# NEGOTIATED RULEMAKING AND NEW RISKS: A RAIL SAFETY CASE STUDY

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#### Abstract

Modern legal scholarship tends to ignore a regulatory "negotiated governance," "negotiated technique called rulemaking," or "regulatory negotiation" ("reg-neg"), which is a process through which agencies work closely with affected stakeholders in drafting a rule. This process was popular in the 1990s and received much scholarly attention around that time, but it has since faded from view. However, several agencies still regularly use negotiated rulemaking, and two of these agencies have recently had to address changing risks in rail transport, thus drawing negotiated rulemaking back into the spotlight. Specifically, a growing volume of ethanol and crude oil is now transported by train due to a recent U.S. energy boom, and our gridlocked Congress did not substantially revise statutes to address rail safety risks until years after these risks were identified and more than six months after agencies had issued a final rail safety rule.1 Thus, the Federal Railroad Administration ("FRA") and Pipeline and Hazardous Materials Safety Administration ("PHMSA") took on the important, initial responsibilities for updating the law within this area by issuing new advisories and writing new regulations to address accidents involving trains carrying crude oil and ethanol. Although FRA and PHMSA did not use negotiated rulemaking to write all of these rules, this Article examines how these agencies' semi-regular use of negotiated rulemaking over time, and thus their repeat interactions with rail industry actors, likely influenced their approach to these risks in positive and negative ways.

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<sup>1.</sup> See infra notes 154–83 and accompanying text.

The Article suggests that industry actors-in part due to their long interaction with FRA and PHMSA through negotiated rulemaking—likely cooperated more with agencies' voluntary rail safety directives than they otherwise might have, and, also due to this interaction, that the agencies had more baseline technical knowledge when writing rules to address new risks. However, this longstanding industry-agency relationship might also have caused the agencies to drag their feet in issuing certain important rules if intervention of the independent National not for the Transportation Safety Board ("NTSB"), the sole function of which is to examine the cause of rail accidents and to suggest and advocate for needed regulatory reforms. Further, the failure of the agencies to include many public interest groups in negotiated rulemaking over time (a failure that is not necessarily the fault of the agencies, as it appears that these groups have not strongly pushed to be part of reg-neg) might have left certain problematic gaps in the rail safety rules written by these agencies. On the other hand, in some cases FRA, through the reg-neg process, supported and defended public interest concerns over the objections of the rail industry-in part due to labor group members' focus on public interest concerns—thus demonstrating that a lack of direct, robust interest group representation in the reg-neg process did not consistently translate to agency capture. This Article draws lessons from this case study to suggest how negotiated rulemaking strategies could generally be beneficial in agency processes that address new and changing risks, and how the negative aspects of negotiated rulemaking could best be avoided within these processes.

## INTRODUCTION

As the influence and effectiveness of Congress has changed over time, the importance of the administrative state in addressing existing, new, and emerging risks has attracted increasing attention. Some scholars and courts have praised agencies for using expert staff to write effective rules in technically challenging areas while providing open, responsive forums for the airing of stakeholder concerns.<sup>2</sup> Others have criticized the

<sup>2.</sup> See, e.g., ADRIAN VERMEULE, JUDGING UNDER UNCERTAINTY: AN INSTITUTIONAL THEORY OF LEGAL INTERPRETATION (2006) (exploring agency expertise and

administrative state for being overly "ossified" due to excessive judicial review,<sup>3</sup> inadequately responsive and undemocratic,<sup>4</sup> and captured by a select number of interest groups,<sup>5</sup> among other concerns.

Several decades ago, as the role of the administrative state became increasingly important relative to Congress, a specific regulatory technique called "negotiated governance," "negotiated rulemaking," or "regulatory negotiation" ("reg-neg")<sup>6</sup> was all the rage.<sup>7</sup> This process was designed to harness the positive attributes of agencies while addressing concerns about agencies' alleged inability to adequately incorporate various stakeholder preferences into rules and to efficiently write effective, relatively well-accepted rules.<sup>8</sup> Agencies that used this federally-approved technique worked closely with a range of stakeholders to hammer

3. Thomas O. McGarity, Some Thoughts on "Deossifying" the Rulemaking Process, 41 DUKE L.J. 1385, 1385–86 (1992).

4. See, e.g., Sanford N. Caust-Ellenbogen, Blank Checks: Restoring the Balance of Powers in the Post-Chevron Era, 32 B.C. L. REV. 757, 789 (1991) (noting "the problem of agency bias" and questioning "the degree to which agency action reflects majoritarian concerns").

5. See, e.g., Clayton P. Gillette & James E. Krier, Risk, Courts, and Agencies, 138 U. PA. L. REV. 1027 (1991); Roger Noll, The Political Foundations of Regulatory Policy, 139 J. INSTITUTIONAL & THEORETICAL ECON. 377, 378 (1983) (exploring the potential capture of agencies by "organized interest groups" but concluding that "in the long run regulation may be less sensitive to particular distributionist pressures than other types of public policies").

6. See DAVID M. PRITZKER & DEBORAH S. DALTON, NEGOTIATED RULEMAKING SOURCEBOOK 1 (1995) (noting alternate terms for the practice).

7. See Jeffrey S. Lubbers, Enhancing the Use of Negotiated Rulemaking by the U.S. Department of Education, in RECALIBRATING REGULATION OF COLLEGES AND UNIVERSITIES: REPORT OF THE TASK FORCE ON FEDERAL REGULATION OF HIGHER EDUCATION app. IV, at 90 (2014) (noting that there was "an initial groundswell of agency interest in the 1990s").

8. See John S. Applegate, Beyond the Usual Suspects: The Use of Citizens Advisory Boards in Environmental Decisionmaking, 73 IND. L.J. 903, 914 (1998) (describing the "renewed interest" in regulatory negotiations resulting from "recent efforts at regulatory flexibility").

accountability); Frank B. Cross, Shattering the Fragile Case for Judicial Review of Rulemaking, 85 VA. L. REV. 1243, 1274 (1999) (arguing that "the democratic features of the bureaucracy are often overlooked"); Brian Galle & Mark Seidenfeld, Administrative Law's Federalism: Preemption, Delegation, and Agencies at the Edge of Federal Power, 57 DUKE L.J. 1933, 1954–61, 1971–74 (2008) (arguing that agencies are transparent and accessible to stakeholders, "deliberative and responsive to political preferences," and that they may be superior to Congress and the courts on these metrics); Mark Seidenfeld, A Civic Republican Justification for the Bureaucratic State, 105 HARV. L. REV. 1511, 1554–62 (1992) (noting the expertise of agencies, their "procedures that facilitate access and public interest oriented discourse," and their fostering of deliberation).

out the potential content and text of a rule.<sup>9</sup> All other aspects of the rulemaking process were similar: the agency still issued a proposed rule, released the rule for notice and comment by the general public, and finalized the rule.<sup>10</sup> But the stakeholder negotiation process with the agency substantially influenced the content of the rule that was eventually proposed, released for public comment, and then finalized.<sup>11</sup> Stakeholders interacted indepth with each other and with the agency prior to rule proposal and finalization.<sup>12</sup>

Some scholars and other supporters of negotiated rulemaking praised this approach as reducing the likelihood of post-rulemaking litigation,<sup>13</sup> saving time,<sup>14</sup> infusing more expertise

12. *See* Lubbers, *supra* note 7 (describing this interaction as the key difference from traditional notice-and-comment rulemaking).

13. See PRITZKER & DALTON, supra note 6, at xiii (observing that "[r]eg-neg has the capacity to reduce the likelihood of litigation"); *id.* at 3–5 (listing and exploring the benefits); Applegate, supra note 8, at 916 (describing proponents' belief that negotiated rules inspire more "voluntary compliance and political support" and fewer judicial challenges); Philip J. Harter, Assessing the Assessors: The Actual Performance of Negotiated Rulemaking, 9 N.Y.U. ENVTL. L.J. 32, 49–51 (2000) (providing examples and concluding that rules produced through reg-neg "have been remarkably resistant to substantive challenges"); Lubbers, supra note 7 (noting that reg-neg rules are "less likely to be challenged in court").

14. See PRITZKER & DALTON, supra note 6, at xiii (observing that reg-neg can "produce faster and less costly rulemaking"); *id.* at 3–5 (discussing the benefits of regneg); Applegate, supra note 8, at 915 (describing "efficiency" as the "primary" claim made by "[p]roponents of negotiated rulemaking"); Jody Freeman, Collaborative Governance in the Administrative State, 45 UCLA L. REV. 1, 35–36 (1997) (noting the ongoing debate over whether reg-neg achieves "traditional regulatory goals in a more time- and cost-efficient manner"); Harter, supra note 13, at 46–49 (arguing that reg-neg saves time); Lubbers, supra note 7 (noting that reg-neg final rules are "likely to be issued more quickly").

<sup>9.</sup> PRITZKER & DALTON, *supra* note 6 ("The essence of the idea is that in certain situations it is possible to bring together representatives of the agency and the various interest groups to negotiate the text of the proposed rule."); Cary Coglianese, *Assessing Consensus: The Promise and Performance of Negotiated Rulemaking*, 46 DUKE L.J. 1255, 1257 (1997) (noting that through this process, a group of stakeholders is formed as a committee, the committee "meets publicly to negotiate a proposed rule," and if consensus is reached, the agency typically uses the committee's rule as its proposed rule); Kimberly D. Krawiec, *Cosmetic Compliance and the Failure of Negotiated Governance*, 81 WASH. U. L.Q. 487, 490 (2003) (describing negotiated rulemaking strategies as involving "methods that permit a voice to the regulated group and other interested private parties").

<sup>10.</sup> *See* Coglianese, *supra* note 9 (noting that after an agency adopts a consensus rule, it then engages in Administrative Procedure Act ("APA") notice-and-comment procedures).

<sup>11.</sup> *See id.* at 1256 ("Negotiated rulemaking supplements the notice-and-comment procedures of the [APA] with a negotiation process that takes place before an agency issues a proposed regulation.").

into the rulemaking process,<sup>15</sup> and potentially encouraging "problem-solving and broad participation" and flexible rulemaking,<sup>16</sup> among other attributes. Perhaps most boldly, supporters believed that reg-neg could produce rules with superior content that also simply "work better" on the ground.<sup>17</sup> Others criticized the process for its exclusion of certain key stakeholders, particularly the lack of representation from the public interest community,<sup>18</sup> and they disputed the evidence of reduced litigation and time-savings.<sup>19</sup>

The focus on negotiated rulemaking faded over time,<sup>20</sup> and today many seem to assume that the technique is not very relevant.<sup>21</sup> The scholarly literature tends to ignore the topic, and many agencies have reverted to more traditional modes of rulemaking, or they increasingly use other alternative techniques to negotiated rulemaking in order to accomplish regulatory goals.<sup>22</sup> But negotiated rulemaking is alive and well within a few

17. See PRITZKER & DALTON, supra note 6, at xiii (noting the capacity of reg-neg to "create objectively better rules"); supra notes 13–16 and accompanying text.

20. See Jeffrey S. Lubbers, Achieving Policymaking Consensus: The (Unfortunate) Waning of Negotiated Rulemaking, 49 S. TEX. L. REV. 987, 988 (2008) ("[A]fter an initial groundswell of agency interest, its use has waned in recent years—to the point that it is used half as often as it was in the 1990s, and over half of those undertaken in this century have been of the nondiscretionary variety—required by specific legislation.").

21. But see id. (arguing for the continued use of reg-neg, while noting the substantial waning of the practice).

<sup>15.</sup> See, e.g., Applegate, *supra* note 8, at 920 (noting that reg-neg allows "direct communication among the technical experts on a given problem").

<sup>16.</sup> *See* Freeman, *supra* note 14 (exploring how reg-neg can potentially achieve various attributes of collaborative governance, including enhancing participation and flexibility as well as creating "the conditions under which rules can be viewed as provisional" rather than unmodifiable edicts, and providing "opportunities for transcending the public-private divide"); *see also* Lubbers, *supra* note 7 (noting that regneg rules are likely "easier to implement" than traditional notice-and-comment rules).

<sup>18.</sup> Applegate, supra note 8, at 917–21.

<sup>19.</sup> See, e.g., Coglianese, supra note 9, at 1284–86, 1309 (noting that reg-neg requires the agency to devote unusually "concentrated amounts of time" to the process, takes at least as long as traditional rulemaking, and observing that "[a]s a means of reducing litigation, [it] has yet to show any demonstrable success").

<sup>22.</sup> See Sam Kalen, The Transformation of Modern Administrative Law: Changing Administrations and Environmental Guidance Documents, 35 ECOLOGY L.Q. 657, 659–60 (2008) ("When available ... agencies often employ other devices to address policy preferences: legal opinions from agency counsel; management policies; guidance documents; manuals; instruction memoranda; and regulatory guidance letters.").

agencies,23 and some agencies are using it in important legal areas where Congress has failed to address new and emerging risks or has been slow to address these risks.<sup>24</sup> This Article examines two agencies that semi-regularly use negotiated rulemaking and explores how these agencies have addressed emerging and changing risks. Specifically, it investigates the Federal Railroad Administration's ("FRA") and Pipeline and Hazardous Materials Safety Administration's ("PHMSA") regulation of the growing risk of the transportation of crude oil and ethanol by rail, which has increased as a result of a recent energy boom within the United States and Canada.<sup>25</sup> It investigates how negotiated rulemaking directly influenced certain rules promulgated by these agencies. More extensively, it examines how the long-term use of negotiated rulemaking by these agencies might have influenced agency actions and the quality of rules when these agencies issued rules without the use of negotiated rulemaking.

As risks in the area of rail transport of fuels increased, there were no major congressional efforts to revise or write new statutes until years after the risks were known, and more than six months after numerous agency actions already had been taken,<sup>26</sup> thus enhancing the importance of initial agency action to address these new risks. This Article uses the example of FRA and PHMSA and their regulation of rail safety in the ethanol and crude oil context as a case study to explore the potential efficacy and advisability of using negotiated rulemaking, particularly in a regulatory area involving new risks. The Article draws lessons from this case study to suggest certain elements that might be prerequisites to ensuring effective regulation in an area of emerging risks governed partially by negotiated rulemaking, and to identify problematic aspects of negotiated rulemaking that should be avoided or mitigated in this same context.

<sup>23.</sup> *See, e.g.*, PRITZKER & DALTON, *supra* note 6, at xiii (noting the agencies that continue to use reg-neg tend to be those for which Congress requires the use of reg-neg to write rules).

<sup>24.</sup> But see Lubbers, supra note 20, at 1004 (stating that most agencies have voluntarily stopped reg-neg, and that only seven of the twenty-two reg-neg committees established from 2000 through 2008 were formed absent a statutory mandate).

<sup>25.</sup> JOHN FRITTELLI ET AL., CONG. RESEARCH SERV., U.S. RAIL TRANSPORTATION OF CRUDE OIL: BACKGROUND AND ISSUES FOR CONGRESS 1–2 (2014); Alexandra B. Klass, *Future-Proofing Energy Transport Law*, 94 WASH. U. L. REV. 8–9 (forthcoming 2017) (describing the boom and the rise in oil transport by rail).

<sup>26.</sup> See infra notes 47, 154 and accompanying text.

In the case of rail safety, on the benefits side, FRA has long used negotiated rulemaking<sup>27</sup> and often directs its advisory committee, the entity that engages in the negotiated rulemaking process with FRA, to work with PHMSA.<sup>28</sup> Through this somewhat regular use of negotiated rulemaking, longstanding relationships between agency officials and the regulated industry have developed. This Article therefore hypothesizes that when new rail safety risks recently emerged—requiring relatively rapid action by the agencies-industry actors were more cooperative than they otherwise might have been when the agencies asked them to voluntarily change certain technologies and practices in order to address emerging risks. A second, related benefit of negotiated rulemaking is that in the highly technical rail safety context, the rail industry and companies that rely on rail to transport their products-entities that are important stakeholders in FRA's negotiated rulemaking process-have long provided valuable expertise in helping to develop new standards for safer train technologies and operational practices, among other standards. Indeed, although FRA and PHMSA did not use negotiated rulemaking to draft the final rule for rail safety issued in 2015,<sup>29</sup> this longstanding relationship with industry through negotiated rulemaking likely gave the agencies important baseline technical knowledge and made them more aware of the benefits and limitations of existing industry standards. Further, the agencies directly used negotiated rulemaking to begin to address other rail

safety risks associated with ethanol and crude oil.<sup>30</sup> Negotiated rulemaking also might sometimes spur congressional action because the parties most likely to drive and influence policy have

<sup>27.</sup> See RSAC History, FED. RAILROAD ADMIN. RAILROAD SAFETY ADVISORY COMMITTEE, https://rsac.fra.dot.gov/home.php (last visited Nov. 9, 2016) ("In 1996, FRA established the Railroad Safety Advisory Committee ("RSAC") to develop new regulatory standards, through a collaborative process, with all segments of the rail community working together to fashion mutually satisfactory solutions on safety regulatory issues.").

<sup>28.</sup> See Safe Transportation of Energy Products: Chronology, PIPELINE & HAZARDOUS MATERIALS SAFETY ADMIN., http://www.phmsa.dot.gov/hazmat/osd/chronology (last visited Nov. 9, 2016) (noting RSAC rail safety recommendations are "directed to [PHMSA]").

<sup>29.</sup> See Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. 26,644 (May 8, 2015) (to be codified at 49 C.F.R. pts. 171–74, 179).

<sup>30.</sup> See infra notes 250-63 and accompanying text.

coordinated and somewhat aligned their positions through the reg-neg process.

On the negative side of the ledger, industry's expertise only goes so far. Those that build and operate trains know the ins and outs of each train car, track, and operational technique. They also are typically aware of the causes of accidents, and thus the risks, due to concerns about insurance,<sup>31</sup> liability, and worker safety. But industry actors are not necessarily motivated to share full information about these risks with the agency regulating them, for fear of more stringent regulation. Furthermore, these actors are likely unaware of certain broader impacts caused by rail accidents, such as long-lasting environmental harms, to the extent that these harms do not trigger liability or are not easily discoverable. Given the limited stakeholder representation in the process, all of the parties to negotiated rulemaking might simply miss certain large issues or purposefully omit certain issues that seem too difficult to address.<sup>32</sup>

Additionally, the long-standing relationship between agency officials and industry actors that results from extensive negotiated rulemaking might have made FRA and PHMSA officials hesitant to question certain industry opinions when it came to changing and updating rules to address new risks. Indeed, the factor that perhaps most successfully pushed the agencies to improve rulemaking in the face of growing risks appears to have been pressure from an independent, external agency—the National Transportation Safety Board ("NTSB")—which has one, very important purpose: investigating the causes of rail accidents and other transportation accidents and suggesting needed reforms.<sup>33</sup> Without NTSB pushing PHMSA and FRA toward reform,<sup>34</sup> certain important rail safety updates might not have

<sup>31.</sup> *But see* Securement of Unattended Equipment, 80 Fed. Reg. 47,350, 47,371 (Aug. 6, 2015) (to be codified at 49 C.F.R. pt. 232) ("Shippers and rail companies are not insured against the full liability of the potential consequences of incidents involving hazardous materials. As a result, these events impose externalities.").

