy that raises air pollutant levels might increase death and morbidity among individuals with respiratory diseases, including some individuals who are neither racial minorities nor have low incomes. . . . These look like potential inequalities, simply by virtue of the impact of the policies within the subpopulation of non-impoverished white individuals, and quite apart from their effect on poor individuals or racial minorities. . . . This is not to say that a policy's impact on poor individuals or racial minorities is not an equity concern. Of course it is. It is rather to say that there is an additional equity concern in these examples, which Executive Order 12,898 . . . does not capture." *Id.* at 7–8.

⁴⁶⁶ For an overview of the topic, see Matthew D. Adler & Eric A. Posner, *Rethinking Cost-Benefit Analysis*, 109 Yale L.J. 165 (1999).

⁴⁶⁷ See Matthew D. Adler, Benefit-Cost Analysis and Distributional Weights: An Overview, 10 Rev. Envtl. Econ. & Pol'y 264 (2016) (providing an introduction to distributional weights and the social welfare function); Marc Fleurbaey & Rossi Abi-Rafeh, The Use of Distributional Weights in Benefit-Cost Analysis: Insights from Welfare Economics, 10 Rev. Envtl. Econ. & Pol'y 286 (2016) (linking distributional weights and cost-benefit analysis with interpersonal comparisons). For examples of specific

the costs and benefits experienced by different groups according to those groups' relative social privilege; thus, costs borne by disadvantaged groups would be weighted more heavily. Without evaluating the merits of such an approach, this Article follows a different path. It does not recommend wholesale changes to the way in which costbenefit analysis is conducted because the current methodologies are now deeply ingrained into the fabric of U.S. administrative law. Moreover, weighting approaches can lead only to changes in the rule that would otherwise have negative distributional consequences. Such approaches do not contemplate the possibility that a rule supported through traditional cost-benefit analysis would be adopted, but then mitigated through separate measures. And, relatedly, weighted approaches do not contemplate the possibility that agencies other than the one promulgating the regulation would be the ones mitigating these adverse consequences.

Instead, agencies should report distributional inequities to OIRA alongside conventional cost-benefit analysis results. Such a report could take the form of a table showing the effects on different groups.⁴⁷⁰ Indeed, one commentator notes that "[m]any of [the] EPA's [Regulatory Impact Analyses] are already detailed enough, and make use of scientific and economic models sufficiently rich enough, that extending them to incorporate such distributional issues would

proposals, see Adler, *supra* note 464, at 2–5 (arguing that distributions of health, longevity, and income should be considered and built into a social welfare function used in costbenefit analysis); A. Myrick Freeman III, *Income Distribution and Planning for Public Investment*, 57 Am. Econ. Rev. 495, 495–96, 500–07 (1967) (arguing that a social welfare function that assigns value to equitable distribution of income change should be built into traditional cost-benefit analysis). There may be a compelling reason why weighting approaches would be ill advised, but this Article does not take a position on this question. *See, e.g.*, H. Spencer Banzhaf, *Regulatory Impact Analyses of Environmental Justice Effects*, 27 J. Land Use & Envilled L. 1, 26 (2011) (arguing that such an approach "arrogates too much power to the benefit-cost practitioner" and diminishes the capacity for policymakers to use discretion).

⁴⁶⁸ See Banzhaf, supra note 467, at 25-26.

 $^{^{469}}$ See supra Section III.A.2 for a discussion of past failures of OIRA to incorporate distributive effects in cost-benefit analyses.

