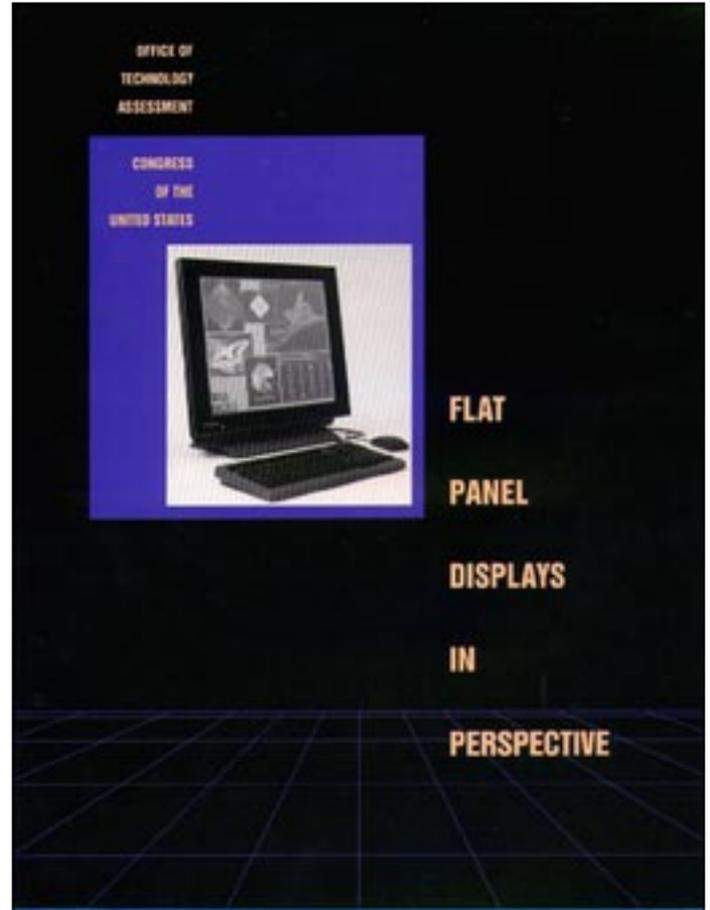


Flat Panel Displays in Perspective

September 1995

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Foreword

Flat panel displays (FPDs) are increasingly important in this information-intensive era. Compared with the cathode ray tube used in televisions, FPDs are thin, lightweight, and power efficient. These displays have enabled the development of portable computers and communication devices. Applications in automobiles and offices will increase, and FPDs may eventually result in the fabled television-on-the-wall. FPDs represent a large and rapidly growing industry worldwide, and are expanding into an increasingly diverse set of systems. American companies and researchers have made many of the key innovations in FPDs, but U.S. firms hold a very small share of the world market. Some observers have called for government intervention to strengthen the U.S. industry. One area of concern—access to displays for military use—has driven recent federal support for FPDs.

Flat Panel Displays in Perspective examines the potential benefits of a domestic, high-volume, FPD industry for the nation, and evaluates the role of government policies in developing it. The report concludes that such an industry would provide both economic and national security benefits. The extent of these benefits is difficult to determine, however, largely because trends in technology development and industry structure are resulting in more displays at declining prices. The barriers to establishing a high-volume FPD industry are formidable, and government tools to address them are limited. However, government funding can play a role by helping to build domestic sources for some displays, such as those used in military systems. An additional finding is that the Department of Defense already uses some foreign displays, but it could take better advantage of FPD sources worldwide.

This report was requested by the Senate Armed Services Committee. It was produced under the auspices of the Assessment on Innovation and Commercialization of Emerging Technologies, requested by the House Science Committee (formerly the Science, Space, and Technology Committee) and the Senate Commerce, Science, and Transportation Committee.

OTA would like to acknowledge the review comments and inputs from members of the Innovation and Commercialization of Emerging Technologies Advisory Panel, as well as experts from government, academia, and the FPD industry. However, the content of the report is the responsibility of OTA.



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Note: OTA appreciates the valuable assistance and thoughtful comments provided by the advisory panelists. The panel does not, however, necessarily approve, disapprove, or endorse this report. OTA assumes full responsibility for the report and the accuracy of its contents.

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