<sup>32.</sup> *Cf.* Klass, *supra* note 25 (citing ALL. FOR INNOVATION & INFRASTRUCTURE, BACK ON TRACK: BRINING RAIL SAFETY TO THE 21ST CENTURY 9–17 (Aug. 6, 2015) (noting that the rule does not address track alignment problems—one of the leading causes of rail accidents)) (noting certain groups' belief that the final rail safety rule lacks "sufficient protections").

<sup>33.</sup> About the National Transportation Safety Board, NAT'L TRANSP. SAFETY BOARD, http://www.ntsb.gov/about/pages/default.aspx (last visited Nov. 9, 2016).

<sup>34.</sup> See infra note 317 and accompanying text.

emerged, in part, perhaps, due to agency inertia and a hesitancy to question certain industry stakeholder opinions. NTSB, in other words, appears to provide an important counterweight to potential agency capture by the concentrated interest groups that frequently interact with PHMSA and FRA.

Although the presence of an independent agency appears to be have been very important in the rail safety context, direct public petitions and comments on rulemaking also played a critical role in influencing PHMSA and FRA, both within and outside of reg-neg.<sup>35</sup> In the reg-neg process for changing minimum required train crew sizes after the Lac-Mégantic train derailment disaster, based on surveys as well as reports from FRA and other groups, FRA strongly defended public interest group concerns over the objections of many rail industry members of the agency's reg-neg advisory committee—the Rail Safety Advisory Committee ("RSAC").<sup>36</sup> In part, this might have been due to the fact that labor group members of RSAC also solicited and focused on these public concerns.<sup>37</sup>

Despite the importance of public interest representation in reg-neg and other rulemaking, independent agencies like NTSB have particularly useful expert knowledge, which certain public interest groups lack the resources to acquire.<sup>38</sup> Negotiated rulemaking therefore might be most effective when some sort of external, independent review agency is tasked with reviewing problems and suggesting regulatory fixes. This external agency can serve as an important counterweight to the strong influence of industry and labor stakeholders who repeatedly interact with the rulemaking agency, whose interests do no always align with those of the broader public and with communities through which trains travel.

Another negative aspect of negotiated rulemaking that requires attention—one that scholars have long focused on<sup>39</sup>—is the potential exclusion of certain key stakeholders from negotiated rulemaking processes. This problem appears to be a

<sup>35.</sup> See infra notes 228, 362-64 and accompanying text.

<sup>36.</sup> See infra notes 350-52 and accompanying text.

<sup>37.</sup> See infra notes 353-54 and accompanying text.

<sup>38.</sup> See, e.g., Eric Fielding et al., The National Transportation Safety Board: A Model for Systemic Risk Management, 9 J. INV. MGMT. 17, 23–24 (2011) (describing the NTSB "Go Team," which includes forensic engineers).

<sup>39.</sup> E.g., Applegate, supra note 8, at 917–21.

serious one in the rail safety context, although it might be partially due to the somewhat slow emergence of stakeholder groups focused on rail safety concerns.<sup>40</sup> (As indicated above, these groups have, however, participated extensively in commenting on rules, and some have petitioned for new and modified rules.<sup>41</sup> And local governments and the National League of Cities have been active in the rail safety context, although not in reg-neg.<sup>42</sup>) Regardless of the reasons for the dearth of public interest representation within reg-neg, the fact remains that many of the members of RSAC-the advisory committee that participates in periodic negotiated rulemaking with FRA and PHMSA-are part of the rail industry or consist of companies that frequently use rail to transport their products.<sup>43</sup> Very few citizens' groups have a voice in the process.<sup>44</sup> Although negotiated rulemaking is, by statutory design, supposed to only include a limited number of stakeholders with certain discrete interests,<sup>45</sup> public interest groups, including citizens within communities that experience frequent train travel, need a seat at the negotiating table. This interest group inclusion cannot be a mere token measure and must be carefully designed; not all interest groups are equipped with the necessary resources and information to effectively participate and influence processes. Further, not all groups would provide constructive input due to a variety of problems that Professor Mark Seidenfeld has described as "pathologies" of internal interest groups dynamics.<sup>46</sup> But by selecting groups with a genuine interest in and understanding of the particular regulatory issue, and potentially supporting these groups' participation by providing them with the education and materials that they need in order to understand and meaningfully

44. See infra note 86 and accompanying text.

<sup>40.</sup> See infra notes 359-64 and accompanying text.

<sup>41.</sup> See infra notes 228, 362-64 and accompanying text.

<sup>42.</sup> See, e.g., KAREN DARCH, RAIL SAFETY WHITE PAPER: BACKGROUND ON RAIL SAFETY ISSUES & LOCAL GOVERNMENT INVOLVEMENT (2014) (on file with author) (presentation by a local government official at a National League of Cities meeting focused on rail safety).

<sup>43.</sup> *RSAC Members*, FED. RAILROAD ADMIN. RAILROAD SAFETY ADVISORY COMMITTEE, https://rsac.fra.dot.gov/organizations/ (last visited Nov. 9, 2016).

<sup>45.</sup> *See* 5 U.S.C. § 563 (2012) (explaining that an agency "may establish a negotiated rulemaking committee" when "there are a limited number of identifiable interests that will be significantly affected by the rule"); *id.* at § 565 (explaining that the agency typically "shall limit membership on a negotiated rulemaking committee to 25 members").

<sup>46.</sup> Mark Seidenfeld, Empowering Stakeholders: Limits on Collaboration as the Basis for Flexible Regulation, 41 WM. & MARY L. REV. 411, 413 (2000).

comment on issues,<sup>47</sup> FRA and PHMSA could greatly improve the reg-neg process.

Indeed, the minimal representation of the broader public in rail safety negotiated rulemaking might have contributed to certain problematic gaps in rules addressing new rail safety risks. For example, in the notice-and-comment process on FRA's and PHMSA's 2015 rail safety rule, many groups and communities were concerned that the rule did not require rail carriers to inform communities of the specific routes that oil and ethanol trains would follow or when the trains would be traveling through communities.<sup>48</sup> The agencies, in explaining the lack of notification requirement in the final rule, cited operational inconvenience security concerns.<sup>49</sup> But the agencies likely could have reached a compromise to protect trains against potential terrorist attacks, make route selection feasible and not overly burdensome for rail companies, and ensure that communities had more specific information about train routes. Indeed, since the release of the final rule, Congress has enacted a statute requiring that emergency and first responders and law enforcement personnel be confidentially informed in real time of the location of trains and the materials they are carrying.<sup>50</sup> If concerned community groups had been more involved in previous negotiated rulemaking efforts with the agencies, it is possible that the agencies would have been more aware of and receptive to their needs within this particular rulemaking process. However, in other contexts FRA has strongly defended public interest concerns over the objection of the rail industry,<sup>51</sup> thus showing that the project of identifying generally positive and negative aspects of reg-neg and its influence on rulemaking must proceed with caution.

To explore negotiated rulemaking in the rail context and draw lessons to broader areas, Part I of this Article introduces the

<sup>47.</sup> See, e.g., Alejandro Esteban Camacho, Mustering the Missing Voices: A Collaborative Model for Fostering Equality, Community Involvement and Adaptive Planning in Land Use Decisions, 24 STAN. ENVTL. L.J. 269, 315–16 (2005) (noting that in the land use planning context, "empowering and informing stakeholders with limited resources remains a significant challenge," but describing ways in which this empowerment can occur).

<sup>48.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. 26,644, 26,710–11 (May 8, 2015) (to be codified at 49 C.F.R. pts. 171–74, 179).

<sup>49.</sup> Id. at 26,712.

<sup>50.</sup> See infra note 161 and accompanying text.

<sup>51.</sup> See infra notes 350-52 and accompanying text.

concept of negotiated rulemaking and federal requirements for this regulatory technique. This Part also describes how FRA and PHMSA, the agencies that are the focus of this Article, use negotiated rulemaking. Part II then describes the recent rise in rail safety incidents associated with the transport of crude oil and gas ethanol by rail, and the slow,52 but somewhat robust,53 congressional response to these incidents. It also explores FRA's and PHMSA's use of both traditional rules and negotiated rulemaking to address emerging rail safety risks more quickly than Congress did (albeit not quickly enough, with clear warning signs having been raised as early as 2009, and agency advisories and emergency orders not being issued until 2013).54 Next, Part III analyzes how the use of negotiated rulemaking by these agencies over time might have impacted the rules in a positive or negative manner. The Article concludes by suggesting how negotiated rulemaking in general-not just within FRA and PHMSA-might best be used by agencies addressing new risks and how potential downsides of negotiated rulemaking might best be avoided.

## I. NEGOTIATED RULEMAKING: A SHORT-TERM REGULATORY REVOLUTION WITH LONG-LASTING IMPACTS

As the administrative state has grown within the United States, so too has the complexity of certain agency rules and the breadth of their coverage. One response to complex rules that impact easily-identifiable groups of regulatory targets with shared

<sup>52.</sup> NTSB warned of the inadequacy of the common type of tank car for carrying substances similar to crude oil as early as 2009, and dramatic ethanol-by-rail safety incidents occurred that same year; however, Congress did not act until December 2015. *See infra* notes 128, 222 and accompanying text. On the other hand, Congress acted relatively soon after the risks of transporting crude oil and ethanol, in particular, had been identified. *See Safe Transportation of Energy Products: Chronology, supra* note 28 (describing efforts to classify the hazardous qualities of crude oil from the Bakken as beginning in 2013). And, considering the red flags raised in 2009, agencies were also slow to act. *Id.* They did not begin issuing safety advisories and emergency orders until 2013. *Id.* 

<sup>53.</sup> Many groups would not consider Congress's Fixing America's Surface Transportation ("FAST") Act to be adequately robust from a rail safety perspective, but the statute requires that agencies implement specific technological standards for rail safety; it requires important updates on whether the rail industry is in fact retrofitting train cars to make them safer; it directs the formation of a grant program for emergency and other response to rail incidents; and it requires a variety of studies that will further enhance knowledge of risks. *See infra* notes 154–62.

<sup>54.</sup> See supra note 52.

interests was a movement toward more collaborative drafting of rules through the process of negotiated rulemaking in which agencies work with the entities that would be affected by rules when writing them.<sup>55</sup> As introduced above, in implementing negotiated rulemaking, agencies did not change the fundamental attributes of informal rulemaking, which is the most common process by which agencies write rules through issuing notice of proposed rules, receiving and responding to public comments, and publishing a final rule.<sup>56</sup> Rather, agencies that use negotiated rulemaking form a stakeholder committee<sup>57</sup> prior to issuing a final rule and then employ the stakeholders' consensus-based rule (if a consensus formed) as the proposed rule on which the public comments.<sup>58</sup> The key difference between traditional, informal rulemaking and negotiated rulemaking is that a small group of actors, in the form of an advisory committee comprised of stakeholders, uses a consensus-based process to write a proposed rule rather than having agency staff write this rule after having informal conversations and meetings with affected parties.<sup>59</sup>

Congress endorsed this practice through the Negotiated Rulemaking Act of 1990 and subsequent amendments<sup>60</sup>—as did President Clinton through executive orders.<sup>61</sup> As authorized by

59. PRITZKER & DALTON, supra note 6.

<sup>55.</sup> See supra note 9 (defining negotiated rulemaking).

<sup>56.</sup> *See* PRITZKER & DALTON, *supra* note 6, at 2 (stating that "negotiated rulemaking should be viewed as a supplement to the rulemaking provisions" of the APA); Coglianese, *supra* note 9, at 1256–57 (discussing how negotiated rulemaking is an additional layer to, not a replacement of, the notice-and-comment procedures of the APA).

<sup>57.</sup> See 5 U.S.C. § 562(6)-(7) (2012) (defining negotiated rulemaking as "rulemaking through the use of a negotiated rulemaking committee" and defining this committee as "an advisory committee established by an agency in accordance with this subchapter and the Federal Advisory Committee Act to consider and discuss issues for the purpose of reaching a consensus in the development of a proposed rule").

<sup>58.</sup> See Coglianese, supra note 9 (stating that "if the committee reaches consensus, the agency typically adopts the consensus rule as its proposed rule" and then follows notice-and-comment procedures as per the APA); Lubbers, supra note 20, at 994 (stating that "the agency ordinarily would publish the draft rule based on that consensus in a notice of proposed rulemaking").

<sup>60.</sup> See Coglianese, supra note 9, at 1255 ("Congress officially endorsed regulatory negotiation in the Negotiated Rulemaking Act of 1990, and it permanently reauthorized the Act in 1996.").

<sup>61.</sup> See id. at 1255–56 (citing Exec. Order No. 12,866, 3 C.F.R. § 638, 642–43 (1994), reprinted in 5 U.S.C. § 601 (1994); and Memorandum for Executive Departments and Selected Agencies [and the] Administrator of the Office of Information and Regulatory Affairs, 58 Fed. Reg. 52,391 (1993)); Lubbers, *supra* note 20, at 987–90 (describing in

federal statutes that remain in place today, agencies can form a negotiated rulemaking committee "to negotiate and develop a proposed rule" after determining "that the use of the negotiated rulemaking procedure is in the public interest."<sup>62</sup> The factors that influence whether the rulemaking procedure will be in the "public interest" include, inter alia, whether "there is a need for the rule," whether there is a "limited number of identifiable interests that will be significantly affected by the rule," whether "there is a likelihood that the committee will have balanced representation," and whether the use of negotiated rulemaking will "not unreasonably delay" the proposed or final rule and is likely to result in consensus.<sup>63</sup> An agency that decides to form a negotiated rulemaking committee must publish notice in the Federal Register of its intent to do so, and it must publicize the proposed composition of committee members; it also must allow thirty days for comments.<sup>64</sup> Additional entities may apply to be committee members.<sup>65</sup> The agency may then form a committee, taking into account comments and applications, if it determines that "a negotiated rulemaking committee can adequately represent the interests that will be significantly affected by a proposed rule and that it is feasible and appropriate in the particular rulemaking."<sup>66</sup> In convening the committee, the agency must follow the Federal Advisory Committee Act ("FACA"),67 including creating a charter and filing the charter with the relevant agency.68

Once a committee has been formed, FACA rules establish procedures that the committee must follow, including, inter alia, making committee meetings open to the public and committee documents available to the public, unless the President or agency head determines that a meeting should not be open; maintaining "detailed minutes" of meetings; and holding meetings only when requested to do so or approved by a federal government

- 67. *Id.* § 565(a)(1).
- 68. 5 U.S.C. app. § 9(c) (2012).

greater detail the history of the congressional process of allowing reg-neg, the statutory requirements for reg-neg, and the reg-neg process).

<sup>62. 5</sup> U.S.C. § 563 (2012).

<sup>63.</sup> *Id.* § 563(a).

<sup>64.</sup> Id. § 564(c).

<sup>65.</sup> *Id.* § 564(b).

<sup>66.</sup> Id. § 565(a).

employee.<sup>69</sup> Formally, these committees are not designed to consist of more than twenty-five members (unless the agency determines that a larger membership is needed), and they are supposed to last no longer than two years, subject to renewal.<sup>70</sup> Committees that are assigned a particular task by an agency then meet to discuss and hammer out options for a proposed ruletypically with the help of a neutral mediator or facilitator<sup>71</sup>—and attempt to reach consensus on a proposed rule.<sup>72</sup> Consensus typically means "that each interest represented concurs in the result."73 In the rail safety context, consensus means that "all stakeholders can accept and support the recommendations, whether or not the recommendation would be the stakeholder's first choice."74 If consensus is reached, an advisory committee typically meets with the agency and reports its recommendation, often with a formal report indicating where agreement was or was not reached and the text of the agreed-upon proposed rule or rules.<sup>75</sup> Although the advisory committees that are central to negotiated rulemaking must follow these and other FACA-dictated procedures, when these committees form subcommittees to recommend certain content of proposed rules or to provide other information to the full committee, these subcommittees are not subject to FACA.76

In the context of rail safety, negotiated rulemaking occurs through RSAC, which was chartered under FACA in 1996.<sup>77</sup> This committee is different from most negotiated rulemaking advisory committees because it is a standing committee.<sup>78</sup> As with other

74. Grady C. Cohen, Jr. et al., Consensus Rulemaking at the Federal Railroad Administration: All Aboard for Railway Safety Measures, 236 TR NEWS, Jan.-Feb. 2005, at 8, 13.

75. PRITZKER & DALTON, *supra* note 6, at 8–9.

76. *See* 41 C.F.R. § 102-3.35 (2016) ("In general, the requirements of the Act and the policies of this Federal Advisory Committee Management part do not apply to subcommittees of advisory committees that report to a parent advisory committee and not directly to a Federal officer or agency.").

77. Railroad Safety Advisory Committee (RSAC), U.S. DEP'T TRANSP. FED. RAILROAD ADMIN., https://www.fra.dot.gov/Page/P0015 (last visited Nov. 9, 2016).

78. *See* Track Safety Standards; Miscellaneous Proposed Revisions, 62 Fed. Reg. 36,138 (July 3, 1997) (to be codified at 49 C.F.R. pt. 213) (noting that RSAC was acting as a standing committee).

<sup>69.</sup> Id. § 10(a)–(f).

<sup>70.</sup> *Id.* § 14(a)(1).

<sup>71.</sup> See infra note 106.

<sup>72.</sup> PRITZKER & DALTON, *supra* note 6, at 8.

<sup>73.</sup> Id.

advisory committees formed under FACA, the charter expires every two years, but it has been repeatedly renewed, and it was most recently renewed effective May 16, 2016.79 The federal sponsor of RSAC is the Federal Railroad Administrator,<sup>80</sup> and RSAC members are supposed to represent the viewpoints of "railroad owners, manufacturers, labor groups, state government groups, and public interest associations."81 The advisorv committee has thirty-seven member organizations, which provide sixty-three "voting representatives."82 These organizations include companies that own and operate railroad cars and railroads, and groups that represent these companies, such as the Association of American Railroads ("AAR").<sup>83</sup> Companies that use rail to transport products and groups that represent these companies, such as the American Chemistry Council, The Chlorine Institute, Inc., The Fertilizer Institute, the American Petroleum Institute, and the Institute of Makers of Explosives, are also members of RSAC.<sup>84</sup> Labor group representatives on the committee include, inter alia, the Brotherhood of Locomotive Engineers and Trainmen, the Brotherhood of Railroad Signalmen, and the International Association of Machinists & Aerospace Workers.<sup>85</sup> The only active public interest group member appears to be the National Association of Railroad Passengers, which aims to expand passenger train service and improve safety, among other goals.<sup>86</sup> Other RSAC members, that likely represent certain public concerns but do not directly represent the public, are nonprofit associations of state regulators, including the Association of State Railway Managers and the American Association of State Highway

83. RSAC Members, supra note 43.

<sup>79.</sup> Railroad Safety Advisory Committee; Charter Renewal, 81 Fed. Reg. 31,293 (May 18, 2016).