⁴⁷⁰ See Banzhaf, supra note 467, at 29–30 (presenting examples of such tables); Ronald J. Shadbegian et al., Benefits and Costs from Sulfur Dioxide Trading: A Distributional Analysis, in ACID IN THE ENVIRONMENT: LESSONS LEARNED AND FUTURE PROSPECTS 241, 241–43, 250–55 (Gerald R. Visgilio & Diana M. Whitelaw eds., 2007) (analyzing the distributional benefits of sulfur dioxide regulations included in the 1990 Clean Air Act Amendments). An alternative to reporting distributional effects in a table is to report them using one or more indices quantifying equitability. See, e.g., Jonathan I. Levy et al., Quantifying the Efficiency and Equity Implications of Power Plant Air Pollution Control Strategies in the United States, 115 Envtl. Health Persp. 743, 743, 745–47 (2007) (using the Atkinson index—a mathematical tool for measuring inequality—to measure distribution of health benefits from air pollution regulations).

require only modest additional effort."⁴⁷¹ As the centralized reviewing body, OIRA should determine what level of inequity is sufficient to warrant mobilizing an executive response.

Determining the precise threshold of inequity beyond which an executive response should mobilize is outside the scope of this Article. However, such a response is appropriate only for an unusually large inequity. It is inevitable, and arguably tolerable, that some groups will be burdened more than others in the normal course of regulation. Indeed, the argument for tolerating routine inequities is that over time, the costs and benefits of regulations on particular groups will even out to some extent.⁴⁷² This Article's recommendation is reserved for instances of unusually large inequities, where one group's livelihood or health is especially at risk, as in the paradigmatic environmental justice case of further environmental burdens on poor or minority communities that are already disproportionately burdened,⁴⁷³ or where a community loses a significant portion of its employer base, perhaps as a consequence of repeated regulatory action over a long period of time, as might be for the coal miners in certain parts of Appalachia,474 or where such a community has been subjected to other serious harms, for example as a result of the lack of adequate education and health care. Through a guidance document, OIRA could provide more specific standards on this issue.

As indicated earlier in this Section, the appropriate response to a finding of unacceptable distributional consequences could be either a rule change or mitigation measures. The choice would depend on how to address the negative consequences while compromising the desirability of the underlying regulation as little as possible. OIRA, with its expertise in assessing the consequences of regulation, could be in charge of this determination. Where a rule change is the preferred approach, two situations present themselves. First, the agency that is attempting to promulgate the rule that gives rise to undesirable distributional consequences might be able to address these consequences

⁴⁷¹ Banzhaf, *supra* note 467, at 15. Banzhaf considers the example of the EPA's Regulatory Impact Analyses (RIA) for its arsenic rule and its disinfectants and disinfection byproducts rule; in such cases, the EPA "identified a distribution of costs [of improving water purity] across individual water treatment systems," which entailed determining the distribution of the systems that would be most affected by improved regulation. *Id.* Banzhaf concludes, "with these data and with this conceptual architecture, [the] EPA essentially has already approached a distributional analysis It simply did not follow through to break them out and report them in the same way." *Id.*

⁴⁷² See A. Mitchell Polinsky, *Probabilistic Compensation Criteria*, 86 Q.J. Econ. 407, 408–09 (1972). *But see* Adler & Posner, *supra* note 466, at 189 (considering and rejecting this argument). A thorough exploration of this question is beyond the scope of this Article.

⁴⁷³ See supra note 182 and accompanying text.

⁴⁷⁴ See supra text accompanying note 304.

by amending the rule. Second, the appropriate regulatory action could be within the statutory jurisdiction of a different agency. Both in this latter situation and where mitigation is the preferred response, coordinated executive branch action is necessary.

As stated above, the first step in addressing distributional harms of environmental regulations is to identify relevant populations disproportionately burdened. This Section proposes institutionalizing a procedure for rulemaking agencies to report likely distributional harms to OIRA, alongside the traditional cost-benefit analysis, as a part of the rulemaking review process. A finding of an unusually large inequity would trigger coordinated interagency response to amend the rule or mitigate the harm.

