



Assessing Force Sufficiency and Risk Using RAND's Multi-Period Assessment of Force Flow (MPAFF) Tool

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This report describes RAND's Multi-Purpose Assessment of Force Flow (MPAFF) tool for conducting quick, first-order time-phased analysis of force sufficiency under a variety of assumptions on force generation policies, readiness policies, and force employment policies for the U.S. Army. This tool enables exploring the effect of policy changes on force generation.



RESEARCH QUESTIONS

- How can the Army rapidly explore risk and budget implications across a variety of proposed force structures, readiness policies, and force generation policies?
- How can Army force sufficiency analysis incorporate uncertainty and a large set of possible futures while still supporting rapid high-level decisionmaking?
- What force sizing, force shaping, readiness, and force generation decisions are significant drivers of future force sufficiency risk?
- What force sizing, force shaping, readiness, and force generation decisions are robust in terms of force sufficiency risk across a wide variety of possibly future demand scenarios?



KEY FINDINGS

- Traditionally, the Army assesses risk and budget implications across proposed force and policy options using lengthy and complex processes.
- The Army currently does not have access to a planning tool that provides quick-turn results while still exploring the effect of policy options across time and different phases of a conflict.
- The MPAFF set of tools allows the Army to quickly perform quantitative assessments of capacity and force sufficiency risk over time relative to a large set of possible future demands.

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- The MPAFF set of tools can identify the most sensitive force planning assumptions, allowing the Army to focus slower, more sophisticated modeling efforts on the sets of force structure options, force management policies, and future demand scenarios that are of the most interest.



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