<sup>80.</sup> Railroad Safety Advisory Committee; Establishment, 61 Fed. Reg. 9740, 9741 (Mar. 11, 1996).

<sup>81.</sup> Id.

<sup>82.</sup> Railroad Safety Advisory Committee; Charter Renewal, 81 Fed. Reg. at 31,293.

<sup>84.</sup> Id.

<sup>85.</sup> Id.

<sup>86.</sup> About Us, NAT'L ASS'N RAILROAD PASSENGERS, http://www.narprail.org/about/ (last visited Nov. 9, 2016). Safe Travel America, also listed as a member on the RSAC website, appears to no longer operate; the group does not have a website, and the most recent news article that the author could identify that mentioned this group was from 1991. See John H. Cushman, Jr., In Test of Federal Rail Law, U.S. Moves to Bar Engineer, N.Y. TIMES, Jan. 4, 1991, at A16.

and Transportation Officials.<sup>87</sup> Finally, RSAC includes government agencies as members, such as FRA, the Transportation Security Administration ("TSA"), Federal Transit Administration, and NTSB, as well as agency representatives from Canada and Mexico, all of which are "nonvoting advisory representatives."<sup>88</sup>

FRA relies on RSAC to propose the content of certain rules FRA, PHMSA, or both through informal negotiated for rulemaking. When it decides to request that RSAC draft language for a proposed rule, the agency defines a specific "task" for RSAC: "When appropriate, FRA assigns a task to RSAC, and after consideration and debate, RSAC may accept or reject the task. If accepted, RSAC establishes a working group that possesses the appropriate expertise and representation of interests to develop consensus recommendations to the FRA Administrator for action on the task."89 For example, after one recent crude oil train disaster, which was caused by a stopped, parked train that later rolled and derailed,90 FRA assigned to the RSAC "Securement" working group the task of "ensuring that appropriate processes and procedures are in place to ensure that any unattended trains and vehicles ... are properly secured against unintended movement,"91 among other securement-related tasks.92 Working groups, which are staff of the larger RSAC, include members that represent a "balance between management and labor."93 Once RSAC has accepted a task and formed a working group or groups, FRA meets with the working group(s) to brief the group(s) on the "agency position on the issue being discussed."94 Typically, the

92. *Id.* (describing RSAC Task No. 13-04 on operational testing measures to ensure adequate train securement).

93. Cohen et al., supra note 74.

94. *See* Train Crew Staffing, 81 Fed. Reg. 13,918, 13,937 (proposed Mar. 15, 2016) (to be codified at 49 C.F.R. pt. 218) (noting that FRA "always enters any RSAC discussion with an agency position on the issue being discussed").

<sup>87.</sup> *RSAC Members, supra* note 43; *see also* Miriam Seifter, *States as Interest Groups in the Administrative Process*, 100 VA. L. REV. 853 (2014) (providing an extensive discussion of associations of state officials, how these associations operate, and the interests that they tend to represent or purport to represent through various voting structures).

<sup>88.</sup> Railroad Safety Advisory Committee; Charter Renewal, 81 Fed. Reg. 31,293 (May 18, 2016).

<sup>89.</sup> Railroad Safety Advisory Committee (RSAC), supra note 77.

<sup>90.</sup> See infra note 121 and accompanying text.

<sup>91.</sup> Presentation of the R.R. Safety Advisory Comm., Securement Working Group Update 5 (Mar. 6, 2014) (describing RSAC Task No. 13-03 on securement requirements for unattended trains).

agency presents a relatively broad view of its position, beginning the "first meeting with a free-form discussion of the topic, allowing the RSAC Working Group's members to brainstorm problems and a range of acceptable solutions."<sup>95</sup> However, when FRA is surer of its position, less brainstorming occurs and the Agency is quicker to state its broad position and then ask the working group to address particular tasks relating to this position.<sup>96</sup> FRA also often provides reports to the working group to assist the group in its deliberations, and the group typically requests additional data and reports from FRA.<sup>97</sup> This process produces valuable information for the rule that FRA—or PHMSA, if FRA has directed RSAC to work with PHMSA—might later propose.<sup>98</sup>

Due to FACA requirements, all RSAC meetings are open to the public, with limited exceptions (although meetings are not announced in advance), and RSAC's "records, reports, transcripts, minutes, and other documents" are "available for public inspection."<sup>99</sup> Individual working group minutes also become part of the public docket and are available for public inspection, but other working group documents are not available to the public.<sup>100</sup> Working groups formed by RSAC attempt to reach consensus on matters involving their task and then report their consensus to the full RSAC, which approves or rejects the recommendations and then reports the results to FRA.<sup>101</sup> FRA is not bound to accept the RSAC recommendation, but when it publishes a proposed rule

<sup>95.</sup> Id.

<sup>96.</sup> *See, e.g., id.* (noting that on the issue of train crew size, FRA knew its position so it simply explained its broad position and the specific tasks it wanted the working group to focus on).

<sup>97.</sup> See id. at 13,924 (noting that before the first RSAC Working Group meeting on minimum train crew size, "FRA provided five FRA-sponsored reports, as well as one Transportation Research Board (TRB) conference report that contains presentations from multiple research reports, prior to the first meeting").

<sup>98.</sup> Id.

<sup>99.</sup> Railroad Safety Advisory Committee; Establishment, 61 Fed. Reg. 9740, 9741 (Mar. 11, 1996); E-mail from Larry Woolverton, Exec. Staff Dir., Fed. R.R. Admin., to author (on file with author) (stating that meetings are not announced in advance).

<sup>100.</sup> Train Crew Staffing, 81 Fed. Reg. at 13,936 (noting that "[m]inutes of . . . these [working group] meetings are part of the docket . . . and are available for public inspection"); E-mail from Larry Woolverton, *supra* note 99 (stating that other working group documents are not available to the public).

<sup>101.</sup> See Safe Transportation of Energy Products: Chronology, supra note 28 (describing the working groups formed in wake of growing ethanol and crude oil incidents and the processes they followed for making recommendations).

that differs from the recommendation, it provides an explanation for the differences.  $^{102}$ 

FRA describes this process as "informal" negotiated rulemaking because it does not involve an advisory committee consisting of representatives that have been selected specifically on the basis of the rule to be proposed by the committee; rather, it relies on a standing committee and working groups that are staff of the committee and are formed to address a particular task.<sup>103</sup> FRA's form of negotiated rulemaking also uses an agency employee rather than a third-party as facilitator (although many, more traditional negotiated rulemaking processes also use employees instead of third-party facilitators).<sup>104</sup>

Through FRA's typical informal negotiated rulemaking process, the standing advisory committee, RSAC, addresses a variety of tasks assigned to it by FRA, if it chooses to accept those tasks.<sup>105</sup> The employees that RSAC and its working groups use as facilitators "have experience in the railroad industry and are familiar with the [technical] nomenclature and with working and operating conditions," and they are involved in the process of attempting to work toward consensus.<sup>106</sup> FRA has also used more traditional negotiated rulemaking in which it appoints a special advisory committee to address one potential rule and uses a third-party facilitator, but it more frequently relies on informal reg-neg through RSAC.<sup>107</sup> Since 1996, which is when RSAC was chartered, RSAC has accepted more than forty-four tasks from FRA, and more than 550 meetings of RSAC, its working groups, and related groups have been held.<sup>108</sup>

<sup>102.</sup> Train Crew Staffing, 81 Fed. Reg. at 13,936.

<sup>103.</sup> *See* Cohen et al., *supra* note 74 (noting that the "substantive work [of RSAC] is performed largely through working groups ... [that] serve as staff to the full committee").

<sup>104.</sup> See infra note 106 and accompanying text.

<sup>105.</sup> Cohen et al., *supra* note 74, at 10–11, 13 (describing the "informal" RSAC process and a more formal negotiated rulemaking that occurred outside of RSAC).

<sup>106.</sup> *Id.* at 13; *see also* Lubbers, *supra* note 20, at 992 (noting that in formal reg-neg, "committee meetings are to be chaired by an impartial facilitator who assists the committee in its deliberation," although agencies "may use government employees to act as facilitators").

<sup>107.</sup> Cohen et al., supra note 74, at 8.

<sup>108.</sup> Fed. R.R. Admin. Office of R.R. Safety, Railroad Safety Advisory Committee Training Presentation 14 (Aug. 16, 2016) http://rsac.fra.dot.gov/RSACTraining.ppt.

As agencies like FRA began using more negotiated rulemaking in the 1990s, this provided a fertile testing ground for the successes and limitations of this type of rulemaking.<sup>109</sup> However, agency use of this method faded over time, and today, agencies generally only use negotiated rulemaking when required to do so by Congress.<sup>110</sup> And the use of standing committees like RSAC is particularly rare.<sup>111</sup> A notable exception is the rail safety context, as discussed in the following part.

## II. INFORMAL NEGOTIATED RULEMAKING IN THE RAIL SAFETY CONTEXT

Although the use of negotiated rulemaking has become less common, two agencies that semi-regularly use this process, FRA and PHMSA, have recently played an important role in addressing changing risks. FRA and PHMSA have primary responsibility for regulating the safety of transporting freight by rail, although agencies such as TSA work with FRA and PHMSA on certain train routing issues and the reporting of train shipments of dangerous substances, among other issues.<sup>112</sup> Additionally, the Environmental Protection Agency ("EPA") and other agencies address responses to spills from trains.<sup>113</sup> The role of these agencies has become increasingly important with the recent substantial growth of rail transport of crude oil and ethanol.<sup>114</sup> Due to congressional incentives for the production of more

<sup>109.</sup> See PRITZKER & DALTON, supra note 6, at 9–10 (describing agencies that used regneg in the past).

<sup>110.</sup> See Lubbers, supra note 20.

<sup>111.</sup> *See* E-mail from Jeffrey Lubbers, Professor, Am. Univ. Wash. Coll. of Law, to author (May 19, 2015, 4:40 PM) (on file with author) (indicating that the Federal Aviation Administration and Department of Energy use a standing committee, but that Professor Lubbers is not aware of other agencies that use standing committees).

<sup>112.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. 26,644, 26,651–52, 26,728–29 (May 8, 2015) (to be codified at 49 C.F.R. pts. 171–74, 179) (describing recent TSA actions in the rail safety context).

<sup>113.</sup> *Id.* at 26,659 (describing recent actions regarding environmental and emergency spill response by the EPA and other agencies).

<sup>114.</sup> *See generally* FRITTELLI ET AL., *supra* note 25 (describing how the recent boom in "North American oil production has led to significant challenges in transporting crudes efficiently and safely"); *infra* note 121.

domestic fuel in the form of ethanol from corn and other crops,<sup>115</sup> a boom in hydraulic fracturing that has opened up vast new reserves of U.S. oil, and growing Canadian oil production, massive volumes of these fuels are now transported by train.<sup>116</sup> As larger quantities of crude oil and gas ethanol have traveled through thousands of communities, dramatic accidents have occurred.<sup>117</sup> This Part discusses recent changes in the risks of transporting crude oil and ethanol by rail, and agencies' responses to these risks. Some of these responses involved negotiated rulemaking, and, as discussed further in Part III, even the more traditional agency responses that did not rely on negotiated rulemaking likely were influenced by FRA's and PHMSA's longstanding relationship with RSAC.

#### A. Growing Risks of Transporting Crude Oil and Ethanol by Rail

As the transport of crude oil and ethanol by rail has grown in recent years,<sup>118</sup> it appears that the risks have also grown; although the rise in the volume transported is relatively recent, and definitive conclusions about the rate of rail incidents cannot be drawn. Rather, with growing numbers of train cars being used to transport crude oil and ethanol, and increasing volumes of

<sup>115.</sup> See, e.g., Alexandra B. Klass, *Tax Benefits, Property Rights, and Mandates: Considering the Future of Government Support for Renewable Energy*, 20 J. ENVTL. & SUSTAINABILITY L. 19 (2013) (discussing U.S. ethanol tax credits and mandates).

<sup>116.</sup> See Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. at 26,644 ("The volume of crude oil carried by rail increased 423 percent between 2011 and 2012."); *id.* at 26,645 ("U.S. ethanol production has also increased considerably during the last 10 years and has generated similar growth in the transportation of ethanol by rail."); Emergency Order Establishing Additional Requirements for Attendance and Securement of Certain Freight Trains and Vehicles on Mainline Track or Mainline Siding Outside the Yard or Terminal, 78 Fed. Reg. 48,218, 48,221 (Aug. 7, 2013) ("Ethanol experienced an increase in traffic of 442 percent between 2005 and 2010. Although in 2012 the number of carloads dropped by 11 percent from 2010 levels, there were still approximately 366,000 carloads transported by rail."); *see also* FRITTELLI ET AL., *supra* note 25, at 1–4 (describing the reasons for the growth of crude oil transport by rail); Klass, *supra* note 25, at 8–9, 43–47 (discussing expanding transport of oil by rail, comparing pipeline and rail incidents, and discussing certain rail safety regulations).

<sup>117.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 79 Fed. Reg. 45,016, 45,020 (proposed Aug. 1, 2014) (to be codified at 49 C.F.R. pts. 171–74, 179) (describing crude oil and ethanol accidents that occurred between 2006 and 2014).

<sup>118.</sup> See supra note 116; infra note 119.

these substances being transported, certain problematic accidents have occurred, and more accidents (in terms of total number, and not necessarily rate per train car or volume of substance transported)<sup>119</sup> have occurred.

The most tragic recent crude oil train accident was in Lac-Mégantic, Montreal, where a crude oil train that was parked and left unattended, later rolled and derailed.<sup>120</sup> The train then exploded, killing forty-seven people and causing millions of dollars of damage.<sup>121</sup> There have been other high-profile accidents throughout the United States. As described by FRA, in 2015 in Mt. Carbon, West Virginia, a train carrying crude oil derailed and spilled approximately 379,000 gallons of oil, causing "[m]ultiple fires and explosions ... [and the evacuation of] approximately 300 people."122 Also in 2015, an oil train that derailed near Galena, Illinois, released oil and caused a fire.<sup>123</sup> In 2013, an oil train near Casselton, North Dakota, collided with a train carrying grain.<sup>124</sup> The train released oil, which ignited, and authorities directed a "voluntary evacuation of the city and surrounding area."125 That same year a crude oil train derailment in Aliceville, Alabama, spilled oil into a wetland and the oil ignited.<sup>126</sup> The rise

126. Id.

<sup>119.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. at 26,720–21 (showing the rise in rail accidents as crude oil shipments have increased).

<sup>120.</sup> Emergency Order Establishing Additional Requirements for Attendance and Securement of Certain Freight Trains and Vehicles on Mainline Track or Mainline Siding Outside the Yard or Terminal, 78 Fed. Reg. at 48,219 (describing the Lac-Mégantic incident).

<sup>121.</sup> See id.; TRANSP. SAFETY BD. OF CAN., LAC-MÉGANTIC RUNAWAY TRAIN AND DERAILMENT INVESTIGATION SUMMARY (2014), http://www.bst-tsb.gc.ca/eng/rapports-rep orts/rail/2013/r13d0054/r13d0054-r-es.pdf (detailing the findings from the investigation of the Lac-Mégantic incident); Monique Beaudin, Lac-Mégantic Disaster: Where Things Stand Today, MONTREAL GAZETTE (Jan. 21, 2014), http://www.montrealgazette.com/busi ness/m%C3%A9gantic+disaster+where+things+stand+today/9418300/story.html.

<sup>122.</sup> FED. R.R. ADMIN., FRA EMERGENCY ORDER NO. 30, EMERGENCY ORDER ESTABLISHING A MAXIMUM OPERATING SPEED OF 40 MPH IN HIGH-THREAT URBAN AREAS FOR CERTAIN TRAINS TRANSPORTING LARGE AMOUNTS OF CLASS 3 FLAMMABLE LIQUIDS 6 (2015), www.fra.dot.gov/Elib/Document/14474.

<sup>123.</sup> Id.

<sup>124.</sup> See id.; Danielle Silva, Mile-Long Train Carrying Crude Oil Derails, Explodes in North Dakota, NBC NEWS (Dec. 30, 2013, 2:37 PM), http://usnews.nbcnews.com/\_news/2013/12/30/22113442-mile-long-train-carrying-crude-oil-derails-explodes-in-north-dakota.

<sup>125.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 79 Fed. Reg. 45,016, 45,020 (proposed Aug. 1, 2014) (to be codified at 49 C.F.R. pts. 171–74, 179).

in accidents, fires, and explosions may be due in part to the fact that the type of crude oil now being transported—primarily oil from hydraulically fractured wells in North Dakota's Bakken Shale—is more ignitable and flammable than other types of crude oil,<sup>127</sup> thus posing a higher risk of damage when accidents occur.

Ethanol trains, too, have experienced a recent rise in accident numbers. A 2009 derailment of an ethanol train in Cherry Valley, Illinois, caused fires and explosions, killing one person and leading to an evacuation of "approximately 600 residences."<sup>128</sup> Similar derailments of ethanol trains in Columbus and Arcadia, Ohio, and Plevna, Montana, also caused fires and evacuations.<sup>129</sup>

These types of incidents—and others involving trains carrying similar hazardous substances, as well as safety issues with passenger trains—in the past prompted Congress to enact rail safety statutes.<sup>130</sup> However, as discussed in the following sections, Congress was slow in acting to address issues involving the safety of crude oil or ethanol rail transport, thus leaving agencies with the initial primary responsibility for addressing these newer risks.

## B. Congressional Action in the Rail Safety Area

Congress historically played an important role in regulating rail safety, both by enabling agencies to act and by prescribing specific standards. In one of the most important rail safety statutes, the Federal Railroad Safety Act of 1970 directed the Secretary of Transportation to "prescribe, as necessary, appropriate rules, regulations, orders, and standards for all areas of railroad safety" to supplement congressionally-provided laws as well as to "conduct . . . research, development, testing, evaluation, and training for all areas of railroad safety."<sup>131</sup> The Act also allowed the Secretary to use emergency powers to stop the use of

<sup>127.</sup> PIPELINE & HAZARDOUS SAFETY MATERIALS ADMIN., OPERATION SAFE DELIVERY UPDATE 16 (2014), http://www.phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/H azmat/07\_23\_14\_Operation\_Safe\_Delivery\_Report\_final\_clean.pdf.

