

## Producing Individual Deployability in the Army National Guard

Personnel authorized to serve as Active Guard or Reserve (AGR) soldiers under Title 32 of the United States Code provide the planning, training, administration, and maintenance activities required to support the part-time drilling Army National Guard (ARNG) force at the state level. To assist ARNG leaders in efficiently allocating scarce resources across readiness investments, IDA quantified the causal relationship between the Title 32 AGR complement within ARNG battalions and the deployable status of individual drilling soldiers in those units.

IDA's analysis focused on Modified Table of Organization and Equipment (MTOE) units during periods of foundational readiness—when the unit is not mobilized for, on, or recently returned from deployment. IDA researchers developed an innovative, individual-level approach using monthly observations of ARNG members from 2001 to 2014 to isolate the effect of Title 32 AGR investment levels on personal readiness. The estimated effects hold constant the influence of individual and unit characteristics.

IDA's analysis indicates that Title 32 AGR support in MTOE units has a positive, persistent, and robust effect on personal readiness levels. The addition of a Title 32 AGR member has the greatest estimated impact when Title 32 AGR members are scarce in the unit. As the ratio of Title 32 AGRs to part-time drilling soldiers in the unit increases, the impact of an additional Title 32 AGR member diminishes. The following graphic shows the estimated effects of increasing Title 32 AGR full-time support on personal readiness levels within a battalion.

(continued)



Note: The effect on personal readiness becomes statistically insignificant for Title 32 AGR ratios of approximately 6% and above.

These results provide a lower bound estimate of Title 32 AGR soldiers' affect on overall readiness. Of the numerous possible ways Title 32 AGRs effect readiness, this research considered the single output of MTOE drilling soldiers' personal readiness rates. The ARNG and IDA are working to quantify the total readiness impact of staffing investments—for example on equipment and training—as part of the ARNG Readiness Research Program.



**Julie Lockwood** (formerly Pechacek), **jlockwood@ida.org** leads the Human Capital Group in the Strategy, Forces and Resources Division of IDA's Systems and Analyses Center. The Human Capital Group uses econometric, machine learning, other empirical and structural toolkits, surveys, and interviews to conduct quantitative and qualitative research on military personnel topics. Julie holds a doctorate from the University of Texas at Austin in economics with a focus on labor economics and applied econometrics.

Research based on IDA P-8123, Assessing the Effect of Title 32 Active Guard and Reserves on Personal Readiness in the Army National Guard, J. Pechacek, A. Wang, and E. Novak, September 2016. Research sponsored by the National Guard Bureau.