The ultimate goal of safety policy is to reduce or even virtually eliminate risk, and policymakers and regulated industries continually face difficult decisions in working toward this objective. In the context of rail safety, all stakeholders must do their part to mitigate the consequences of incidents and take steps to prevent them from occurring altogether. A healthy focus on both mitigation and prevention will make an already safe U.S. freight rail system even safer.

Over the last decade, one of the priorities for U.S. rail safety – both in the policy sphere and in the eyes of the public – has been on mitigating the consequences of train derailments. To that end, in recent years U.S. rail shippers, many from the fuel and petrochemical industries, have invested hundreds of millions of dollars into upgrading over 65,000 tank cars. These sizable investments have led to a 74 percent reduction in the Conditional Probability of Release for the U.S. flammable liquid fleet since 2013, a key measure of risk for hazardous materials transported by rail. In addition, railroads have made significant investments in their infrastructure to reduce the number of derailments over the last decade. Together rail shippers and railroads have greatly reduced risk – but more can still be done.

Despite the prevailing focus on reducing the risks posed by rail incidents, several prominent studies and even data from the Federal Railroad Administration show that more fundamental to improving the safety of today’s rail system is the prevention of derailments altogether. While considerable action has already been taken to mitigate the consequences of derailments, what is needed now is a greater emphasis on developing policies and marshaling resources to eliminate their root cause – not further restrictions on rail cargo, which can harm important U.S. manufacturing supply chains.

It appears that 2020 could be the year that the rail system will make the pivot, with a renewed focus among rail safety professionals on both mitigation and prevention.

FRA issued a proposed rulemaking at the very end of 2019 to improve and modernize rail integrity and track safety standards, the results of which may be made public sometime this year. This proposal, which allows for more frequent track inspections and authorized the use of innovative technologies, was roundly supported by both rail shippers and the railroads.

Further, a new study by Sandia National Laboratories delivered to Congress this spring conclusively showed that efforts to restrict the vapor pressure (or RVP) in rail tank cars carrying crude oil are not backed by science, nor would they increase rail safety. Upon seeing the study, the Pipeline and Hazardous Materials Safety Administration rescinded its proposed rulemaking that would have established a nationwide standard for crude volatility in rail shipments. Based on the study, PHMSA also determined that a new Washington state law regulating crude volatility in rail shipments is misaligned with national hazmat transportation law and not supported extensive federal research.

These actions are based on a growing body of data highlighting the importance of addressing the root
cause of derailments to enhance the overall safety of the U.S. rail system. According to FRA data, as much as 52 percent of freight train derailments over the past decade were due to track and equipment failures. In 2017, the National Academy of Sciences released the results of a multi-year study on energy transportation that recommended “more frequent and comprehensive inspections of rail routes” and encouraged railroads to utilize “new inspection capabilities made possible by advances in sensor, high-resolution imaging and autonomous systems technologies.” The FRA proposal does just that.

A balanced approach to rail safety that is informed by data – and one that does not place undue emphasis on politicized narratives not based on sound science – must be the driving force shaping U.S. rail policy in 2020 and beyond. FRA’s track integrity rulemaking and PHMSA’s recent move on RVP standards certainly indicate that our federal regulators are moving in this direction. Such an approach is not only the right thing to do, but it will benefit all parts of the rail system – both rail carriers and shippers – and strengthen manufacturing supply chains, ultimately benefitting U.S. consumers.

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