<sup>128.</sup> Emergency Order Establishing Additional Requirements for Attendance and Securement of Certain Freight Trains and Vehicles on Mainline Track or Mainline Siding Outside the Yard or Terminal, 78 Fed. Reg. 48,218, 48,221 (Aug. 7, 2013).

<sup>129.</sup> Id.

<sup>130.</sup> See infra note 141 and accompanying text.

<sup>131.</sup> Federal Railroad Safety Act of 1970, Pub. L. No. 91-458, § 202(a), 84 Stat. 971, 971 (1970).

unsafe facilities and equipment,<sup>132</sup> and directed the Secretary to submit a "comprehensive study" of railroad grade crossing problems to the President and Congress within a year of the Act.<sup>133</sup> Further, the Act preempted most state control over railroad safety, with exceptions allowing regulation in areas not "covered" by federal law or in areas that are covered by federal law where local or state laws are needed to meet an "essentially local safety hazard" and satisfy other conditions.<sup>134</sup> The Act additionally gave NTSB "the authority to determine the cause or probable cause and report the facts, conditions, and circumstances relating to accidents" involving railroad safety, and it granted NTSB inspection powers.<sup>135</sup> Further, Congress required the Secretary of the Department of Transportation ("DOT") to annually submit a "statistical compilation of . . . [rail] accidents and casualties" and other information.<sup>136</sup>

In terms of setting direct standards for railroad safety within this Act, Congress primarily limited itself to setting the amount for penalties imposed: requiring a civil penalty of not less than \$250 and not more than \$2500 for each violation of a DOT "rule, regulation, order, or standard."<sup>137</sup>

Also, in 1970 Congress enacted the Hazardous Materials Transportation Control Act.<sup>138</sup> This Act was more minimalist than the railroad safety portion of the legislation and simply directed the Secretary of Transportation to "establish facilities and technical staff to maintain within the Federal Government the capability to evaluate the hazards connected with and surrounding the various hazardous materials being shipped" and to "establish a central reporting system for these materials."<sup>139</sup>

In 1988, in response to a collision of a freight and commuter train in Chatsworth, California, which caused "25

<sup>132.</sup> Id. § 203.

<sup>133.</sup> Id. § 204.

<sup>134.</sup> Id. § 205.

<sup>135.</sup> Id. § 208.

<sup>136.</sup> Id. § 211.

<sup>137.</sup> Id. § 209.

<sup>138.</sup> Hazardous Materials Transportation Control Act of 1970, Pub. L. No. 91-458, § 301, 84 Stat. 971, 977 (1970).

<sup>139.</sup> Id. § 302.

deaths and 102 injuries,"140 the Rail Safety Improvement Act of 1988 enhanced the civil penalties originally established for rail safety violations in 1970, raising them to not less than \$250 and not more than \$10,000 per violation.141 The Act also created liability for individuals responsible for rail safety violations, allowing the Secretary to prohibit those individuals from "performing safety-sensitive functions in the rail industry for a specified period of time."142 Congress further directed the Secretary to issue rules to establish "licensing or certification of any operator of a locomotive," including minimum training requirements, and established certain criteria that the Secretary should and should not consider when creating the licensing and certification program.<sup>143</sup> The Act also required the Secretary to mandate that trains be equipped with "event recorders," and issued a variety of requirements for trains operating in the northeastern and mid-Atlantic states, including requirements for "automatic train control systems designed to slow or stop a train in response to external signals."144 The failure of train companies to timely install these types of systems, and FRA's waivers from the requirements for trains traveling on certain portions of railroad tracks, have been problematic, with NTSB listing several accidents likely caused by the lack of certain types of automatic train control.<sup>145</sup> The Act included a variety of other mandates directing, inter alia, the preparation of rules for the safety of workers on railroad rights-of-way,146 prohibiting tampering with "railroad safety or operational monitoring devices,"147 and ensuring "the safe maintenance, inspection, and testing of signal systems and devices at railroad highway grade crossings."148

More recently, the Hazardous Materials Transportation Safety Improvement Act of 2012 focused largely on the collection

- 146. Rail Safety Improvement Act of 1988 § 19(a).
- 147. Id. § 21.
- 148. Id. § 23.

<sup>140.</sup> Implement Positive Train Control Systems, NAT'L TRANSP. SAFETY BOARD, http://www.ntsb.gov/safety/mwl/Pages/mwl8\_2014.aspx (last visited Nov. 10, 2016).

<sup>141.</sup> Rail Safety Improvement Act of 1988, Pub. L. No. 100-342, § 3(a)(2), 102 Stat. 624, 624 (1988).

<sup>142.</sup> Id. § 3(f).

<sup>143.</sup> Id. § 4(a).

<sup>144.</sup> Id. §§ 6, 9.

<sup>145.</sup> Implement Positive Train Control Systems, supra note 140.

of better information-based regulation of transport in all contexts, not just by rail. Congress directed the Secretary to "improve the collection, analysis, reporting, and use of data related to accidents and incidents involving the transportation of hazardous material,"<sup>149</sup> and allowed the Secretary to "develop and implement a hazardous material technical assessment, research and development, and analysis program" to reduce the risks of transporting hazardous material and identify technologies to assist with this risk reduction.<sup>150</sup> This Act also required the development of "uniform performance standards for training hazardous materials inspectors and investigators"<sup>151</sup> and increased certain penalties,<sup>152</sup> among other provisions. No portions of this short Act specifically addressed the transport of crude oil or ethanol by train.<sup>153</sup>

The act that directly, and relatively robustly, addresses the transport of crude oil and ethanol by rail, the Fixing America's Surface Transportation ("FAST") Act, was not enacted until December 2015.<sup>154</sup> This Act took several of the rules from FRA's and PHMSA's May 2015 final rail safety rule and made them statutory requirements; it also added new requirements that these agencies must implement. Specifically, the FAST Act required that the Secretary of Transportation enact rules requiring train cars to retrofit to the new, safer "DOT-117" design for tank cars, with a different retrofit schedule for different types of trains to convert to DOT-117 standards.<sup>155</sup> DOT's May 2015 final rule included this same retrofit schedule.<sup>156</sup> Additionally, under the Act, all new DOT-117 cars, and train cars retrofited to this standard, are to be equipped with a half-inch thick "insulating blanket" that helps to prevent fires in the case of derailments or collisions.<sup>157</sup> This is

153. See id. (addressing hazardous materials generally).

155. Id. § 7304.

<sup>149.</sup> Hazardous Materials Transportation Safety Improvement Act of 2012, Pub. L. No. 112-141, § 33006(a), 126 Stat. 410, 834–35 (2012).

<sup>150.</sup> Id. § 33007.

<sup>151.</sup> Id. § 33008.

<sup>152.</sup> Id. § 33010.

<sup>154.</sup> Fixing America's Surface Transportation Act, Pub. L. No. 114-94, 129 Stat. 1312 (2015).

<sup>156.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. 26,644, 26,682–83 (May 8, 2015) (to be codified at 49 C.F.R. pts. 171–74, 179).

<sup>157.</sup> Fixing America's Surface Transportation Act § 7305.

similar to, but more specific than, train car thermal protection requirements in the final rule.<sup>158</sup> The Act also requires other specific design features for the DOT-117 cars that PHMSA and FRA had not specifically mandated in their May 2015 rule, such as a "protective housing" of minimum one-half-inch thickness, with a particular tensile strength, that must be installed around the cars.<sup>159</sup> And one provision rejected in the May 2015 FRA and PHMSA rule, but required by Congress in the FAST Act, is realtime notification of crude oil and ethanol routes, locations, and other information.<sup>160</sup> Specifically, the Act requires the Secretary to issue regulations requiring railroads that transport crude oil and ethanol to generate real-time information about "the identity, quantity, and location of hazardous materials on a train," in addition to other real-time information, and to provide this information confidentially to emergency responders, first responders, and law enforcement.<sup>161</sup> This language largely echoes an NTSB recommendation that FRA and PHMSA had rejected.<sup>162</sup>

Beyond requiring safety standards identical to and more stringent than those in PHMSA's and FRA's rule, the FAST Act requires the Secretary of Transportation to update Congress on the status of in-progress rulemaking on oil-spill response plans for trains that carry crude oil and ethanol and, if rulemaking had not yet occurred, provide reasons for this.<sup>163</sup> Further, the Act requires the Secretary to provide data on the conversion of tank cars to the DOT-117 standard as well as cars that have not yet been retrofitted and modified and are still carrying ethanol and crude oil, among other data.<sup>164</sup> Under the Act, the Secretary of Transportation also must study the structure of insurance held by companies that carry hazardous materials by train and "the level and structure of insurance that would be necessary and appropriate ... to efficiently allocate risk and financial responsibility for claims,"<sup>165</sup>

<sup>158.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. at 26,679.

<sup>159.</sup> Fixing America's Surface Transportation Act § 7306.

<sup>160.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. at 26,660.

<sup>161.</sup> Fixing America's Surface Transportation Act § 7302.

<sup>162.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. at 26,660.

<sup>163.</sup> Fixing America's Surface Transportation Act § 7307.

<sup>164.</sup> Id. § 7308.

<sup>165.</sup> Id. § 7310.

and the Secretary must study the effectiveness of certain types of electronic braking systems for trains,<sup>166</sup> the Comptroller General must study "whether limitations or weaknesses exist in the emergency response information carried by train crews transporting hazardous materials";<sup>167</sup> and the Secretaries of Energy and Transportation must report the results of their continued efforts to classify crude oil.<sup>168</sup> Additionally, the Secretary of Transportation must establish a competitive grant program, with grants to nonprofit organizations that conduct "national outreach and training programs to assist communities in preparing for and responding to accidents and incidents involving the transportation of hazardous materials" and that train "State and local personnel responsible for enforcing the safe transportation of hazardous material."169 This statute does not come close to addressing all risks associated with the transport of crude oil and ethanol by rail, but it is a rare example of a relatively robust congressional response to recent risks, albeit a response that occurred years after the risks were known.

## C. Recent Agency Efforts to Address Crude Oil and Ethanol Rail Transport

In light of Congress's failure to quickly pass major legislation addressing the rise in the transport of crude oil and ethanol by rail and associated risks, the agencies already tasked with railroad safety by the above-described statutes had to step in. As public attention to the dramatic incidents involving oil and ethanol increased, in September 2012 FRA and PHMSA began to address these risks, initially through studies of the problem and voluntary directives issued to industry, and eventually through the promulgation of rules.<sup>170</sup> The agencies did not use negotiated rulemaking to write most of these rules, but they assigned various tasks to FRA's advisory committee to address certain aspects of the

<sup>166.</sup> Id. § 7311.

<sup>167.</sup> Id. § 7303.

<sup>168.</sup> Id. § 7309.

<sup>169.</sup> Id. § 7301.

<sup>170.</sup> Safe Transportation of Energy Products: Chronology, supra note 28 (showing, as a first step, that the PHMSA Administrators visited the "North Dakota Bakken Region to observe operations at rail loading facilities and the application of U.S. DOT regulations" in September 2012).

rules.<sup>171</sup> Further, the agencies' historic reliance on the advisory committee and associated negotiated rulemaking likely influenced how the agencies approached crude oil and ethanol transport risks.

## i. Information-Based Regulation of Rail Safety: Risk Identification and Training, Notification of Communities

The first response of the agencies to the rise in the number of crude oil and ethanol rail-based incidents was to collect more information on the source of the problem and to commence educational efforts. Most of these efforts were directed at oil trains, but by 2014, the agencies made clear that they were addressing both crude oil and ethanol—both of which fall within the same class of hazardous flammable substances transported by train ("Class 3 flammable liquids")—in their efforts.<sup>172</sup>

In October 2012, PHMSA convened a working group to increase inspections of both trucks and rail cars carrying oil from North Dakota's Bakken Shale.<sup>173</sup> In December of that same year, FRA expanded its inspections of rail cars traveling from the Bakken Region and began training all entities associated with the rail transport of oil with respect to safety issues.<sup>174</sup> Other information-based efforts continued in 2013, when FRA sent a letter to the American Petroleum Institute ("API") documenting its concerns associated with rail transport of crude oil and informing API that FRA "will be requesting analytical data supporting the current classification of a shipper's crude oil, as well as information related to shipper crude oil loading practices."<sup>175</sup> The letter also indicated that FRA would work with PHMSA, using PHMSA's existing Hazardous Materials Testing

<sup>171.</sup> *Id.* (noting that three working groups—the Securement Working Group, the Hazardous Materials Issues Working Group, and the Appropriate Train Crew Size Working Group—were established at the RSAC Emergency Meeting in August 2013 when the recommendations produced by those groups were discussed).

<sup>172.</sup> *Id.* (noting that an ongoing effort of the agency to improve the safety of rail transportation of flammable substances like crude oil was renamed in 2014 to make clear that the effort addressed both crude oil and ethanol).

<sup>173.</sup> Id.

<sup>174.</sup> Id.

<sup>175.</sup> Letter from Thomas J. Hermann, Acting Dir., Office of Safety Assurance & Compliance, Fed. R.R. Admin., to Jack Gerard, Am. Petroleum Inst. 4 (July 29, 2013).

Program, to conduct laboratory testing of the oil transported in certain trains, and that FRA would investigate whether the oil shipped was being properly classified in terms of its hazardous nature.<sup>176</sup>

In its letter to API, the Agency was concerned, in particular, that the crude oil was coming from many different wells and was blended prior to shipping.<sup>177</sup> Due to the many different oil wells from which oil was procured and blended-wells for which the characteristics of the oil, such as flammability, were not individually tested-the Agency worried that shippers of oil often were not aware of the exact properties of the oil and were using improper types of tank cars.<sup>178</sup> The Agency provided an example of one shipper that classified the oil it was shipping as falling within one "Packing Group," the classification of a particular hazardous substance based on its flammability and other characteristics which determines the type of tank car that must be used to transport that substance.<sup>179</sup> (A transported substance first receives a numerical classification based on its characteristics, such as Class 1, 2, or 3, and is then placed within a particular Packing Group based on these characteristics, with the Class and Packing Group determining the safety measures that must be followed and technologies, such as specific tank car designs, that must be used when the substance is transported.)<sup>180</sup> Yet the oil was improperly classified within a different Packing Group and shipped in "tank cars that were not equipped with the required design enhancements."181 FRA also expressed concerns that the oil being transported from the Bakken was damaging tank cars by corroding them and thus compromising their safety.<sup>182</sup> The Agency surmised that the chemicals in the crude oil, which are present because crude oil from the Bakken is extracted using hydraulic fracturing, might be causing the corrosion.<sup>183</sup>

Soon after FRA sent this letter, FRA and PHMSA issued an August 2013 Safety Advisory requesting, but not requiring, that

176. Id.

- 177. Id. at 2.
- 178. Id.
- 179. *Id*.
- 180. *Id.*
- 181. *Id.*
- 182. *Id.* at 4.
- 183. Id.

"offerors"—those entities that deal with hazardous materials prior to transport or make hazardous materials available for transport<sup>184</sup>—"evaluate their processes for testing, classifying, and transporting the crude oil that they offer into transportation via railroad tank car."<sup>185</sup> The Safety Advisory also asked rail companies to review their existing "safety and security plans for the transportation of hazardous materials"—plans that must include "personnel security, unauthorized access, and en route security."<sup>186</sup> If rail companies determined that existing measures inadequately protected safety, the advisory requested that the companies amend their plans.<sup>187</sup>

FRA sent a letter to rail industry actors in October 2013 requesting updates on the steps that they had taken to implement the August 2013 Safety Advisory.<sup>188</sup> Organizations such as AAR responded that, with respect to the Safety Advisory's recommendation for improving the testing and classification of oil, "[r]ailroads have completed or are in the process of reviewing their programs."<sup>189</sup> AAR did not indicate that its members had directly implemented the recommendation that the railroads review their hazardous materials safety and security plans, but rather indicated that "[r]ailroads periodically review their plans for compliance with federal regulations."<sup>190</sup> PHMSA and FRA issued another Safety Advisory in November 2013 "reinforcing" the importance of properly classifying crude oil and the recommendation that companies revise their safety and security plans.<sup>191</sup>

As the agencies sent voluntary safety advisories and followed up with industry to identify responses to the advisories, they also commenced an effort called "Operation Classification"

<sup>184. 49</sup> C.F.R. § 171.8 (2015).

<sup>185.</sup> Lac-Mégantic Railroad Accident Discussion and DOT Safety Recommendations, 78 Fed. Reg. 48,224, 48,227 (Aug. 7, 2013).

<sup>186.</sup> Id.

<sup>187.</sup> Id.

<sup>188.</sup> Letter from Edward R. Hamberger, President & CEO, Ass'n of Am. R.R., to Joseph C. Szabo, Adm'r, Fed. R.R. Admin. 2 (Oct. 16, 2013), www.fra.dot.gov/Elib/Docu ment/3442; see also Industry Response to Safety Advisory 2013-06, FED. RAILROAD ADMIN., http://www.fra.dot.gov/Page/P0670 (last visited Nov. 10, 2016).

<sup>189.</sup> Letter from Edward R. Hamberger, supra note 188.

<sup>190.</sup> Id. at 3.

<sup>191.</sup> Safety and Security Plans for Class 3 Hazardous Materials Transported by Rail, 78 Fed. Reg. 69,745, 69,745 (Nov. 20, 2013).

to better test and identify the various types of oil that were being produced in the Bakken, blended, and then loaded into tank cars.<sup>192</sup> This program, through which the agencies tested 135 samples of oil between 2013 and 2014, led the agencies to conclude that crude oil from the Bakken fell within a particular class of flammable substances called "Class 3," and tended to exhibit characteristics consistent with the most dangerous types of Class 3 substances, which are typically described as falling within "Packing Group I" and have to be carried in specially-designed tank cars that protect against the hazards associated with Packing Group I.<sup>193</sup> The agencies further concluded that Bakken oil "is more volatile than other types of crude, which correlates to increased ignitability and flammability," and, therefore, "there is an increased risk of a significant incident involving this material due to the significant volume that is transported, the routes and the extremely long distances it is moving by rail."<sup>194</sup> In February and March 2014, DOT issued an emergency order<sup>195</sup> and an amended order<sup>196</sup> that required, rather than just requested, that offerors and carriers of crude oil update their testing and classification procedures for crude oil.<sup>197</sup> To reinforce the mandatory nature of these requirements, in February 2014, PHMSA issued two notices of probable violation to two oil companies, with penalties totaling more than \$82,000, based on a failure of these companies to properly classify Bakken oil transported by train.<sup>198</sup>

196. U.S. DEP'T OF TRANSP., DOT-OST-2014-0025, AMENDED AND RESTATED EMERGENCY RESTRICTION/PROHIBITION ORDER (Mar. 6, 2014), http://www.phmsa.dot.go v/staticfiles/PHMSA/DownloadableFiles/Amended\_Emergency\_Order\_030614.pdf.

