



ASSOCIATION OF
AMERICAN RAILROADS

Sarah G. Yurasko
Assistant General Counsel

October 13, 2017

Via email to: oira_submissions@omb.eop.gov

Office of Information and Regulatory Affairs
Office of Management and Budget
725 17th Street NW
Washington, DC 20503
Attention: FRA Desk Officer

Re: FRA Proposed Agency Information Collection Activities; Autonomous Locomotive Technology; OMB Control Number 2130-XXXX

Dear FRA Desk Officer:

The Association of American Railroads (“AAR”), on behalf of itself and its member railroads, submits the following comments in response to the Federal Railroad Administration’s (“FRA”) Information Collection Request (“ICR”) to conduct two studies regarding automated locomotive technology.¹ AAR is a trade association whose membership includes freight railroads who employ 95 percent of the workers of all railroads in the United States and who will therefore be impacted by this ICR.

FRA proposes with the first study, “Experimental Investigation of Automation-Induced Human Error in Locomotive Cab,” to identify and evaluate the potential for human error associated with the operation of systems and automation in the locomotive cab. FRA states that it will use the research’s results to identify training, operational procedures, or automation design standards that will improve the safety of automated systems in locomotive cabs.

AAR is interested in studies that advance the development of autonomous locomotive technology. Autonomous locomotive technology will enhance rail safety and operations by minimizing, and possibly eliminating, human factors that contribute to accidents. Studies to develop this new technology are a necessary and appropriate part of FRA’s role in advancing rail safety. However, this study prematurely focuses on assessing human errors caused by automation, while the far likelier consequence of implementing such technology is the avoidance of human error. FRA should instead study human errors that could be avoided by automation.

¹ See 82 Fed. Reg. 43,078 (Sept. 13, 2017). FRA Docket No. FRA-2017-0002-N-12.

Then, FRA should determine what regulations are necessary to promote autonomy technology development and innovation. Only after the technology itself is fully developed and implementable should the FRA examine whether there are any human errors caused by automation. Given the current state of development, it is unlikely that this study will yield information of present value, and its piecemeal approach may lead to unnecessary roadblocks to the development of technology that could otherwise greatly benefit safety in the near term. FRA should also include in the study a control group demonstrating the number of errors that occur in locomotives absent autonomous technology. AAR supports FRA's interest in this area but cautions that the narrow and premature scope of the study may be counterproductive to the development of safety-enhancing technology. We encourage FRA to develop a path toward autonomy instead.

With the second study, "Design and Evaluation of a Robust Manual Locomotive Operating Mode," FRA proposes to design and evaluate a prototype locomotive operating mode that allows an operator to "manually" control a train by providing the desired speed target while the control system determines the throttle-notch changes required. The agency states that the information collected from this research will be used by researchers and equipment designers to evaluate the merit of a prototype display and control configuration maximizing the use of both automation and human capabilities. This is more properly focused on the development and advancement of automation technology. AAR would appreciate more information about this study as it unfolds.

Finally, AAR is going to offer a meeting with FRA staff to provide an informational overview on some of the developments the industry has been considering in automation. I will be including these comments to the ICR in a meeting invitation.

Thank you for the opportunity to provide comments on this ICR.

Sincerely,

A handwritten signature in black ink that reads "Sarah Yurasko". The signature is written in a cursive, flowing style.

Sarah Yurasko