2. The POWER Initiative and IWG as Models for Action and Structure

President Obama's POWER Initiative serves as a model for the type of coordinated executive action undertaken to mitigate harms suffered by populations negatively affected by regulation. As previously discussed, the POWER+ Plan and the related RECLAIM Act, which would have entailed substantial statutory and budgetary authorization, stalled in Congress. In contrast, President Obama's POWER Initiative relied primarily on existing statutory authority and funds, and required more modest appropriations in fiscal years 2016 and 2017. The POWER Initiative has successfully made more than \$100 million in funds available to communities affected by changes in the coal industry in 2015 and 2016, and continues beyond 2017. Notably, it is an interagency effort, led by the Economic Development Administration, an agency within the Department of Commerce, but relying on the authority, resources, and institutional expertise of ten federal agencies. As a coordinated effort drawing resources and

⁴⁷⁵ See supra text accompanying notes 365–73.

⁴⁷⁶ See supra text accompanying notes 344–54.

⁴⁷⁷ Press Release, U.S. Econ. Dev. Admin., Obama Administration Announces \$65.8 Million Available for Economic and Workforce Development in Coal-Impacted Communities (Mar. 17, 2016), https://www.eda.gov/archives/2016/news/press-releases/2016/03/17/power.htm; POWER Initiative Press Release, *supra* note 345; *Assistance to Coal Communities (ACC)*, U.S. Econ. Dev. Admin., https://www.eda.gov/coal/ (last visited Sept. 30, 2018); *POWER Initiative*, Appalachian Reg'l Comm'n, https://www.arc.gov/funding/POWER.asp (last visited Sept. 30, 2018).

⁴⁷⁸ As of 2016, the POWER Initiative was described as "a community-based [a]dministration effort involving ten federal agencies working together to align, leverage and target a range of federal economic and workforce development programs and resources to assist communities and workers that have been affected by job losses in [the coal industry]." Press Release on Additional Resources for Coal Communities, *supra* note 352.

funds from a number of federal agencies to target a particular population, the POWER Initiative exemplifies precisely the type of coordinated assistance recommended by this Article.

Furthermore, the specific grants made available through the POWER Initiative exhibit the type of resources that might be mobilized as a part of an executive-led mitigation strategy. The most recent round of grants, announced in October 2016, is described as a "funding opportunity that invests in economic revitalization and workforce training in coal communities across the country" that "support[s] 42 economic and workforce development projects in thirteen states."479 A selection of grants awarded include a nearly \$1.5 million grant to Hocking College in Nelsonville, Ohio, to support a program leveraging public and private resources to provide workforce training services targeted to industry needs in north central Appalachia, "including advanced energy, automotive technology, petroleum technology, welding, and commercial driver's licenses";480 just over \$300,000 to the Centralia College Robotics Workforce Training project in Centralia, Washington, to support a workforce training initiative around robotics technology; and just over \$100,000 to Williamson Health and Wellness Center in Williamson, West Virginia, to support an initiative offering workforce training and substance abuse treatment.481

As these funds are targeting dislocated workers, they are primarily aimed at economic development and workforce training. Because they are issued in the form of discretionary grants, they support a patchwork of local organizations that will in turn support workers affected by the coal industry. This approach typifies what we might expect from a unilateral executive model of correcting distributional harms caused by regulations—a patchwork of programs imperfectly but deliberately tailored to reach a desired population. In response to other types of harms, such as health hazards of local pollution, a similar strategy might be employed to deliver targeted healthcare services.

The basic function of the POWER Initiative is to provide assistance to dislocated energy-sector workers.⁴⁸² The program follows in

⁴⁷⁹ *Id*.

⁴⁸⁰ *Id*.

⁴⁸¹ Id.

⁴⁸² Dislocated workers are understood as those who have not been discharged for cause, have at most a very small chance of being recalled to their old jobs, and have had strong prior attachment to the industry of their pre-displacement employers. Louis S. Jacobson et al., *Is Retraining Displaced Workers a Good Investment?*, 29 Econ. Persp. 47, 48 (2005). Such workers can experience especially large earnings losses compared to other job-losers because dislocated workers possess valuable skills or knowledge particular to their

the footsteps of existing job training programs for displaced workers and is provided primarily under two statutory frameworks: Trade Adjustment Assistance (TAA), which serves workers dislocated due to economic shifts caused by free trade agreements, and the Workforce Innovation and Opportunity Act (WIOA), which provides workforce development more broadly.

