



Highlights of [GAO-06-938](#), a report to congressional committees

## Why GAO Did This Study

The Department of Defense (DOD) issued the Mobility Capabilities Study (MCS), which was intended to identify and quantify the mobility capabilities needed to support U.S. strategic objectives into the next decade. The MCS found that projected capabilities are adequate to achieve U.S. objectives with an acceptable level of risk—that is, current U.S. inventory of aircraft, ships, prepositioned assets, and other capabilities are sufficient, in conjunction with host nation support, and assuming planned investments take place.

The Senate report accompanying the bill for the fiscal year 2005 Defense Authorization Act required GAO to report on the adequacy and completeness of the MCS. GAO assessed the extent to which the MCS met generally accepted research standards that this type of study would be expected to meet to be considered sound and complete.

## What GAO Recommends

GAO recommends that the Secretary of Defense, in future mobility capabilities studies beginning with any study currently under way, develop models and data for critical missions and processes; include in study reports an explanation of how stated limitations might impact results; and, incorporate both mobility and warfighting metrics to determine capabilities. In comments, DOD concurred with two of the recommendations and claimed they did not understand the third, which GAO clarified.

[www.gao.gov/cgi-bin/getrpt?GAO-06-938](http://www.gao.gov/cgi-bin/getrpt?GAO-06-938).

To view the full product, including the scope and methodology, click on the link above. For more information, contact William M. Solis at (202) 512-8365 or [solisw@gao.gov](mailto:solisw@gao.gov).

## DEFENSE TRANSPORTATION

# Study Limitations Raise Questions about the Adequacy and Completeness of the Mobility Capabilities Study and Report

## What GAO Found

DOD used an innovative approach in conducting the study and acknowledged methodological limitations in its report; however, it did not fully disclose how these limitations could affect the MCS conclusions and recommendations. Therefore, it is not transparent how the analyses done for the study support DOD's conclusions. Measured against relevant generally accepted research standards, GAO has identified limitations in the MCS and its report that raise questions about their adequacy and completeness. GAO suggests that Congress and other decision makers exercise caution in using the MCS to make investment decisions. Among GAO's findings:

- Aspects of modeling and data were inadequate in some areas because data were lacking and the models used could not simulate all relevant aspects of the missions. The report did not explain how these limitations could affect the study results or what the impact on projected mobility capabilities might be. Generally accepted research standards require that models used are adequate for the intended purpose, represent a complete range of conditions, and that data used are properly generated and complete. For example, the MCS modeled hypothetical homeland defense missions rather than homeland defense demands derived from a well defined and approved concept of operations for homeland defense, because the specific details of the missions were still being determined and the data used may be incomplete. The MCS also was unable to model the flexible deterrent options/deployment order process to move units and equipment into theater because of lack of data, but the study assumed a robust use of this process. In addition, the MCS report contains over 80 references to the need for improved modeling or data.
- While the MCS concluded that combined U.S. and host nation transportation assets were adequate, in describing the use of warfighting metrics in its analyses, the report does not provide a clear understanding of the direct relationship of warfighting objectives to transportation capabilities. Additionally, the report stated that further analysis is required to understand the operational impact of increased or decreased strategic lift on achieving warfighting objectives. Relevant generally accepted research standards require that conclusions be supported by analyses. The use of both warfighting and mobility metrics would allow decision makers to know whether combat tasks were achieved and how much strategic transportation is needed to accomplish those tasks.
- In some cases, the MCS results were incomplete, unclear, or contingent on further study, making it difficult to identify findings and evaluate evidence. Relevant research standards require results to be presented in a complete, accurate, and relevant manner. For example, the report contains recommendations for further studies and assessments, five of which are under way. However, DOD has no plans to report the impact of these studies on the MCS results after the studies are complete. In addition, the report contains qualified information that is not presented clearly, such as varying assessments of intra-theater assets in three different places.