197. Id.

<sup>192.</sup> Safe Transportation of Energy Products: Chronology, supra note 28.

<sup>193.</sup> PIPELINE & HAZARDOUS SAFETY MATERIALS ADMIN., supra note 127.

<sup>194.</sup> Id.

<sup>195.</sup> U.S. DEP'T OF TRANSP., DOT-OST-2014-0025, EMERGENCY RESTRICTION/ PROHIBITION ORDER (Feb. 25, 2014), https://www.transportation.gov/sites/dot.gov/files/ docs/Emergency%20Restriction%20-%20Prohibition%20Order%20%28Docket%20DOT-OST-2014-0025%29.pdf.

<sup>198.</sup> PIPELINE & HAZARDOUS MATERIALS SAFETY ADMIN., PHMSA Case No. 14-0001-SH-CE, NOTICE OF PROBABLE VIOLATION (Feb. 3, 2014), http://phmsa.dot.gov/ staticfiles/PHMSA/DownloadableFiles/Enforcement%20Notices/NOPV%2014-0001-SH-CE%20Hess%20Corporation.pdf (proposed penalty or \$51,530); PIPELINE & HAZARDOUS MATERIALS SAFETY ADMIN., PHMSA Case No. 14-0002-SH-CE, NOTICE OF PROBABLE VIOLATION (Feb. 3, 2014), http://phmsa.dot.gov/staticfiles/PHMSA/Downloadable Files/Enforcement%20Notices/NOPV%2014-0002-SH-CE%20Marathon%20Oil% 20Company.pdf (proposed penalty of \$30,000).

The agencies also continued to collect information to better classify oil. In April and May 2014, the agencies sent two additional letters to producers of Bakken crude oil asking these producers to provide more information on the characteristics of their oil.<sup>199</sup> These and other actions eventually culminated in a final rule, issued in May 2015, that required more thorough testing and classification programs for crude oil<sup>200</sup> in addition to substantive regulations addressing the transport of oil and ethanol.

Beyond focusing on the importance of crude oil classification and better plans for the safety of transporting oil, the agencies, beginning in 2012, embarked upon a variety of training programs relating to rail safety. For example, in December 2012, FRA conducted "hazardous materials safety training seminars."<sup>201</sup> Further, PHMSA met several times with the rail industry and emergency responders to improve "training and awareness" relating to the safety of Bakken crude oil transport.<sup>202</sup> PHMSA also released training modules on preparing for and responding to rail incidents involving crude oil and ethanol,<sup>203</sup> and it provided \$5.9 million to "firefighters, police, and other first responders" for training programs relating to incidents involving rail transport of crude oil, ethanol, and other flammable liquids.<sup>204</sup>

In addition to these agency programs, industry voluntarily instituted certain training efforts. For example, after the Secretary of Transportation met with and issued a Call to Action to the rail industry to maintain rail safety as crude oil shipments grew,<sup>205</sup> and

<sup>199.</sup> Safe Transportation of Energy Products: Chronology, supra note 28.

<sup>200.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. 26,644, 26,646 (May 8, 2015) (to be codified at 49 C.F.R. pts. 171–74, 179).

<sup>201.</sup> Safe Transportation of Energy Products: Chronology, supra note 28.

<sup>202.</sup> *Id.* (describing PHMSA meeting with emergency response officials on February 10, 2014, and December 11, 2014).

<sup>203.</sup> Id.; Transportation Rail Incident Preparedness and Response (TRIPR), PIPELINE & HAZARDOUS MATERIALS SAFETY ADMIN., http://www.phmsa.dot.gov/hazmat/osd/emerge ncyresponse/TRIPR (last visited Nov. 10, 2016).

<sup>204.</sup> Press Release, Pipeline & Hazardous Materials Safety Admin., DOT Announces \$5.9 Million in First Responder Grants to Help Protect Communities from Flammable Liquids by Rail Incidents (Sept. 28, 2015), http://www.phmsa.dot.gov/hazmat/dot-annou nces-5-9-million-in-first-responder-grants-to-help-protect-communities-from-flammable-liquids-by-rail-incidents; *Safe Transportation of Energy Products: Chronology, supra* note 28.

<sup>205.</sup> Safe Transportation of Energy Products: Chronology, supra note 28.

issued a follow-up Call to Action,<sup>206</sup> the American Short Line and Regional Railroad Association asked for a grant from FRA to create a "Short Line Safety Institute" to conduct training that would help to reduce crude oil transport risks.<sup>207</sup> FRA funded this project.<sup>208</sup>

Beyond classification and training, the agencies also embarked upon efforts designed to provide better notification of risks. In January 2014, PHMSA issued a "safety alert to notify the general public, emergency responders and shippers and carriers ... that the type of crude oil being transported from the Bakken region may be more flammable than traditional heavy crude oil."209 DOT then issued an emergency order in May 2014 requiring rail carriers that carried certain minimum volumes of Bakken crude oil to notify each State Emergency Response Commission regarding the expected movement of crude oil trains traveling through each state.<sup>210</sup> The carriers had to "identify each county, or a particular state or commonwealth's equivalent jurisdiction" through which Bakken crude oil trains would run.<sup>211</sup> In May<sup>212</sup> and July 2015,<sup>213</sup> PHMSA and FRA issued directives making clear that this notification requirement remained in force despite the order not having been codified as a rule. DOT also informed all of the states of this emergency order and encouraged

210. U.S. DEP'T OF TRANSP., DOT-OST-2014-0067, EMERGENCY RESTRICTION/ PROHIBITION ORDER (May 7, 2014), http://www.phmsa.dot.gov/staticfiles/PHMSA/Down loadableFiles/Hazmat/Final\_EO\_on\_Transport\_of\_Bakken\_Crude\_Oi\_05\_07\_2014.pdf.

211. Id.

<sup>206.</sup> Letter from Anthony R. Foxx, Sec'y of Transp., to Ed Hamberger, President, Ass'n of Am. R.Rs. et al. (Jan. 22, 2014), http://www.phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/Letter\_from\_Secretary\_Foxx\_Follow\_up\_to\_January\_16.pdf.

<sup>207.</sup> Safe Transportation of Energy Products: Chronology, supra note 28.

<sup>208.</sup> Press Release, Fed. R.R. Admin., Federal Railroad Administration Funds Two Grants to Mitigate Risk Among Short Line Railroads (Aug. 22, 2014), https://www.fra.dot. gov/eLib/details/L15890.

<sup>209.</sup> Press Release, Pipeline & Hazardous Materials Safety Admin., Preliminary Guidance from Operation Classification (Jan. 2, 2014), http://www.phmsa.dot.gov/portal /site/PHMSA/menuitem.6f23687cf7b00b0f22e4c6962d9c8789/?vgnextoid=c6efec1c60f2 3410VgnVCM100000d2c97898RCRD.

<sup>212.</sup> Press Release, Fed. R.R. Admin., PHMSA Notice Regarding Emergency Response Notifications for Shipments of Petroleum Crude Oil by Rail (May 28, 2015), http://www.phmsa.dot.gov/hazmat/phmsa-notice-regarding-emergency-response-notifications-for-ship ments-of-petroleum-crude-oil-by-rail.

<sup>213.</sup> Press Release, Fed. R.R. Admin., Federal Railroad Administration to Railroads: Notification of Crude Oil Trains to States Must Continue (July 22, 2015), https://www.fra. dot.gov/eLib/details/L16747#p1\_z50\_gD\_IPR.

them to "facilitate coordination between the rail industry" and their emergency responders.<sup>214</sup> Although rail companies must generally inform communities if trains will run through their area, they need not provide information on when and exactly how often the trains will be in the area. This is because FRA and PHMSA have not adopted the NTSB recommendation that "railroads immediately provide to emergency responders accurate, real-time information regarding the identity and location of all hazardous materials on a train."215 The lack of real-time notification is a concern for many community officials who want clearer information about exactly when and where they are likely to encounter risks due to trains traveling through their communities.<sup>216</sup> Congress has, however, partially responded to this concern, requiring in the FAST Act that real-time information be provided to emergency responders.<sup>217</sup>

ii. Substantive Regulation of Rail Safety

While FRA and PHMSA were implementing informational requirements, the agencies also began sending letters and similar requests to rail industry actors asking them to voluntarily change certain operational protocols and technologies and to report on their progress in making these changes.<sup>218</sup> As with informational regulation, the agencies also began issuing mandates for substantive changes to transporting crude oil in addition to requests.

The substantive regulation of transporting fuels by rail generally involves four categories, including: (1) <u>technology-based</u> <u>standards</u>: once the material being transported has been properly

217. See supra notes 161-62 and accompanying text.

218. Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. at 26,658.

<sup>214.</sup> Safe Transportation of Energy Products: Chronology, supra note 28.

<sup>215.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 79 Fed. Reg. 45,016, 45,036 (proposed Aug. 1, 2014) (to be codified at 49 C.F.R. pts. 171–74, 179) (summarizing NTSB recommendation R-07-4).

<sup>216.</sup> See Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. 26,644, 26,707 (May 8, 2015) (to be codified at 49 C.F.R. pts. 171–74, 179) (indicating that commenters expressed support for additional routing requirements and expansion of risk factors, including one to avoid routes that pass through areas that experience a high density of commuters at peak times).

classified in terms of its risk, requiring the use of certain technologies and tank designs to ensure that tanker cars carrying fuels are secure and will not easily derail or collide with other objects, and will not spill, catch fire, or explode when an incident occurs; (2) operational standards: requiring certain procedures for operating moving trains and securing stopped trains (such as the number and type of employees who must be aboard trains at various times, and the types of technologies that must be activated or deactivated at different times), and employee certification and training, in order to avoid and address incidents such as derailment and collisions; (3) route planning and decisions: addressing the routing of trains to attempt to reduce incidents in highly populated or other sensitive areas; and (4) incident response: regulating the planning and implementation of spill clean-up, in addition to other actions for responding to accidents. FRA and PHMSA have recently issued requests and mandates for changes in all of these substantive areas.

## a. Improving Rail Car Technologies

When crude oil rail shipments dramatically increased, one of the first areas of attention for FRA and PHMSA was the design of the rail cars used for crude oil transport. Rail cars must be made of specific material of a certain strength and thickness to avoid corrosion, puncture, explosion, and other incidents.<sup>219</sup> The cars also must have special valves that can be closed properly after the rail tank is filled and other auxiliary equipment that will not leak or otherwise be compromised during accidents.<sup>220</sup>

The types of train cars that companies typically use to transport crude oil, which are called DOT-111 cars based on their specifications, have long been shown to contribute to problems and were placed on NTSB's 2015 "most wanted" list for improved regulation.<sup>221</sup> As early as 2009, NTSB had concluded, as summarized by FRA and PHMSA, that this type of tank car "can almost always be expected to breach in the event of a derailment

<sup>219.</sup> Id. at 26,661.

<sup>220.</sup> Id. at 26,670.

<sup>221.</sup> NAT'L TRANSP. SAFETY BD., NTSB 2015 MOST WANTED TRANSPORTATION SAFETY IMPROVEMENTS (2015), http://www.ntsb.gov/safety/mwl/Documents/MWL\_2015\_Factsh eet\_05.pdf.

resulting in car-to-car-impacts or pileups."222 NTSB "identified a number of vulnerabilities" in the car's design, which "create the risk that, in an accident, hazardous materials could be released and, in the case of flammable liquids such as crude oil and ethanol, could ignite and cause catastrophic damage."223 In 2013, several entities petitioned PHMSA for changes to rules involving the design, maintenance, and retrofit of tank cars.<sup>224</sup> Industry groups asked PHMSA to relax certain rules so that they could more easily change or repair tank cars to address the risks of the material being transported.<sup>225</sup> AAR proposed that PHMSA adopt a new design for DOT-111 tank cars based on the recommendations of an industry task force created by AAR to propose the new design, but it did not propose to require retrofit of the numerous DOT-111 tank cars in use, citing to costs.<sup>226</sup> NTSB, in turn, recommended rules that would require a design that "exceeded" DOT-111 standards for both new and existing train cars,<sup>227</sup> and a local government and public interest group argued for rules similar to NTSB's proposal.<sup>228</sup>

FRA and PHMSA considered these and other petitions in an Advance Notice of Proposed Rulemaking, requesting comments on the various options posed by the petitions.<sup>229</sup> Beyond these proposals and petitions, certain members of the rail industry signed a commitment letter in February 2014 agreeing to install improved braking technologies on trains carrying a certain amount of oil.<sup>230</sup> In August 2014, PHMSA issued a Notice of

- 228. Id. at 54,856.
- 229. Id. at 54,859.

<sup>222.</sup> Hazardous Materials: Rail Petitions and Recommendations to Improve the Safety of Railroad Tank Car Transportation, 78 Fed. Reg. 54,849, 54,856 (proposed Sept. 6, 2013) (to be codified at 49 C.F.R. pts. 173–74, 178–80).

<sup>223.</sup> NAT'L TRANSP. SAFETY BD., supra note 221.

<sup>224.</sup> Hazardous Materials: Rail Petitions and Recommendations to Improve the Safety of Railroad Tank Car Transportation, 78 Fed. Reg. at 54,853.

<sup>225.</sup> Id. at 54,854.

<sup>226.</sup> Id. at 54,854-55.

<sup>227.</sup> Id. at 54,851.

<sup>230.</sup> Letter from Anthony R. Foxx, Sec'y, Dep't of Transp., to Edward R. Hamberger, President & CEO, Ass'n of Am. R.Rs. (Feb. 21, 2014), https://www.transportation. gov/briefing-room/letter-association-american-railroads; *Safe Transportation of Energy Products: Chronology, supra* note 28 ("AAR President and CEO Edward Hamberger signed the agreement that same day, subsequently followed by individual member railroads. Other railroad signatories include: Genesee & Wyoming, Inc., the Iowa Interstate Railroad, Iowa Pacific Holdings, Wheeling and Lake Erie Railway Company."). The

Proposed Rulemaking that proposed, among other requirements, a new type of tank car, the DOT-117 car, to be used for transporting crude oil, and it proposed requiring retrofits to existing DOT-111 tank cars that transport crude oil.<sup>231</sup> The rule included three different design options for new and retrofitted cars, all of which would meet NTSB's recommendation of requiring a design that exceeded the DOT-111 design.<sup>232</sup> It also proposed other technological requirements such as enhanced braking systems that certain members of the railroad industry already had committed to installing in their commitment letter,<sup>233</sup> as well as the possibility of more sophisticated braking systems than industry had committed to.234 The proposed rule was written to apply to a newly-named type of train called a "high-hazard flammable train" ("HHFT"), defined in the proposed rule as a train with twenty or more cars carrying a flammable liquid within Class 3,<sup>235</sup> meaning the liquid fell within a range of certain characteristics for flammability, etc., that required special protections when it was transported. These liquids included Bakken oil and ethanol.

The final rule that followed the proposed rule, issued in May 2015, defined an HHFT as a train carrying a continuous row of twenty or more cars with Class 3 flammable liquids, or at least

braking systems that the signatories committed to install were two-way end-of-train ("EOT") devices or distributed power ("DP") locomotives. Letter from Anthony R. Foxx, *supra*. DP locomotives are "technically not a braking system," but it enhances a train's "conventional braking system" by signaling that the air brakes of the train should engage more quickly. Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. 26,644, 26,650 (May 8, 2015) (to be codified at 49 C.F.R. pts. 171–74, 179). "Two-way EOT devices include two pieces of equipment linked by radio that initiate an emergency brake application command from the front unit located in the controlling ('lead') locomotive, which then activates the emergency air valve at the rear of the train within one second." *Id*.

<sup>231.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 79 Fed. Reg. 45,016, 45,018 (proposed Aug. 1, 2014) (to be codified at 49 C.F.R. pts. 171–74, 179).

<sup>232.</sup> Id. at 45,036.

<sup>233.</sup> Id. at 45,018; Letter from Anthony R. Foxx, supra note 230.

<sup>234.</sup> See supra note 230 and accompanying text. The proposed rule would have required all high-hazard flammable trains to install EOTs or DPs (those that certain industry members had committed to in the letter) or electronic controlled pneumatic brakes ("ECPs"). Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 79 Fed. Reg. at 45,018.

<sup>235.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 79 Fed. Reg. at 45,017.

thirty-five cars containing Class 3 liquids somewhere within the chain of tank cars.<sup>236</sup> For the purposes of requiring advanced braking technologies, the rule defined a "high-hazard flammable unit train" ("HHFUT") as "a train comprised of 70 or more loaded tank cars containing Class 3 flammable liquids traveling speeds at greater than 30 [miles per hour]."237 The final rule selected the second design option for tank cars that had been included in the notice of proposed rulemaking (the option between the most stringent, in terms of new design, and least stringent) and, as previously proposed, also required the retrofit of existing DOT-111 tank cars on a ten-year schedule.<sup>238</sup> Further, advanced braking technology contained the the rule requirements<sup>239</sup> that certain industry actors had earlier voluntarily agreed to implement in the February 2014 commitment letter, as well as more stringent braking technology requirements for more hazardous trains.<sup>240</sup> The final rule also included operational requirements discussed in the following section.

#### b. Improving Rail Car Operations

Another substantive regulatory area that received early attention from FRA and PHMSA in the wake of the oil and ethanol boom was the operation of trains. The Lac-Mégantic disaster was caused by a train loaded with crude oil, which the operator had stopped, secured, and then left unattended.<sup>241</sup> After the train was left unattended, someone noticed a small fire, and local emergency officials responded to the fire and left the scene.<sup>242</sup> The train later rolled, derailed, and released oil, causing fires and explosions that resulted in more than forty deaths.<sup>243</sup> In one of the first emergency orders issued after this incident, FRA

<sup>236.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. 26,644, 26,645 (May 8, 2015) (to be codified at 49 C.F.R. pts. 171–74, 179).

<sup>237.</sup> Id.

<sup>238.</sup> Id. at 26,647.

<sup>239.</sup> Id.

<sup>240.</sup> Id. (requiring ECP braking devices only for HHFUTs).

<sup>241.</sup> Emergency Order Establishing Additional Requirements for Attendance and Securement of Certain Freight Trains and Vehicles on Mainline Track or Mainline Siding Outside of a Yard or Terminal, 78 Fed. Reg. 48,218, 48,219 (Aug. 7, 2013).

<sup>242.</sup> Id.