TAA originated in 1962 to mitigate dislocation of workers and firms affected by international trade liberalization.⁴⁸³ Most recently reauthorized in 2015, the current version of TAA offers training and reemployment services to eligible workers, income support for workers who have exhausted other available unemployment compensation, a wage insurance program to subsidize the wages of older workers who obtain reemployment at a lower wage, and a health coverage tax credit.⁴⁸⁴

WIOA, enacted in 2014, is the latest in a series of laws which also trace their roots to 1962.⁴⁸⁵ WIOA funds demand-based workforce development activities such as job training and adult education services, administered through a network of "One-Stop Centers" that coordinate a host of federal workforce development activities, including TAA benefits.⁴⁸⁶ Although WIOA benefits are available to a far larger pool of citizens, TAA benefits are significantly more generous.⁴⁸⁷

Both Presidents Richard Nixon and Barack Obama sought to consolidate disparate federal job training services into a single, more robust program to assist any and all dislocated workers, rather than

industries or companies that may not be transferrable. Because such skills are developed on the job over time, earnings losses are largest for longer-tenured workers. *See* Louis S. Jacobson et al., The Hamilton Project, Policies to Reduce High-Tenured Displaced Workers' Earnings Losses Through Retraining 8–9 (2011).

⁴⁸³ HORNBECK, CONG. RESEARCH SERV., *supra* note 330, at 6–7. This was the first legislation offering adjustment assistance relative to free trade; prior to it, the only protection for workers affected by free trade was temporary protectionism in the form of higher tariffs or quotas. EDWARD H. ALDEN, FAILURE TO ADJUST: HOW AMERICANS GOT LEFT BEHIND IN THE GLOBAL ECONOMY 115–18 (2017). Since 1962, the TAA has undergone periodic changes under different administrations, and has faced a variety of administrative and funding difficulties. For a brief history of the evolution of TAA, see *id.* at 115–22.

 $^{^{484}}$ Benjamin Collins, Cong. Research Serv., R44153, Trade Adjustment Assistance for Workers and the TAA Reauthorization Act of 2015, at 5–10 (2016).

 $^{^{485}}$ David H. Bradley, Cong. Research Serv., R44252, The Workforce Innovation and Opportunity Act and the One-Stop Delivery System 2–4 (2015). 486 Id. at 4–7

 $^{^{487}}$ Robert Maxim, Council on Foreign Relations, No Helping Hand: Federal Worker-Retraining Policy 10, 13, 19 (2016).

targeting particular populations as under TAA.⁴⁸⁸ Both presidents, however, ran into political barriers, and federal worker dislocation assistance remains a patchwork.⁴⁸⁹ While President Obama emphasized adult job training in his second term, and consistently increased funding in this area,⁴⁹⁰ the United States still provides far less funding for labor market adjustment than other industrialized countries.⁴⁹¹

Studies of the effectiveness of benefits provided under TAA and WIOA have found mixed results, and more research is needed to identify effective and ineffective approaches. A study commissioned by the DOL to evaluate the predecessor of the 2015 TAA reauthorization found that TAA beneficiaries earned \$3300 less per year than a control group that received non-TAA unemployment benefits four years after members of each group lost their jobs. However, the DOL study did suggest that TAA benefits may have a greater impact on workers who received job training services under the program than those who received income support without training. A similar, ongoing evaluation of the Adult and Dislocated Worker Program administered under WIOA found inconclusive results after the first

⁴⁸⁸ See Alden, supra note 483, at 122.

