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DIGITAL BROADCAST TELEVISION TRANSITION

Estimated Cost of Supporting Set-Top Boxes to Help Advance the DTV Transition

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Highlights

Highlights of GAO-05-258T, a testimony before the Subcommittee on Telecommunications and the Internet, Committee on Energy and Commerce, House of Representatives

Why GAO Did This Study

The digital television (DTV) transition offers the promise of enhanced television services. At the end of the transition, radiofrequency spectrum used for analog broadcast television will be used for other wireless services and for critical public safety services. To spur the digital transition, some industry participants and experts have suggested that the government may choose to provide a subsidy for set-top boxes, which can receive digital broadcast television signals and convert them into analog signals so that they can be displayed on *existing* television sets. This testimony provides information on (1) the current distribution of American households by television viewing methods and whether there are demographic differences among these groups; (2) the equipment required for households to receive digital broadcast signals; and (3) the estimated cost to the federal government, under various scenarios, of providing a subsidy for set-top boxes that would enable households to view digital broadcast signals.

We developed estimates of the cost of a subsidy for set-top boxes using data on household television characteristics, expected set-top box costs, and varied assumptions about how certain key regulatory issues will be decided.

www.gao.gov/cgi-bin/getrpt?GAO-05-258T.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Mark L. Goldstein, (202) 512-2834, goldsteinm@gao.gov.

What GAO Found

The three primary means through which Americans view television signals are over the air, cable, and direct broadcast satellite (DBS). GAO found that 19 percent, or roughly 21 million American households, rely exclusively on free over-the-air television; 57 percent, or nearly 64 million households, view television via a cable service; and 19 percent, or about 22 million households, have a subscription to a direct broadcast satellite (DBS) service. On average, over-the-air households are more likely to have lower incomes compared to cable and DBS households. While 48 percent of over-the-air households have incomes under $30,000, roughly 29 percent of cable and DBS households have incomes less than that level. Also, 6 percent of over-the-air households have incomes over $100,000, while about 13 percent of cable and DBS households have incomes exceeding $100,000.

The specific equipment that each household needs to transition to DTV—that is, to be able to view digital broadcast signals—depends on the method through which the household watches television, whether the household has already upgraded its television equipment to be compatible with DTV, and the resolution of certain key regulatory issues. GAO examined two key cases regarding the regulatory issues. The assumption for case one is that cable and DBS providers would continue providing broadcasters' signals as they currently do, thus eliminating the need for their subscribers to acquire new equipment. In this case, only households viewing television using only an over-the-air antenna would need to take action to be able to view broadcasters' digital signals. The assumption for the second case is that cable and DBS providers would be required to provide broadcasters' digital signals to subscribers in substantially the same format as broadcasters transmitted those signals. This would require cable and DBS subscribers, in addition to over-the-air households, to have equipment in place to be able to receive their providers' high-definition digital signals.

If a subsidy for set-top boxes is only needed for over-the-air households (case one), GAO estimates that its cost could range from about $460 million to about $2 billion, depending on the price of the set-top boxes and whether a means test—which would limit eligibility to only those households with incomes lower than some specified limit—is employed. If cable and satellite subscribers also need new equipment (case two), the cost of providing the subsidy could range from about $1.8 billion to approximately $10.6 billion.

We provided a draft of this testimony to the Federal Communications Commission (FCC) for their review and comment. FCC staff provided technical comments that we incorporated where appropriate.