<sup>243.</sup> Id.

updated standards for securing and ensuring adequate human monitoring of stopped trains.<sup>244</sup> This order, issued in August 2013, prohibited trains or vehicles that transported hazardous substances from being left unattended when parked in certain areas until rail companies had submitted and had approved by FRA a plan indicating the circumstances in which the trains could be left unattended, with safety justifications included in the plan.<sup>245</sup> It also required the locomotive that controls the train to be locked when the train is left unattended, or that the reverser the handle that controls train direction-be "removed or secured,"246 among other requirements.247 FRA additionally issued a Safety Advisory in August 2013 requesting, but not requiring, that members of the rail industry evaluate the practices that they then followed for securing stopped trains and review whether they performed adequate testing of their train securement operations.<sup>248</sup> The advisory included several further operational recommendations, such as removing certain equipment from the train when it is unattended and is on a main track, and it required railroads to test their current operations to determine whether they were complying with operational rules in place at the time.<sup>249</sup>

FRA also used negotiated rulemaking to formulate certain proposed and final operational rules for trains carrying crude oil and gas ethanol. Specifically, in August 2013 FRA called an emergency meeting of RSAC.<sup>250</sup> At this meeting FRA proposed tasks to be carried out by RSAC, and RSAC agreed to form two working groups to address these tasks.<sup>251</sup> One working group was assigned to address issues associated with properly securing stopped trains, and another was assigned to hazardous materials transportation safety issues more generally, including train

<sup>244.</sup> Id. at 48,218.

<sup>245.</sup> Id. at 48,219.

<sup>246.</sup> Id.

<sup>247.</sup> *Id.* The final securement rule displaced this emergency order once the rule became effective because it includes all of the requirements of the emergency order and additional requirements. *See* Securement of Unattended Equipment, 80 Fed. Reg. 47,350, 47,352 (Aug. 6, 2015) (to be codified at 49 C.F.R. pt. 232) ("FRA has decided that Emergency Order 28 will sunset on the effective date of this final rule.").

<sup>248.</sup> Lac-Mégantic Railroad Accident Discussion and DOT Safety Recommendations, 78 Fed. Reg. 48,224, 48,227 (Aug. 7, 2013).

<sup>249.</sup> Id.

<sup>250.</sup> Safe Transportation of Energy Products: Chronology, supra note 28.

<sup>251.</sup> Id.

operations.<sup>252</sup> Both of these working groups later made recommendations to the full RSAC, and RSAC adopted certain of these recommendations by majority vote.<sup>253</sup> FRA then used RSAC's proposed operational rules relating to train securement in a notice of proposed rulemaking issued in August 2014,<sup>254</sup> and a final rule in August 2015.<sup>255</sup>

RSAC's consensus recommendations for improving train securement included updating the following types of requirements for train cars stopped on tracks:

(1) The duty status and hours of service for any railroad personnel left to attend or secure a train; (2) job briefings for train crews that cover the details of individual responsibilities for the securement of a train; (3) locking requirements for locomotives and/or train controls; (4) verification of securement procedures by personnel not members of the train and reporting verified crew, securement to dispatchers; and (5) procedures for verifying securement in the event that emergency response personnel have been on, under, or between equipment that has been previously secured.<sup>256</sup>

Other consensus recommendations of RSAC, which FRA included in its proposed and final rules, included, inter alia, identifying portions of train tracks where cars containing hazardous materials "are regularly stored," and determining "[w]hether additional attendance, monitoring, and other security measures may be appropriate" and whether handbrakes on cars that sit on these tracks are adequate and whether more handbrakes are needed.<sup>257</sup> The final rule does not appear to address the RSAC task of

<sup>252.</sup> Id.

<sup>253.</sup> Id.

<sup>254.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 79 Fed. Reg. 45,016, 45,062–63 (proposed Aug. 1, 2014) (to be codified at 49 C.F.R. pts. 171–74, 179).

<sup>255.</sup> Securement of Unattended Equipment, 80 Fed. Reg. 47,350 (Aug. 6, 2015) (to be codified at 49 C.F.R. pt. 232).

<sup>256.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 79 Fed. Reg. at 45,062.

<sup>257.</sup> Id. at 45,032.

"whether the stopped cars should post all of the signs, placards, and other warnings that they post while in transit so as to inform emergency personnel of possible hazards."<sup>258</sup> Based on certain RSAC recommendations made, the final rule requires trains to meet new securement requirements when stopped on both "main tracks" and adjacent tracks and requires employees responsible for securement to verify proper securement with another employee before leaving the train unattended.<sup>259</sup> Further, although RSAC did not recommend this, the rule requires that "at least one hand brake must be applied to hold unattended equipment," among other mandates.<sup>260</sup>

One operational standard that an RSAC working group was tasked with considering, for which it could not reach consensus, was the standard for the acceptable minimum size of a train crew operating a train carrying flammable liquids.<sup>261</sup> FRA and PHMSA indicated that despite the lack of consensus, the information produced by the working group would help to inform a new rule on train crew sizes that the agencies have proposed and are continuing to work on.<sup>262</sup> Indeed, the agencies describe RSAC deliberations in detail in their 2016 proposed rule on train crew sizes and explain how the reports, information, and opinions revealed in those deliberations influenced the rule.<sup>263</sup>

Additional operational standards that FRA and PHMSA have adopted were not recommended by RSAC but, rather, were initially proposed through voluntary initiatives and emergency orders issued by FRA and PHMSA. Specifically, in February 2014, AAR and a small number of rail companies signed a commitment letter with DOT promising to, inter alia, maintain maximum speeds of fifty or forty miles per hour for different types of trains carrying hazardous liquids and conduct at least one additional rail inspection than was required by existing regulations.<sup>264</sup> The August 2014 Notice of Proposed Rulemaking introduced in Part I contained a proposal for a similar fifty and forty mile per hour

262. Id.

<sup>258.</sup> Id.

<sup>259.</sup> Securement of Unattended Equipment, 80 Fed. Reg. at 47,371-72.

<sup>260.</sup> Id. at 47,359.

<sup>261.</sup> Safe Transportation of Energy Products: Chronology, supra note 28.

<sup>263.</sup> Train Crew Staffing, 81 Fed. Reg. 13,918, 13,936–37 (proposed Mar. 15, 2016) (to be codified at 49 C.F.R. pt. 218).

<sup>264.</sup> Letter from Anthony R. Foxx, supra note 206.

rule,<sup>265</sup> and an emergency order effective as of April 2015 required trains carrying Class 3 substances through high-threat urban areas to maintain a maximum forty mile per hour speed limit.<sup>266</sup> The May 2015 final rule issued by FRA and PHMSA adopted these earlier approaches.<sup>267</sup>

Additionally, a 2014 final rule required that certain actions be taken to fix flawed rails and required that train operators have minimum qualifications, among other mandates.<sup>268</sup> FRA and PHMSA note that "[t]he bulk of this regulation codifies current good practices in the industry."<sup>269</sup>

In summary, the current, key updated operational requirement for trains carrying Class 3 substances involve speed reduction (regulations contained within a final rule), operator qualifications, track repair, and securement measures recommended by RSAC and included within a final rule.<sup>270</sup> Other operational regulatory issues, such as minimum train crew sizes, have yet to be finalized.

## c. Changing Rail Routing Notification and Plans for Rail Routes

Another means of improving rail safety—beyond requiring better technologies and enhanced operational procedures—is to avoid sending trains that carry hazardous materials through

<sup>265.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 79 Fed. Reg. 45,016, 45,017–18, 45,018 n.5 (proposed Aug. 1, 2014) (to be codified at 49 C.F.R. pts. 171–74, 179) (proposing a fifty mile per hour limit for all HHFTs and options for a forty mile per hour limit for HHFTs not meeting enhanced tank car standards and running through all areas, all high threat urban areas (areas comprising "one or more cities and surrounding areas including a 10-mile buffer zone"), or areas with a population 100,000 or higher).

<sup>266.</sup> FED. R.R. ADMIN., DEP'T OF TRANSP., FRA EMERGENCY ORDER NO. 30, EMERGENCY ORDER ESTABLISHING A MAXIMUM OPERATING SPEED OF 40 MPH IN HIGH-THREAT URBAN AREAS FOR CERTAIN TRAINS TRANSPORTING LARGE QUANTITIES OF CLASS 3 FLAMMABLE LIQUIDS 1 (2015), www.fra.dot.gov/Elib/Document/14474.

<sup>267.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. 26,644, 26,646 (May 8, 2015) (to be codified at 49 C.F.R. 171–74, 179) (adopting a fifty mile per hour limit for all HHFTs and a forty mile per hour limit for all HHFTs not meeting enhanced tank car standards and running through all high threat urban areas).

<sup>268.</sup> See id. at 26,655 (summarizing the rule).

<sup>269.</sup> Id.

<sup>270.</sup> Securement of Unattended Equipment, 80 Fed. Reg. 47,350, 47,350 (Aug. 6, 2015) (to be codified at 49 C.F.R. pt. 232).

populous areas or areas that could otherwise be substantially affected by spills, leaks, explosions, fires, and other incidents associated with rail transport. As with operational and technological standards, FRA and PHMSA took both a voluntary and mandatory approach to rail routing. In the commitment letter noted in Part I, AAR and several other rail companies agreed that they would apply protocols already developed by certain members of the rail industry to comply with existing rail routing regulations.<sup>271</sup> These regulations required rail carriers to consider "safety and security risks" along routes, including potential terrorist targets, and annually identify potential alternative routes.<sup>272</sup>

FRA and PHMSA also included new routing requirements in the Notice of Proposed Rulemaking issued on August 1, 2014, requiring rail companies to consider "27 safety and security factors" in a route analysis and to select a route based on this route analysis.<sup>273</sup> The May 2015 final rule contained the same requirement.<sup>274</sup>

> d. Requiring Plans for Avoiding and Responding to Spills of Hazardous Materials from Trains

A final means of addressing rail safety issues is to require companies to attempt to avoid the negative consequences of collisions, derailments, and other accidents by reducing the likelihood of a release of oil when the incident occurs and ensuring proper response when there is a release. Oil spills are regulated by the Clean Water Act ("CWA") and the Oil Pollution Act, which amended the CWA.<sup>275</sup> Together, these acts only require certain types of entities to prepare plans for responding to oil

<sup>271.</sup> Letter from Anthony R. Foxx, supra note 206.

 $<sup>272. \</sup>quad 49 \text{ C.F.R. } \$ 172.820 \ (2015).$ 

<sup>273.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 79 Fed. Reg. 45,016, 45,017 (proposed Aug. 1, 2014) (to be codified at 49 C.F.R. pts. 171–74, 179).

<sup>274.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. at 26,646 (May 8, 2015).

<sup>275.</sup> Hazardous Materials: Oil Spill Response Plans for High-Hazard Flammable Trains, 79 Fed. Reg. 45,079, 45,080 (proposed Aug. 1, 2014) (to be codified at 49 C.F.R. pts. 130, 174).

spills.<sup>276</sup> The threshold for spill planning requirements was established based on the quantity of oil contained in a given "package."277 In 2014, many rail carriers were exempt from the comprehensive oil spill planning requirement because of the volume of oil contained in a single rail tank car.<sup>278</sup> In January 2014, NTSB accordingly recommended to PHMSA that it require more rail carriers of oil to comprehensively plan for oil spills, thus removal of the exemption from recommending а the comprehensive planning requirement.<sup>279</sup> In August 2014, PHMSA issued an advance notice of proposed rulemaking proposing to require more train operators to prepare plans for avoiding and responding to oil spills.<sup>280</sup> Specifically, the proposed regulations would apply the oil volume threshold that triggers comprehensive reporting requirements to the entire "chain" of train cars (the train "consist") and would therefore require most trains with more than thirty-five tank cars to prepare a comprehensive oil spill response plan.<sup>281</sup> The rule has not yet been finalized,<sup>282</sup> but it must be updated and finalized relatively quickly in light of Congress's FAST Act requirements for an oil spill response rule.<sup>283</sup>

Since the rise in the transport of crude oil and ethanol by rail, FRA and PHMSA have taken a variety of actions to substantively address rail safety, although, as described above, many proposed regulations have yet to be finalized.

## III. THE INFLUENCE OF NEGOTIATED RULEMAKING ON RAIL SAFETY REGULATION: BENEFITS, COSTS, AND LESSONS

As shown in Part I, the majority of FRA's and PHMSA's responses to the new risks posed by larger volumes of crude oil

279. NAT'L TRANSP. SAFETY BD., supra note 221.

283. Safe Transportation of Energy Products: Chronology, supra note 28; see supra note 163 and accompanying text.

<sup>276.</sup> Id.

<sup>277. 49</sup> C.F.R. § 130.2 (2015).

<sup>278.</sup> Hazardous Materials: Oil Spill Response Plans for High-Hazard Flammable Trains, 79 Fed. Reg. at 45,079–80.

<sup>280.</sup> Hazardous Materials: Oil Spill Response Plans for High-Hazard Flammable Trains, 79 Fed. Reg. at 45,079–80.

<sup>281.</sup> Id. at 45,082.

<sup>282.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. 26,644, 26,656 (May 8, 2015) (to be codified at 49 C.F.R. pts. 171–74, 179) (noting that as of May 2015, the agencies were developing a "follow-up" notice of proposed rulemaking).

and ethanol transported by train were not the direct result of negotiated rulemaking. And some of the rules proposed through negotiated rulemaking have yet to be finalized. This does not mean that the reg-neg process is necessarily too slow as compared to other forms of rulemaking, but it demonstrates that the reg-neg process has not yet fully played out in the rail safety context. Further, the agencies' longstanding relationship with a FACA advisory committee comprised primarily of labor groups, the rail industry, and companies that use railroads to transport products likely substantially influenced the content of the actions that the agencies already have taken in this context, as well as the success or failure of these actions. Specifically, this Article hypothesizes that this advisory committee-agency relationship, developed as a result of the agencies working with RSAC since 1996 through a variety of informal negotiated rulemaking projects, produced benefits in the form of more industry compliance with voluntary agency directives than might otherwise have occurred, and allowed for the agencies to more nimbly and expertly address technical issues in their voluntary and mandatory directives. However, it appears that this long-term relationship also might have prevented the agencies from timely issuing certain rules that were important for addressing emerging risks, although the presence of an external, independent agency pushing for certain rules still motivated the agencies to act in some cases despite industry opposition. Additionally, FRA and PHMSA appear to have inadequately considered certain interests of diffuse stakeholders such as the millions of people who live in cities, towns, and other communities through which crude oil and ethanol trains regularly travel. This might have been partially due to the scant representation of public interest groups on RSAC. However, in other cases, FRA robustly defended public interest concerns.

#### A. Benefits

RSAC, the advisory group tasked with recommending certain regulatory text to FRA and PHMSA and providing other information since 1996, is comprised primarily of industry groups and labor unions.<sup>284</sup> A political economic analysis might therefore

<sup>284.</sup> See supra notes 80–87 and accompanying text. This approach is similar to the European Union, in which the Advisory Groups that serve the European Commission are primarily composed of the affected industries and union representatives. Register of

suggest that FRA and PHMSA, by relying heavily on the advice of relatively small, well-organized, and resource-rich interest groups that enjoy repeat interactions with the agencies, are likely to be captured by these groups and to inadequately represent more diffuse, disorganized groups like train passengers and residents of communities through which trains travel. For these latter groups, the individual costs or benefits of a particular safety rule are small, but if these groups were able to more effectively organize, the costs and benefits of the rule would be large-perhaps even larger than those experienced by the organized groups. However, due to the barriers to organization, the smaller groups' strong interests for or against safety rules might have more weight in the regulatory process. As discussed in below, this capture story might ring true in certain aspects of rail safety rulemaking. However, it is too broad of a story to fully explain the response of FRA and PHMSA to emerging rail safety risks, which was in some respects rapid and effective from the perspective of communities concerned about the dangers of train derailments and collisions and resulting fires and explosions.

# i. Industry Cooperation with Voluntary Agency Directives

One notable aspect of FRA's and PHMSA's response to emerging rail safety risks was that these agencies relied in large part on efforts to voluntarily induce safety practices—letters to industry, efforts to improve industry training, and safety advisories—before finalizing mandatory safety rules. And industry, in large part, appears to have cooperated with these efforts. For example, as described in Part II, after receiving a letter from the DOT Administrator asking the rail industry to voluntarily commit to certain safety initiatives, AAR and other industry members agreed to limit the speed of trains carrying hazardous liquids to fifty or forty miles per hour, depending on the location of the

Commission Expert Groups and Other Similar Entities: Expert Groups Explained, EUR. COMMISSION, http://ec.europa.eu/transparency/regexpert/index.cfm?do=faq.faq&aide= 2 (last visited Nov. 10, 2016). The approach has received similar criticism in the European Union for its exclusion of public interest group perspectives. James Panichi, EU Watchdog Takes on Commission over "Expert" Groups, POLITICO (Feb. 2, 2016, 10:01 AM), http:// www.politico.eu/article/eu-watchdog-takes-on-commission-over-expert-groups-ombuds man/.

train.<sup>285</sup> Perhaps industry members made this commitment simply because they were already largely following this practice, or it was otherwise not too difficult to change their practice. There is some indication that this is true. In 2013, before AAR made the commitment to restrict speeds to fifty or forty miles per hour in some zones, AAR already had sent out a circular to its members recommending that any trains with at least twenty cars of hazardous materials should restrict speeds to fifty miles per hour.286 And many industry commenters did not object to-and even supported-the mandatory rule that ultimately limited certain trains carrying ethanol and crude oil to speeds of forty miles per hour in high-threat urban areas.287 However, there appear to have been at least minor industry costs associated with the speed change that was first voluntarily implemented and later made mandatory. The final Regulatory Impact Analysis for FRA's and PHMSA's final rule indicated that requiring trains traveling through high-threat urban areas to restrict speeds to forty miles per hour if the trains had at least one car that did not meet enhanced tank car design standards could cost up to \$180 million (twenty-year benefits, seven percent discount rate), as compared to an estimated \$56-\$242 million in benefits (with the range representing different assumptions about lower- versus higherconsequence events).<sup>288</sup>

Additionally, even if many of the commitments that industry voluntarily made to FRA and PHMSA were easy, relatively low-cost promises, some at least involved additional effort on the part of industry, thus representing a willingness of industry to work with the agencies. For example, one industry association ran a safety institute, which, although paid for by FRA, required active

<sup>285.</sup> See supra note 264 and accompanying text.

<sup>286.</sup> ASS'N OF AM. R.RS., CIRCULAR NO. OT-55-N, RECOMMENDED RAILROAD OPERATING PRACTICES FOR TRANSPORTATION OF HAZARDOUS MATERIALS (Aug. 5, 2013), http://www.boe.aar.com/CPC-1258%20OT-55-N%208-5-13.pdf; *see also* U.S. DEP'T OF TRANSP., PHMSA-2012-0082, FINAL REGULATORY IMPACT ANALYSIS, HAZARDOUS MATERIALS: ENHANCED TANK CAR STANDARDS AND OPERATIONAL CONTROLS FOR HIGH-HAZARD FLAMMABLE TRAINS 199 (May 2015) [hereinafter FINAL REGULATORY IMPACT ANALYSIS] (noting this circular), https://www.regulations.gov/contentStreamer?documen tId=PHMSA-2012-0082-3442&attachmentNumber=1&disposition=attachment&contentTy pe=pdf.