⁴⁸⁹ See id. at 118–22. For example, a 2011 report identified forty-seven federal employment and training programs administered by nine federal agencies. U.S. Gov't Accountability Office, GAO-11-92, Multiple Employment and Training Programs: Providing Information on Colocating Services and Consolidating Administrative Structures Could Promote Efficiencies 5 (2011). Although passage of WIOA in 2014 effectuated some consolidation, employment services continue to draw on a network of statutory authorities, and support for dislocated workers remains split between WIOA and TAA. See Maxim, supra note 487, at 19 (noting that the WIOA "was a positive development, but it largely leaves the existing system intact").

⁴⁹⁰ DEP'T OF LABOR, BUDGET IN BRIEF 9 (2017); see also ALDEN, supra note 483, at 122 (citing funding increases for job training in 2009 and 2010).

⁴⁹¹ Mark Muro & Joseph Parilla, *Maladjusted: It's Time to Reimagine Economic 'Adjustment' Programs*, BROOKINGS INST. (Jan. 10, 2017), https://www.brookings.edu/blog/the-avenue/2017/01/10/maladjusted-its-time-to-reimagine-economic-adjustment-programs/.

⁴⁹² Ronald D'Amico & Peter Z. Schochet, Soc. Policy Research Assocs., The Evaluation of the Trade Adjustment Assistance Program: A Synthesis of Major Findings 7 (2012). Other studies have likewise found mixed results in the effectiveness of TAA training services. *See* David B. Muhlhausen & James Sherk, Heritage Found., Issue Brief No. 4311, Trade Adjustment Assistance: Let the Ineffective and Wasteful 'Job-Training' Program Expire 1–4 (2014).

⁴⁹³ D'AMICO & SCHOCHET, *supra* note 492, at 7. Another study found that occupational skills training administered under TAA does reduce the earnings losses from dislocation when the trainee succeeds at acquiring new skills. Jooyoun Park, *Does Occupational Training by the Trade Adjustment Assistance Program Really Help Reemployment? Success Measured as Occupation Matching*, 20 Rev. INT'L ECON. 999, 1010–15 (2012).

fifteen months and stated that it was too soon to judge the effectiveness of training benefits.⁴⁹⁴

Unfortunately, there is a dearth of experimental evidence about the effectiveness of government assistance for dislocated workers, and the limited evidence available shows mixed results.⁴⁹⁵ There is evidence, however, that displaced workers underinvest in retraining relative to the benefits, supporting the notion that subsidizing retraining is sensible in theory.⁴⁹⁶ A recent study of returns to community college retraining produced valuable insights into features which may make government programs more effective. 497 For example, losses from displacement correlate positively with length of tenure, suggesting that programs might target workers with longer tenure prior to dislocation; 498 programs that are more technical in nature produced substantially higher returns than nontechnical programs, so funding should target "high-return" retraining programs;499 and retraining was especially effective for displaced workers who had already completed some postsecondary education, indicating that other interventions may be more appropriate for workers with a lower baseline level of education.500

A federal initiative to channel resources to workers dislocated by environmental regulation must consider insights such as these while recognizing the remaining knowledge gap about the effectiveness of

⁴⁹⁴ Sheena McConnell et al., Mathematica Policy Research, Providing Public Workforce Services to Job Seekers: 15-Month Impact Findings on the WIA Adult and Dislocated Worker Programs 125 (2016).

⁴⁹⁵ See Christopher T. King, The Effectiveness of Publicly Financed Training in the United States: Implications for WIA and Related Programs, in Job Training Policy in the United States 77–79 (Christopher J. O'Leary et al. eds., 2004). Indeed, the available evidence suggests that programs for dislocated workers in particular are less effective than programs for otherwise disadvantaged workers. Carolyn J. Heinrich, Targeting Workforce Development Programs: Who Should Receive What Services? And How Much? 11–12 (2013). However, there is strong evidence of significant earnings increases for dislocated workers who enroll in community college programs. See Jacobson et al., supra note 482, at 59–60. Jacobson et al. found that both the personal and social benefits of investing in community college outweigh the costs, though the authors cautioned that workers who select into training programs are those who expect the largest benefit and that subsidizing training may induce participation by individuals who expect less significant benefits. Id. at 62.

