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Applications of Multi-Path Futures Analyses for Homeland Security Assessments

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Abstract : A range of future-oriented intelligence techniques is commonly used by states to assess their national security and develop strategies to detect and manage threats, to develop and sustain capabilities, and to recover from attacks and disasters. Although homeland security organizations use future's intelligence tools to generate scenarios and simulations which inform their planning, there have been relatively few studies of the methods available or their applications for homeland security purposes. This study presents an assessment of one category of strategic intelligence techniques, termed Multi-Path Futures Analyses (MPFA), and how it can be applied to three distinct tasks for the purpose of analyzing homeland security issues. Within this study, MPFA are categorized as a suite of analytic techniques which can include effects-based operations principles, general morphological analysis, multi-path mapping, and multi-criteria decision analysis techniques. These techniques generate multiple pathways to potential futures and thereby generate insight into the relative influence of individual drivers of change, the desirability of particular combinations of pathways, and the kinds of capabilities which may be required to influence or mitigate certain outcomes. The study assessed eighteen uses of MPFA for homeland security purposes and found that there are five key applications of MPFA which add significant value to analysis. The first application is generating measures of success and associated progress indicators for strategic planning. The second application is identifying homeland security vulnerabilities and relationships between individual drivers of vulnerability which may amplify or dampen their effects. The third application is selecting appropriate resources and methods of action to influence individual drivers. The fourth application is prioritizing and optimizing path selection preferences and decisions. The fifth application is informing capability development and procurement decisions to build and sustain homeland security organizations. Each of these applications provides a unique perspective of a homeland security issue by comparing a range of potential future outcomes at a set number of intervals and by contrasting the relative resource requirements, opportunity costs, and effectiveness measures of alternative courses of action. These findings indicate that MPFA enhances analysts' ability to generate tangible measures of success, identify vulnerabilities, select effective courses of action, prioritize future pathway preferences, and contribute to ongoing capability development in homeland security assessments.

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