<sup>287.</sup> FINAL REGULATORY IMPACT ANALYSIS, supra note 286, at 198-99.

<sup>288.</sup> Id. at 12.

work on the part of the association.<sup>289</sup> Further, FRA asked API to develop "an outreach program to deliver training to first responders throughout the U.S., particularly in states that have seen a rise in crude oil by rail," and in May 2015, API was in the process of forming this program in collaboration with rail industry members.<sup>290</sup>

The industry efforts that occurred voluntarily by no means represent monumental changes in industry operations in order to improve rail safety. However, industry did respond relatively promptly to agency requests, agreeing to review programs for testing and classifying oil and to work with the agencies on better classifying oil, updating the agencies on whether industry actors had in fact implemented voluntary directives, and in some cases committing to standards, such as the fifty and forty miles per hour limits and the installation of certain improved braking technologies, among other standards.<sup>291</sup> And it is possible that if the rail industry did not have a longstanding relationship with the agencies through RSAC, it would not have been as cooperative. Rail industry groups, as members of RSAC, already had worked with the agencies since 1996,<sup>292</sup> allowing industry and agency staff to become familiar with each other through attendance at regular RSAC-agency meetings and to develop trust relationships. This might have enhanced cooperation. Indeed, as Professor Jody Freeman has observed more generally with respect to collaborative governance, involving agencies and stakeholders in an ongoing problem solving effort, as reg-neg sometimes does, leads to "[s]ustained interaction" that makes relationships more civil and "might increase the likelihood of cooperation in future interactions."293 FRA-RSAC interaction is particularly The sustained, since FRA relies on a standing advisory committee rather than appointing new committees each time it wishes to engage in reg-neg.294

<sup>289.</sup> See supra notes 207-08 and accompanying text.

<sup>290.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. 26,644, 26,660 (May 8, 2015) (to be codified at 49 C.F.R. pts. 171–74, 179).

<sup>291.</sup> See supra Part II; see also Letter from Anthony R. Foxx, supra note 206 (summarizing the commitments that the rail industry made to DOT).

<sup>292.</sup> RSAC History, supra note 27.

<sup>293.</sup> Freeman, supra note 14, at 24.

<sup>294.</sup> Railroad Safety Advisory Committee (RSAC), supra note 77.

Despite industry's willingness to cooperate with many of FRA's and PHMSA's requests, this cooperation only went so far in the context of rail safety, demonstrating that there are limits to the trust relationships that can result from negotiated rulemaking and reduce antagonism between industry and agencies. For example, several key industry members of RSAC, including AAR, appealed FRA's and PHMSA's 2015 final rail safety rule through the administrative appeals process.<sup>295</sup> Through this process, entities that have filed comments on a final rule<sup>296</sup> may appeal the rule by filing with the agency, inter alia, a "brief statement" of the party's concern with the rule, "[a]n explanation of why compliance with the final rule is not practical, reasonable, or in the public interest," and, if the party wants "PHMSA to consider more facts," an explanation for why the party "did not present those facts within the time given during the rulemaking process for public comment."297

# ii. Agency Knowledge of Technical Industry Information

Another frequently cited benefit of negotiated rulemaking—and one that appears to play out to some degree in the rail safety context—is the ability of the agency writing rules to harness the detailed technical knowledge of industry and other stakeholders who are members of the advisory committee.<sup>298</sup> Agencies already receive certain technical information through individual meetings with stakeholders and notice-and-comment rulemaking, among other methods,<sup>299</sup> but asking an advisory committee to draft the text of a rule before comments are even

<sup>295.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. 71,952, 71,952 (Nov. 18, 2015) (to be codified at 49 C.F.R. pts. 171–74, 179).

<sup>296. 49</sup> C.F.R. § 106.110 (2015).

<sup>297.</sup> Id. § 106.115.

<sup>298.</sup> See, e.g., Negotiated Rulemaking Act of 1990, Pub. L. No. 101-648, § 2, 104 Stat. 4969, 4969 (observing in the Congressional findings within the Negotiated Rulemaking Act of 1990, that adversarial rulemaking deprives "affected parties and the public . . . of the benefits of shared information, knowledge, expertise, and technical abilities possessed by the affected parties"); Administrative Conference of the United States Recommendation 82-4, 1 C.F.R. § 305.82–4 (1982) (noting that through negotiated rulemaking parties can "identify the information and data necessary to resolve the issues").

<sup>299.</sup> Coglianese, supra note 9, at 1331.

submitted can sometimes infuse a higher degree of technical knowledge into the rulemaking process. Indeed, FRA employees might have more technical knowledge than those in some other agencies because these employees act as mediators for RSAC, thereby engaging in numerous RSAC processes and becoming familiar with technical terms and rail technologies and operations.<sup>300</sup> This type of knowledge is particularly important in areas like rail safety, where technological specifications involving tank design, equipment such as brakes and reversers, and certain operational standards are quite complicated. Indeed, FRA notes that one formal reg-neg process involving an independent thirdparty facilitator did not work as well in part because the facilitator was not familiar with technical terms.<sup>301</sup> In contrast, RSAC processes involving FRA employees familiar with "nomenclature and with working and operating conditions," employees who act as repeat facilitators, tend to be more successful.<sup>302</sup> This FRA knowledge, which is gained through facilitating multiple RSAC processes over time, does not only benefit the informal reg-neg process; it also benefits the agency when it writes its own rules.

One example of the knowledge that FRA gains from the reg-neg process—even when no consensus is reached and FRA disagrees with the working group or RSAC as a whole—comes from the proposed rule on minimum requirements for train crew sizes,<sup>303</sup> in which a working group was formed but reached no consensus. Through the working group process, AAR, which opposed any increase in requirements for train crew size, provided FRA with examples in which one train crew member had to be outside of the car; FRA clarified that in its rule proposing a minimum required crew of two members, these situations would not be prohibited provided that "the second train crewmember that is separated from the train can directly communicate with the crewmember in the cab of the controlling locomotive."<sup>304</sup> Another working group member argued that many shortline railroads

<sup>300.</sup> Cohen et al., *supra* note 74 (noting that FRA employees that lead RSAC working group deliberations "have experience in the railroad industry and are familiar with the nomenclature and with working and operating conditions").

<sup>301.</sup> Id. at 10–11.

<sup>302.</sup> Id. at 13-14.

<sup>303.</sup> Train Crew Staffing, 81 Fed. Reg. 13,918, 13,918 (proposed Mar. 15, 2016) (to be codified at 49 C.F.R. pt. 218).

<sup>304.</sup> Id. at 13,939.

operate with only one crewmember and would be greatly impacted by the rule, but FRA, relying on a survey provided by this group, closely investigated the survey and concluded "only about 13 of every 100 shortlines run any type of one-person operation."<sup>305</sup> FRA then completed its own survey of shortline railroads and compared it to the railroads' survey.<sup>306</sup> In this case, FRA and the working group member disagreed on the importance of the impact, with the member viewing thirteen out of onehundred as a problematic impact, and FRA viewing it as largely inconsequential, particularly in light of certain exceptions to the two-person requirement that the rule provides.<sup>307</sup> But FRA obtained valuable data about current train crew sizes as well as the views of one of the industries that would be impacted by the rules.<sup>308</sup>

The overall knowledge gained from a variety of working groups might have improved the effectiveness of FRA's and PHMSA's many actions taken in the context of crude oil and ethanol rail safety. In responding to the recent rise in rail safety incidents, FRA and PHMSA were able to issue advisories and emergency orders involving relatively technical issues, such as the types of braking systems that trains should install or equipment that should be deployed or removed to ensure that stopped trains were properly secured. For example, as described in Part II, in its first emergency order issued approximately eight months after FRA started taking active steps to improve the safety of crude oil train transport, FRA addressed the necessary securement of stopped trains by requiring, inter alia, that the locomotive that controls the cab either be locked or the "reverser" be removed or secured.<sup>309</sup>

In this case, FRA directly borrowed from a recently-issued order from Canada's transportation agency, Transport Canada, which similarly required the removal or securement of reversers.<sup>310</sup> But direct knowledge of industry standards and best practices also

<sup>305.</sup> Id. at 13,939-40.

<sup>306.</sup> Id. at 13,940.

<sup>307.</sup> Id. at 13,939–40.

<sup>308.</sup> Id.

<sup>309.</sup> Emergency Order Establishing Additional Requirements for Attendance and Securement of Certain Freight Trains and Vehicles on Mainline Track or Mainline Siding Outside of a Yard or Terminal, 78 Fed. Reg. 48,218, 48,218–19 (Aug. 7, 2013).

<sup>310.</sup> Id. at 48,220.

allowed the agencies to ask industry actors to reconsider their existing standards and, in some cases, to eventually require changes to them. For example, in a Safety Advisory issued at the same time as the first emergency order on train securement, DOT asked rail companies to review their existing practices for minimum crew requirements for trains carrying certain amounts and types of hazardous material and to consider amending those practices, indicating that it would work further with RSAC to consider necessary minimum crew sizes.<sup>311</sup> Additionally, DOT persuaded several members of the rail industry to sign a commitment letter agreeing, among other things, that they would follow rail routing protocols already followed by certain industry members.<sup>312</sup> Detailed technical information on the characteristics of crude oil from the Bakken, which was obtained through the cooperation of industry,<sup>313</sup> was also key information that formed the basis of many of the agencies' rules, as it allowed the agency to understand the hazards of the oil and the safety measures accordingly needed. In some cases, the agencies even simply adopted industry "good practices"; for example, as described in Part II, a 2014 final rule required repairs to flawed tracks, minimum operator qualifications for trains carrying hazardous materials, and other standards that came directly from industry.<sup>314</sup> While it is not clear whether these standards were adequately stringent from a safety perspective, the agencies' knowledge and understanding of these requirements allowed them to quickly issue certain mandates to ensure that all members of industry were following practices deemed to be "good" practices by prevailing industry standards.

The agencies' awareness of existing technical industry standards and technical information, likely acquired through many previous interactions with RSAC, was not the only factor that contributed to the agencies' ability to write technical directives

<sup>311.</sup> Lac-Mégantic Railroad Accident Discussion and DOT Safety Recommendations, 78 Fed. Reg. 48,224, 48,228 (Aug. 7, 2013).

<sup>312.</sup> Letter from Anthony R. Foxx, *supra* note 230 ("By no later than July 1, 2014, Railroad Subscribers will apply any protocols developed by the rail industry to comply with the existing route analysis requirements.").

<sup>313.</sup> See, e.g., Letter from Anthony R. Foxx, *supra* note 206 (describing API's commitment to assist with oil testing and classification efforts). API is a member of RSAC. *RSAC Members, supra* note 43.

<sup>314.</sup> See supra notes 268-70 and accompanying text.

relatively quickly. Borrowing from Canadian rules that were rapidly implemented after Lac-Mégantic helped.<sup>315</sup> So, too, did the recommendations of NTSB, which is the independent U.S. agency that investigates the causes of rail and other accidents and makes specific recommendations for regulatory changes based on the knowledge obtained from these recommendations.<sup>316</sup> Indeed, NTSB issued numerous, specific recommendations for rule updates, rife with technical details.<sup>317</sup> FRA and PHMSA included certain of these recommendations within their rules, are continuing to work to implement some recommendations, and chose not to implement other recommendations.<sup>318</sup> But the NTSB recommendations, too, benefitted from technical industry data. For example, NTSB referred to AAR's existing standard for tank cars (the DOT-111 cars described in Part II) in arguing that this standard was inadequate because it failed to require the cars to have "thermal protection systems to protect the tank from exposure to . . . fire conditions that can occur in accidents."<sup>319</sup>

Although numerous sources helped provide FRA and PHMSA with the technical knowledge needed to issue directives, recommendations, and rules for the safety of transporting crude oil and ethanol by train, FRA's and PHMSA's longstanding interactions with industry through negotiated rulemaking likely helped. At a minimum, FRA's and PHMSA's baseline knowledge of existing industry standards likely reduced the search time typically required for agencies to find these types of standards and determine which standards might need to be made mandatory or updated through publicly-formulated rules. Indeed, some of the non-industry sources that provided FRA and PHMSA with important technical information for their train safety advisories,

<sup>315.</sup> *See* Emergency Order Establishing Additional Requirements for Attendance and Securement of Certain Freight Trains and Vehicles on Mainline Track or Mainline Siding Outside of a Yard or Terminal, 78 Fed. Reg. 48,218, 48,218–19 (Aug. 7, 2013).

<sup>316.</sup> See Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 79 Fed. Reg. 45,016, 45,036 (proposed Aug. 1, 2014) (to be codified at 49 C.F.R. pts. 171–74, 179) (summarizing the many NTSB recommendations); see also NAT'L TRANSP. SAFETY BD., SAFETY RECOMMENDATION 1 (Apr. 3, 2015), http://www.ntsb.gov/safety/safety-recs/recletters/R-15-014-017.pdf.

<sup>317.</sup> See, e.g., NAT'L TRANSP. SAFETY BD., supra note 316.

<sup>318.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. 26,644, 26,660–61 (May 8, 2015) (to be codified at 49 C.F.R. pts. 171–74, 179).

<sup>319.</sup> NAT'L TRANSP. SAFETY BD., supra note 316, at 2.

emergency orders, and rulemakings also likely had higher background knowledge of technical rail industry issues in part due to their participation in RSAC. NTSB and Transport Canada, from which FRA and PMHSA adopted certain rules, are advisory members of RSAC.<sup>320</sup>

#### iii. Faster Policymaking?

A final potential benefit of reg-neg is that through the process of forming working groups and proposing rules, parties involved in the process become more coordinated, and they might potentially further align their positions beyond alliances that existed prior to reg-neg. This might spur quicker congressional action in addition to, or in lieu of, agency rules because these parties might more effectively and quickly influence policy. For example, although Congress did not rapidly enact legislation addressing crude and ethanol rail risks from the perspective of risk prevention and mitigation,<sup>321</sup> the issuance of an act that partially addressed rail safety several years after the growing risks became apparent is somewhat impressive in today's gridlocked, partisan context. This is not necessarily evidence that reg-neg affected the policymaking process; Congress might have acted regardless of pressures from various interest groups due to the heightened public attention to rail safety after several high-profile disasters. But it is a potential benefit that merits further empirical investigation.

#### B. Costs

Although FRA's and PHMSA's repeat interactions with the rail industry through RSAC likely provided benefits in the form of mutual trust and thus a heightened willingness by industry to comply with voluntary directives, as well as greater baseline technical knowledge, some classic elements of the "capture" story also appear to have infiltrated the process of responding to heightened risks of transporting fuel by rail. In some cases, the agencies might have been influenced more powerfully by the concentrated stakeholder groups with whom they regularly work through RSAC than by diffuse, yet also important, public interests.

<sup>320.</sup> See supra note 88 and accompanying text.

<sup>321.</sup> See supra notes 154-69 and accompanying text.

The very small number of public interest groups that are members of RSAC might have compounded this problem, causing the agencies to be more accustomed to working with labor and industry groups than with groups representing different types of interests. However, as discussed below, in some cases FRA was aware of and responsive to interest group concerns, thus warning against overly broad generalization.

# i. Delayed and Unimplemented Rules: Possible Capture Concerns

Certain aspects of FRA's and PHMSA's response to the rail safety crisis associated with crude oil and ethanol suggest that these agencies' longstanding interactions with the rail industry through RSAC might have caused them to be particularly sympathetic to industry concerns about the costs of regulation, and might have led them to drag their feet on implementing certain important rules. Indeed, the very structure of RSAC suggests that it is not designed to consistently encourage the types of rules that public interest groups might demand, such as rules that require action above and beyond action required to address the basic externalities posed by rail travel. FRA indicates a hesitancy to impose certain types of rules, particularly those that impose industry costs, on its RSAC history webpage:

Federal agencies should promulgate only such regulations as are required by law, are necessary to interpret the law, or are made necessary by compelling public need, such as material failures of private markets to protect or improve the health and safety of the public, the environment, or the well-being of the American people. In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating.<sup>322</sup>

<sup>322.</sup> *RSAC History, supra* note 27. Of course, cost-benefit analysis is now nearly universal in United States regulation and is required by an increasingly lengthy change of executive directives. *See, e.g.,* OFFICE OF MGMT. & BUDGET, CIRCULAR A-4, REGULATORY ANALYSIS (Sept. 17, 2003), https://www.whitehouse.gov/sites/default/files/omb/assets/r egulatory\_matters\_pdf/a-4.pdf. But it is somewhat unusual for an agency to prominently display on its website text indicating that only regulations that are required or

Certain problems demonstrated by the rising number of crude oil and ethanol incidents suggested a "compelling public need,"<sup>323</sup> yet the agencies were slow to act regarding these problems. This is perhaps most evident in the standards relating to the design of rail cars. NTSB had made clear as early as 2009 that DOT-111 tank cars—the cars most commonly used by the rail industry to transport crude oil and ethanol—were likely to breach in accidents and were not safe.<sup>324</sup> And, in a 2013 petition NTSB, asked FRA to require new and existing tank cars to meet a more stringent design than the DOT-111 design.<sup>325</sup> AAR, on the other hand, argued in 2013 for a newly redesigned DOT-111 car, and it argued that retrofits should not be required.<sup>326</sup> FRA first asked industry to avoid using DOT-111 tank cars in May 2014,<sup>327</sup> and it did not issue a final rule requiring a better tank car design, including the retrofitting of old trains, until May 2015.<sup>328</sup>

Without an independent federal agency pushing FRA and PHMSA to implement standards more stringent than those suggested by industry, it is unclear whether or when these agencies would have required the better design that industry now must implement, the DOT-117 tank car, or required retrofits. (Local governments and public interest groups, too, pushed for improvements to the DOT-111 tank car, including retrofits of cars already in use—sometimes citing to NTSB standards—and this might have further persuaded the agencies to act.<sup>329</sup>) But NTSB appears to have played an outsize role. Indeed, FRA and PHMSA were able to cite to NTSB's recommendations as "cover" in explaining why they implemented portions of a final rule to which

<sup>&</sup>quot;compelling" should be promulgated, and that the alternative of not regulating should be considered. *RSAC History, supra* note 27.

<sup>323.</sup> RSAC History, supra note 27.

<sup>324.</sup> See supra note 222 and accompanying text.

<sup>325.</sup> See supra note 227 and accompanying text.

<sup>326.</sup> See supra note 226 and accompanying text.

<sup>327.</sup> Recommendations for Tank Cars Used for the Transportation of Petroleum Crude Oil by Rail, 79 Fed. Reg. 27,370, 27,370 (May 13, 2014).

<sup>328.</sup> See supra note 46 and accompanying text.