⁴⁹⁶ JACOBSON ET AL., *supra* note 482, at 10–11. The authors found that workers earned approximately 4.4% more per year after retraining. *Id.* at 10. However, because of prohibitive near-term financial costs, workers underutilize existing programs. *Id.* at 14. The authors further found, using cost-benefit analysis, that subsidizing "high-return" retraining is an efficient investment. *Id.* at 15–16.

 $^{^{497}}$ See id. at 10–13 (evaluating outcomes from community college retraining in Washington State).

⁴⁹⁸ See id. at 5.

⁴⁹⁹ See id. at 10-13.

⁵⁰⁰ See id. at 21–22.

current government programs assisting such populations. Ensuring that money is channeled to support evidence-based solutions is essential. However, the fragmented nature of the existing programs, as well as the fact that the greatest benefits—those provided under TAA—are available only for workers dislocated as a consequence of free trade, underscore the vulnerability of workers dislocated by environmental regulation, and the imperative to assist them.

While the POWER Initiative exemplifies the necessary type of policy and resource coordination to assist populations burdened by environmental regulations, this Article advocates for something more—an institutional structure for forming such policy. The POWER Initiative was created as an ad hoc remedy for the problem of coalindustry dislocation. Building on that isolated experience, this Article advocates for a standing executive unit that would mobilize in response to an OIRA determination of substantially disproportionate regulatory harm.

Insofar as unilateral executive distribution draws on authority and funding from multiple agencies, an interagency working group is the ideal structure for formulating such a policy. Such a group would bring varied institutional expertise to bear in solving a problem or formulating a policy. The IWG benefitted from the broad institutional expertise of its constituent agencies in determining an estimate for the social cost of carbon.⁵⁰¹ So would an interagency working group charged with coordinating redistributive assistance benefit from such expertise. With a bird's-eye view of agency expertise and capability, such a group would be able to identify and mobilize the best resources available from across the administrative bureaucracy.

So far, this subsection's discussion has focused on unacceptable distributional consequences that are best addressed through mitigation. But the interagency working group would similarly be well positioned where the preferred response is a rule change and the agency with authority to make this change is not the agency attempting to promulgate the rule with the negative distributional consequences.

Conclusion

This Article calls for a fundamental rethinking of the administrative state and challenges one of the academic literature's dominant paradigms. Addressing unacceptable distributional consequences of particular environmental, health, and safety regulation cannot be left to congressional action focused on the income tax system because this

 $^{^{501}}$ See Revesz, supra note 420, at 581–83. President Trump disbanded the IWG. See Exec. Order No. 13,783, 82 Fed. Reg. 16,093 (Mar. 28, 2017).

system, as it has evolved for over a century, is not well suited to address the core consequences of such regulation. And, compounding the problem, the serious gridlock that Congress currently experiences makes this approach even more of a nonstarter.

And, while to date the executive branch has similarly not dealt effectively with distributional concerns, it has, at times, used coordination mechanisms that could be adapted to provide effective government-wide distributional responses. The goal of this Article is to build upon discrete examples of such coordination and suggest a more robust standing institutional structure that can focus on properly addressing distributional issues.

This Article, however, should not be read as endorsing roving executive branch action designed to counteract general distributional inequities, for example, constraining the very large range in income and wealth across the populations. Skeptics would say that only Congress can effectively and constitutionally undertake social policy of that magnitude. The focus here is both narrower and far more grounded in an accepted intellectual paradigm. For decades, the administrative state has paid lip service to distributional consequences but has not put in place structures to effectively deal with this issue. After establishing these failings, this Article moves to fill this void.