



Highlights of [GAO-09-288](#), a report to congressional committees

Why GAO Did This Study

The Future Combat System (FCS) program is the centerpiece of the Army's effort to transition to a lighter, more agile, and more capable combat force. By law, GAO is to report annually on the FCS program. Also, law requires the Department of Defense (DOD) to hold a milestone review of the FCS program, now planned for 2009. This report addresses (1) what knowledge will likely be available in key areas for the review, and (2) the challenges that lie ahead following the review. To meet these objectives, GAO reviewed key documents, performed analysis, attended demonstrations and design reviews, and interviewed DOD officials.

What GAO Recommends

GAO suggests Congress consider not approving full funds for the program until several conditions are met, such as preparation of a complete budget for any program emerging from the milestone review. GAO also recommends the Secretary of Defense, among other things, ensure: the program that emerges conforms to current defense acquisition policy, such as technology maturity; any spin out approach is based on fully tested results; and any incremental strategy involves free-standing, justifiable increments. DOD concurred with GAO's recommendations.

DEFENSE ACQUISITIONS

Decisions Needed to Shape Army's Combat Systems for the Future

What GAO Found

The Army will be challenged to demonstrate the knowledge needed to warrant an unqualified commitment to the FCS program at the 2009 milestone review. While the Army has made progress, knowledge deficiencies remain in key areas. Specifically, all critical technologies are not currently at a minimum acceptable level of maturity. Neither has it been demonstrated that emerging FCS system designs can meet specific requirements or mitigate associated technical risks. Actual demonstrations of FCS hardware and software—versus modeling and simulation results—have been limited, with only small scale warfighting concepts and limited prototypes demonstrated. Network performance is also largely unproven. These deficiencies do not necessarily represent problems that could have been avoided; rather, they reflect the actual immaturity of the program. Finally, there is an existing tension between program costs and available funds that seems only likely to worsen, as FCS costs are likely to increase at the same time as competition for funds intensifies between near- and far-term needs in DOD and between DOD and other federal agencies.

DOD could have at least three programmatic directions to consider for shaping investments in future capabilities, each of which presents challenges. First, the current FCS acquisition strategy is unlikely to be executed within the current \$159 billion cost estimate and calls for significant production commitments before designs are demonstrated. To date, FCS has spent about 60 percent of its development funds, even though the most expensive activities remain to be done before the production decision. In February 2010, Congress will be asked to begin advancing procurement funds for FCS core systems before most prototype deliveries, critical design review, and key system tests have taken place. By the 2013 production decision, Congress will have been asked for over \$50 billion in funding for FCS. Second, the program to spin out early FCS capabilities to current forces operates on an aggressive schedule centered on a 2009 demonstration that will employ some surrogate systems and preliminary designs instead of fully developed items, with little time for evaluation of results. Third, the Army is currently considering an incremental FCS strategy—this is to develop and field capabilities in stages versus in one step. Such an approach is generally preferable, but would present decision makers with a third major change in FCS strategy to consider anew. While details are yet unavailable, it is important that each increment be justified by itself and not be dependent on future increments.

To view the full product, including the scope and methodology, click on [GAO-09-288](#). For more information, contact Paul Francis at (202) 512-4841 or francis@ga.gov.