<sup>329.</sup> *See, e.g.*, Hazardous Materials: Rail Petitions and Recommendations to Improve the Safety of Railroad Tank Car Transportation, 78 Fed. Reg. 54,849, 54,856 (Sept. 6, 2013) (summarizing the petition for rulemaking of the Village of Barrington, Illinois, and The Regional Answer to Canadian Nation).

industry objected.<sup>330</sup> For example, when Dow Chemical argued against retrofitting DOT-111 tank cars to provide thermal protection (which helps prevent tank cars from breaching or otherwise being compromised when subjected to fires caused by accidents), FRA and PHMSA explained that they were requiring thermal protection retrofits because they are "critical in the survival of a tank car experiencing a thermal event," citing to previous rail accidents investigated by NTSB and NTSB recommendations regarding thermal protection.<sup>331</sup>

In their final rulemaking, FRA and PHMSA demonstrated the close attention they pay to NTSB recommendations through a table documenting each NTSB recommendation relating to the safety of crude oil and ethanol transport by rail and whether or not the agencies had implemented this recommendation.<sup>332</sup> The implement declined to several agencies NTSB recommendations,<sup>333</sup> often arguing that NTSB failed to adequately industry costs.<sup>334</sup> consider But the agencies' thorough consideration of NTSB recommendations and explanations for why they declined to implement certain recommendations, show the important role that NTSB plays in demanding that FRA and PHMSA consider safety issues beyond the standpoint of the costs that safety regulations impose on industry. Without NTSB, the agencies' deep understanding of industry concerns due to their ongoing interaction with agencies through RSAC-and due to other classic influences of concentrated stakeholder interest groups on agencies-might generate an overly concentrated focus on the costs of regulations and inadequate consideration of the broader benefits that regulations can provide. Further, NTSB provides a perspective that industry does not fully provide. It looks at the *patterns* of the causes of accidents over time and how these patterns can best be addressed.

<sup>330.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. 26,644, 26,652 (May 8, 2015) (to be codified at 49 C.F.R. pts. 171–74, 179).

<sup>331.</sup> Id. at 26,678.

<sup>332.</sup> *Id.* at 26,660–61.

<sup>333.</sup> Id.

<sup>334.</sup> *See, e.g., id.* at 26,668 (declining to implement the most robust tank car design proposed by some commenters, including NTSB, and noting that NTSB and other groups "gave very little consideration to the costs of such standards").

Even with independent agency pressure and petitions and comments from groups not involved in reg-neg,335 the final rule omitted certain important rail safety issues. For example, some parties observed that track alignment problems contribute substantially to rail accidents, yet the final rule fails to address this issue.336 Although the final rule did not rely on reg-neg, as discussed above, the agencies used reg-neg for other rules that they planned to issue or issued in draft form, and it is possible that reg-neg caused all of the parties—including the agency—to simply overlook or fail to address important issues. The limited number of parties in the reg-neg process might be collectively hesitant to address the most challenging problems that require substantial compromise, or they simply might not think of problems that other groups who are not parties to the process identify. Agencies' reliance on notice-and-comment rulemaking in addition to regneg helps to address this problem, but public comments might be somewhat marginalized due to the focus on the issues identified by reg-neg parties. As discussed above, FRA seriously considered certain public interest group concerns outside of the reg-neg process, but the threat of issue omission remains.

## ii. Inadequate Public Interest Group Representation on RSAC

Another factor that potentially caused FRA and RSAC to reject certain rules that would have benefited the public, without an overly burdensome cost on industry, is the absence of meaningful public interest group representation on RSAC. Public interest groups do not add substantial value to processes if they lack the resources or knowledge needed to participate in the process, or if internal dynamics cause them to resort to knee-jerk reactions against any industry proposals and to adopt a "war-like" stance.<sup>337</sup> But if the proper groups are included within the process, they can add substantial value, including value that is distinct from that provided by NTSB. For example, representatives of communities that experience frequent train travel are likely more familiar with specific, localized risks posed by the configuration of

<sup>335.</sup> See supra notes 228, infra notes 364-66 and accompanying text.

<sup>336.</sup> See supra note 32 and accompanying text.

<sup>337.</sup> See, e.g., Seidenfeld, supra note 46, at 442–43 (noting that some groups are "socialized to oppose positions taken by firms").

the rails in their community (such as sharp corners), the proximity of particularly sensitive resources to tracks, and other local conditions.<sup>338</sup> Indeed, local governments have been active in identifying rail transportation risks and voicing their concerns these risks.<sup>339</sup> Yet these types of groups about are underrepresented in the RSAC process. Due to this imbalanced representation, FRA's and RSAC's interactions with the public interest community are similar to those of other agencies: they are limited to meetings with public interest groups, receipt of comments on proposed rules, and other traditional avenues for agency-stakeholder group interactions.<sup>340</sup> In contrast, industry and labor groups benefit both from these traditional avenues for communication with agencies as well as robust representation on RSAC, and thus, repeat interactions with FRA and PHMSA through RSAC.

As introduced in Part I, RSAC representation was designed to be balanced. In 1996, when FRA formed RSAC, it provided: "The membership on the Committee will be fairly balanced with points of view representative of those interested in railroad issues, including those of railroad owners, manufacturers, labor groups, state government groups, and public interest associations."341 However, other descriptions of RSAC membership sometimes omit the term "public interest group," with a 1995 article by FRA officials and staff describing RSAC as including "representatives from all of the agency's major customer groups, including railroads, labor organizations, suppliers and manufacturers, state agencies, passenger organizations, and other interested parties."342 Another FRA description of RSAC indicates that its members represent "labor, railroads, suppliers, States, chemical suppliers and passenger advocates" as well as government representatives from the United States, Canada, and Mexico and "other diverse

<sup>338.</sup> RSAC Members, supra note 43.

<sup>339.</sup> See supra note 42 and accompanying text.

<sup>340.</sup> See, e.g., Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. 26,644, 26,659 (May 8, 2015) (to be codified at 49 C.F.R. pts. 171–74, 179). PHMSA participated in stakeholder meetings prior to the May 2015 rulemaking, but these were primarily educational meetings with emergency responders and fire officials for the purposes of discussing improved response and training these groups in improved response. *Id.* 

<sup>341.</sup> Railroad Safety Advisory Committee; Establishment, 61 Fed. Reg. 9740, 9741 (Mar. 11, 1996).

<sup>342.</sup> Cohen et al., supra note 74, at 8-9 (emphasis added).

groups"<sup>343</sup>—again not referring specifically to public interest groups.

RSAC appears to include as a member only one "true" public interest group, the National Association of Railroad Passengers.<sup>344</sup> does not include representatives from It communities that experience high rates of crude oil and ethanol rail transport, environmental groups concerned about oil spills, or other public interest groups<sup>345</sup> that likely should have a seat at the negotiated rulemaking table. This, in turn, means that FRA and PHMSA lack the types of repeat interactions with these groups that could lead to a better understanding of and response to their concerns. The many labor unions that are members of RSAC likely often have interests that might overlap with public interest groups' safety concerns. For example, labor unions typically support rules that require a larger minimum number of qualified employees to staff all crude oil and ethanol trains.<sup>346</sup> But these groups might oppose certain technical safety measures that could cause rail company costs to increase and that could lead to other cost-saving reduced employment measures. such as or employee compensation. This is not always the case, of course. For example, in RSAC's recommendations regarding adequate securement of crude oil and ethanol trains stopped on tracks, "representatives of the labor unions proposed requiring the installation of locking mechanisms on all locomotives covered by these proposed rules."347

The lack of public interest group representation on RSAC is not necessarily the fault of FRA, however, as it does not appear that public interest groups have strongly pushed to be RSAC members. Although public interest groups have petitioned for rail

347. Securement of Unattended Equipment, 79 Fed. Reg. 53,356, 53,367 (Sept. 9, 2014) (to be codified at 49 C.F.R. pt. 232).

<sup>343.</sup> Fed. R.R. Admin. Office of R.R. Safety, supra note 108.

<sup>344.</sup> See supra note 86 and accompanying text.

<sup>345.</sup> RSAC Members, supra note 43.

<sup>346.</sup> *See, e.g.*, Train Crew Staffing, 81 Fed. Reg. 13,918, 13,936–37 (Mar. 15, 2016) (noting that in the reg-neg process on minimum train crew sizes, "[i]t was made clear to FRA that organizations representing railroad employees supported FRA's overall concept of mandating two-person crews on each train with some exceptions," but that "[s]everal labor organizations wanted FRA to scale back some of the exceptions").

safety rulemakings<sup>348</sup> and commented extensively on FRA and PHMSA rules,<sup>349</sup> they might not yet have adequately lobbied for representation on RSAC, which is a problem that FRA cannot independently solve. Further, the fact that RSAC fails to include many public interest groups does not mean that FRA consistently fails to consider public interest concerns. Indeed, in some cases FRA relatively firmly pushes back against industry objections to rules, citing to the public interest. In the context of minimum train crew sizes-where RSAC failed to reach consensus and FRA later drafted a proposed rule—FRA noted surprise and concern at many rail industry members' insistence that one-person train crews were acceptable due to a lack of accidents proving that oneperson crews were the cause.<sup>350</sup> FRA argued that "railroad employees and the general public should not have to wait for horrific accidents before the Federal government takes action,"351 and provided the working group with the following data and reasons supporting regulations requiring train crews with more than one person:

(1) The scientific research studies showing the benefits of a second crewmember, (2) the anecdotal information regarding recent train accidents and how a second crewmember either could have played a safety role or did play such a role, (3) the explanation that FRA's railroad safety regulations were written with the expectation that nearly every train would be operated by no fewer than two crewmembers, and (4) the general public's negative reaction to the idea that FRA did not already mandate two-person train crews to add another layer of safety.<sup>352</sup>

One reason for FRA's emphasis on public interest concerns in the minimum train crew reg-neg process might have been RSAC labor members' focus on these concerns. For example, one labor

<sup>348.</sup> Hazardous Materials: Rail Petitions and Recommendations to Improve the Safety of Railroad Tank Car Transportation, 78 Fed. Reg. 54,849, 54,851 (proposed Sept. 6, 2013) (to be codified at 49 C.F.R. pts. 173–74, 178–80).

<sup>349.</sup> See infra notes 364-66 and accompanying text.

<sup>350.</sup> Train Crew Staffing, 81 Fed. Reg. at 13,937-38.

<sup>351.</sup> Id. at 13,938.

<sup>352.</sup> Id.

representative, which was a member of the working group, sponsored a survey of voters asking about their support for a minimum train crew size of two for freight trains, and the labor group shared this report (which indicated strong public support for a minimum crew size of two) with FRA and the working group.<sup>353</sup> The labor group also suggested that in supporting minimum crew sizes of two, with certain exceptions, FRA was properly "responding to the public's demand for action."<sup>354</sup>

Although FRA has in some contexts focused on public interest and labor concerns over those of the rail industry, one area that potentially illuminates the problem of inadequate public interest group representation on RSAC, and the lack of repeat interactions between public interest groups and FRA and PHMSA through the reg-neg process, is the rail routing and notification context. As described in the Introduction, many communities through which crude oil and ethanol trains travel expressed concerns that under FRA's and PHMSA's final rule involving rail routing planning, these communities lacked adequate voice in the planning process.<sup>355</sup> They wanted more specific notification of when and exactly where crude oil and ethanol trains would travel through their community,356 but the rule did not provide for this.<sup>357</sup> The rule did not require route-specific notifications despite NTSB also recommending that emergency responders should have real-time information on the location of crude oil and ethanol trains.358

Advisory committees involved in negotiated rulemaking must include industry stakeholders affected by the governance in order to be successful. And including too many diverse groups with "fundamental" differences of opinion can prevent successful consensus.<sup>359</sup> Indeed, in other contexts, reg-neg has involved too many public interest representatives, and this potentially "chilled" productive discussion, particularly by industry or other members

359. Lubbers, supra note 7, at 93.

<sup>353.</sup> Id.

<sup>354.</sup> Id.

<sup>355.</sup> See supra note 48 and accompanying text.

<sup>356.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. 26,644, 26,708 (May 8, 2015) (to be codified at 49 C.F.R. pts. 171–74, 179).

<sup>357.</sup> Id.

<sup>358.</sup> Id. at 26,660.

who felt that these groups might later criticize or investigate them.<sup>360</sup> But in the RSAC context, the pendulum appears to have swung too far in the opposite direction, with only negligible public interest group participation. This problem might be in part due to the slow development of strong public interest groups in the rail safety area, thus limiting the pool from which RSAC could potentially draw. Indeed, it appears that few, if any, public interest groups have applied to be part of RSAC.<sup>361</sup> But the numerous comments provided by individuals and groups on FRA's and PHMSA's proposed rail safety rule finalized in 2015, including comments by 85,017 non-governmental organizations on the routing portion of the rule alone,<sup>362</sup> show that there is opportunity for more robust participation by parties representing broader concerns than those represented by labor groups, the rail industry, and companies that use rail to transport their products. For example, tribal communities and local governments meaningfully commented on the rule.<sup>363</sup> And several public interest groups not primarily focused on rail safety, such as Public Citizen and environmental groups, indicated through comments the ability of these groups to expand their focus to this area.<sup>364</sup>

## **IV. CONCLUSION**

In the current state of congressional gridlock and increased reliance on agencies to address new and emerging risks, the rail safety case study presented in this Article suggests that there is hope for effective administrative action in the face of growing risks, and that negotiated rulemaking might enhance agency action in this context. Specifically, FRA's and PHMSA's decades-long relationship with a standing advisory committee might have enabled these agencies to work more productively with the industry actors that have long served on this advisory committee and to more quickly and effectively address rail safety risks. Although many of FRA's and PHMSA's actions to improve the transport of ethanol and oil by rail were not actions taken

<sup>360.</sup> Id. at 97–98.

<sup>361.</sup> Id.

<sup>362.</sup> Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. at 26,707.

<sup>363.</sup> Id. at 26,664 (describing comments by these entities).

<sup>364.</sup> Id. at 26,662 (describing the commenters).

through the negotiated rulemaking process, industry actors who have been involved in the agency's informal negotiated rulemaking process might have been more willing to comply with voluntary directives issued by the agencies. Furthermore, the agencies' long-term negotiated rulemaking-based interactions with the advisory committee, which is comprised primarily of rail industry and labor members, likely gave the agencies important technical baseline knowledge that allowed them to quickly write advisories and directives involving challenging technical details. But the close agency-industry-labor relationship, which developed in part as a result of negotiated rulemaking, also appears to have had its downsides, potentially causing the agencies to implement certain needed rules too slowly, or not at all, and perhaps preventing adequate consideration of certain public interest groups' concerns when certain rules were finalized. For other rules, FRA relied strongly on public interest concerns despite the lack of direct representation of public interest groups in RSAC. This was in part, perhaps, due to labor representatives' emphasis on public interest concerns.<sup>365</sup>

Due to the decline of negotiated rulemaking—and particularly the fact that few agencies use standing committees like RSAC—other agencies will be less likely to reap the immediate benefits realized by FRA and PHMSA in the rail safety context. They will also not have to worry about the negative attributes of negotiated rulemaking that apparently arose in this context. But agencies can draw certain important lessons from this case study in terms of the factors that might help them more effectively respond to new and emerging risks, as well as potential negative factors that agencies should consider and avoid if they decide to once again dip their toes into the negotiated rulemaking waters.

First, repeat agency interactions with a group like RSAC, which is a group that includes the entities most affected by the agency's rules, seem to create the potential for positive rule "buyin," as negotiated rulemaking scholars in the 1990s suggested would occur.<sup>366</sup> And this buy-in can be highly valuable, particularly when agencies are attempting to rapidly respond to risks by asking regulated entities to change their behavior before official rules can be finalized.

<sup>365.</sup> See supra notes 350–52 and accompanying text.

<sup>366.</sup> PRITZKER & DALTON, supra note 6.

Second, this repeat interaction also can cause agency officials and staff to be highly knowledgeable in challenging technical areas. This is an important benefit, particularly for agencies that need to take quick, effective action in responding to risks. Although many agency officials and staff develop high levels of expertise over time simply by drafting numerous rules, issuing various advisories and memoranda, and meeting with stakeholders, meeting one-on-one with regulated entities and hashing out proposed rules through a negotiated rulemaking process or a similar process can further enhance this knowledge. It is important, however, for agencies to recognize that the information provided by regulated entities through these processes likely omits certain key data necessary for addressing risks. For example, in the rail safety context, companies that operate and use rail cars are highly knowledgeable about the factors that caused an individual accident, such as an improperly secured train car, but they are likely to be less knowledgeable about the long-term environmental and public health impacts associated with the incident, such as oil that spills from a train.<sup>367</sup> Further, regulated actors might not see certain risk patterns. Thus, in the rail safety context, having an entity like NTSB, which investigates all accidents and identifies common causes of accidents, was crucial in providing additional, technical information about risk. Agencies addressing all types of emerging risks should be sure to obtain valuable knowledge from regulated actors but also additional data from groups and agencies with a broader view of risk, as many agencies already do.

Third, and similarly, when agencies rely heavily on regulated actors for their information—either by forming an advisory board or convening groups of these actors in numerous meetings to discuss possible responses to emerging risks—they should strive to also include more public interest group representation in their processes for soliciting information and input. Public interest groups can provide broader perspectives regarding the diffuse, yet sometimes large, benefits of regulation.

<sup>367.</sup> See Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 Fed. Reg. at 26,659 (detailing the stakeholders involved in promulgating the final rule, from the railroad industry, to the emergency response community, to other agencies that play a role in preparing or responding to crude oil incidents).

So, too, can an external, independent agency like NTSB, which is tasked with suggesting specific regulations to better address public safety in the transportation context.<sup>368</sup> Without these broader perspectives, there is a risk that agency staff will become too familiar with, and focused on, the views that they hear most often, such as an industry belief that regulations are too difficult to implement, are unnecessary, or are too costly. If this occurs, agencies will inadequately consider offsetting views.

Agencies operate in a complex world, and their role has become both increasingly important and challenging as they are expected to address more issues with fewer resources. Drawing broad lessons from one case study to suggest that all agencies should follow a particular course of action would be a dangerous and ill-advised endeavor. But FRA's and PHMSA's recent efforts to address rail safety show that interactions between regulated actors above and beyond meetings, other informal that go communications, and comments received in notice-and-comment rulemaking can have important benefits, while also producing cautionary lessons. Regardless of the path that agencies follow as new risks continue to emerge, negotiated rulemaking with adequate inclusion of public interest groups, and, ideally, the presence of an external, independent agency to provide additional regulatory advice, could be an important tool in agencies' arsenal of potential approaches.

<sup>368.</sup> *About the National Transportation Safety Board*, NAT'L TRANSP. SAFETY BOARD, http://www.ntsb.gov/about/pages/default.aspx (last visited Nov. 10, 2016).