

## FOCIS Helps Nations Improve Management of Their Defense Sectors

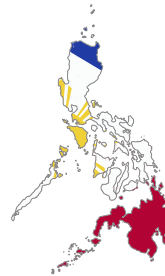
Aaron C. Taliaferro ([ataliafe@ida.org](mailto:ataliafe@ida.org)), Wade P. Hinkle ([whinkle@ida.org](mailto:whinkle@ida.org)), and Thomas J. Wallace ([twallace@ida.org](mailto:twallace@ida.org))

In 2006, IDA researchers developed a relational database called the Force Oriented Cost Information System (FOCIS). FOCIS is part of a long-term IDA project to develop analytic techniques that help defense sector leaders understand how capabilities and costs interact with one another. Using FOCIS, IDA project teams have helped decision makers in many foreign defense institutions formulate affordable multi-year defense plans.

**FOCIS is used to develop, assess, monitor, and evaluate multi-year defense program plans.** The foundation of FOCIS is a unit-level force structure database that can model alternative force structures based on defense policy decisions or strategies. FOCIS’s suite of analysis tools allows users to evaluate the cost and capability of any future force plan. Case studies from Colombia, Philippines, Botswana, and Kosovo show how FOCIS improves defense sector management, leading to an increase in the sustainable capability of the force structure.



**Cost and Force Analysis:** Using FOCIS, Colombian defense planners discovered personnel and pension costs—nearly 70 percent of the overall defense budget—were increasing faster than the entire average annual defense budget.



**Database of Record:** FOCIS was used to integrate data from all branches of the Philippine armed forces to become the official database for defense program analyses and decisions.



**Force Planning and Analysis:** FOCIS was used in Botswana to model different paths to defense reform, validate their costs, and provide defense leaders with options to proceed.



**Capability and Readiness Monitoring:** In Kosovo, FOCIS was used to help leaders understand that key military units were underresourced, exposing gaps in readiness.

**FOCIS empowers users to produce a defense program budget that provides for a capable and affordable force structure that supports defense policy objectives within budget limits.** Ideally, defense planning and programming processes produce a program budget that provides a force structure able to achieve defense policy objectives within defense budget limits. Military units are the building blocks of a capable force. To be capable, units rely on budget plans that pay for personnel, equipment, and other resources that contribute to capability. Therefore, in order to produce a capable and affordable force, units’ resource inputs need to be balanced. However, it is difficult to relate budget inputs to capability outputs. FOCIS allows defense planners to relate a force structure and associated elements to cost at the unit level. This allows planners to analyze trade-offs between capabilities and cost, simultaneously compare multiple options to develop their force structure, and analyze whether a proposed force structure will produce an affordable, capable force.

Based on [IDA NS P-5361](#), *Using a Relational Database (FOCIS) to Improve Defense Force Planning and Budgeting: An Overview for Project Leaders*, T. J. Wallace, A. C. Taliaferro, and W. P. Hinkle, March 2017; [IDA D-4318](#), *Force Oriented Cost Information System (FOCIS) User’s Manual*, J. L. Wilson, K. G. Fasana, C. V. Fletcher, A. O. Gallo, T. J. Graves, K. B. Mills, H. W. Laughlin, D. Tran, and W. P. Hinkle, January 2013; and [IDA NS P-5317](#), *Defense Governance and Management: Improving the Defense Management Capabilities of Foreign Defense Institutions*, A. C. Taliaferro, G. D. Morgan, J. L. Wilson, T. J. Wallace, and W. P. Hinkle, March 2017. Research was sponsored by the Office of the Under Secretary of Defense for Policy and the Office of the Director, Cost Assessment and Program Evaluation.