

Report to Congressional Requesters

September 2008

DIGITAL TELEVISION TRANSITION

Implementation of the Converter Box Subsidy Program Is Under Way, but Preparedness to Manage an Increase in Subsidy Demand Is Unclear





Highlights of GAO-08-1040, a report to congressional requesters

Why GAO Did This Study

The Digital Television Transition and Public Safety Act of 2005 requires all full-power television stations in the United States to cease analog broadcasting after February 17, 2009, known as the digital television (DTV) transition. The National Telecommunications and Information Administration (NTIA) is responsible for implementing a subsidy program to provide households with up to two \$40 coupons toward the purchase of converter boxes. In this requested report, GAO examines (1) what consumer education efforts have been undertaken by private and federal stakeholders and (2) how effective NTIA has been in implementing the converter box subsidy program, and to what extent consumers are participating in the program. To address these issues, GAO analyzed data from NTIA and reviewed legal, agency, and industry documents. Also, GAO interviewed a variety of stakeholders involved with the DTV transition.

What GAO Recommends

GAO recommends that the Secretary of Commerce direct NTIA to develop a plan to manage coupon requests in the lead up to the transition. GAO provided the Department of Commerce and FCC with a draft of this report. While Commerce did not state whether it agreed or disagreed with GAO's recommendation, it stated its concern about an increase in coupon demand as the transition nears. FCC noted consumer outreach efforts that it has taken related to the DTV transition.

To view the full product, including the scope and methodology, click on GAO-08-1040. For more information, contact Mark Goldstein at (202) 512-2834 or goldsteinm@gao.gov.

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Implementation of the Converter Box Subsidy Program Is Under Way, but Preparedness to Manage an Increase in Subsidy Demand Is Unclear

What GAO Found

Private sector and federal stakeholders have undertaken various consumer education efforts to raise awareness about the DTV transition. For example, the National Association of Broadcasters and the National Cable and Telecommunications Association have committed over \$1.4 billion to educate consumers about the transition. This funding has supported the development of public service announcements, education programs for broadcast, Web sites, and other activities. The Federal Communications Commission (FCC) and NTIA have consumer education plans that target those populations most likely to be affected by the DTV transition. Specifically, they identified 45 areas of the country as high risk that included areas with at least 1 of the following population groups: (1) more than 150,000 over-the-air households, (2) more than 20 percent of all households relying on over-the-air broadcasts. or (3) a top 10 city of residence for the largest target demographic groups. The target demographic groups include seniors, low-income, minority and non-English speaking, rural households, and persons with disabilities. In addition to targeting these 45 areas of the country, FCC and NTIA developed partnerships with organizations that serve these hard-to-reach populations.

NTIA is effectively implementing the converter box subsidy program, but its plans to address the likely increase in coupon demand as the transition nears remain unclear. Almost 19 million coupons have been issued by NTIA, but as of June 2008, only 9 percent of U.S. households had requested coupons. As found in GAO's recent consumer survey, up to 35 percent of U.S. households could be affected by the transition because they have at least one television not connected to a subscription service, such as cable or satellite. With a spike in demand likely as the transition date nears, NTIA has no specific plans to address an increase in demand; therefore, consumers might incur significant wait time before they receive coupons as the transition nears and might lose television service during the time they are waiting for the coupons. In terms of participation in the converter box subsidy program, GAO analyzed coupon data in areas of the country comprising predominantly minority and senior populations and found that households in both predominantly black and Hispanic or Latino areas were much less likely to redeem their coupons compared with households outside these areas. Additionally, GAO analyzed participation in the subsidy program in the 45 areas of the country on which NTIA and FCC focused their consumer education efforts and found coupon requests to be about the same for zip codes within the 45 targeted areas compared with areas that were not targeted. Retailers play an integral role in the subsidy program by selling the converter boxes and helping to inform their customers about the DTV transition and the program. GAO visited 132 randomly selected retail stores in 12 cities. Store representatives at a majority of the retail locations GAO visited were able to correctly state that the DTV transition would occur in February 2009 and explain how to apply for a converter box coupon.

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Abbreviations

CEA	Consumer Electronics Association
DTV	digital television
FCC	Federal Communications Commission
IBM	International Business Machines Corporation
NAB	National Association of Broadcasters
NTIA	National Telecommunications and Information
	Administration
PSA	public service announcement

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United States Government Accountability Office Washington, DC 20548

September 16, 2008

Congressional Requesters

Federal law requires all full-power television stations in the United States to cease analog broadcasting and to broadcast digital-only transmissions after February 17, 2009. This process is often referred to as the digital television (DTV) transition. Currently, most television broadcasters transmit over-the-air signals in both an analog and a digital format to U.S. households. After the transition, consumers who rely exclusively on over-the-air television signals viewed on analog sets will not be able to view broadcast programming, which could include important news information or emergency alerts, unless they take action. Specifically, these consumers could (1) purchase a television capable of processing digital signals; (2) purchase a digital-to-analog converter box that converts the digital signals to analog signals and enables their display on an analog set; or (3) subscribe to cable, satellite, or other service.

The federal government and the private sector have taken several steps to prepare for the DTV transition. The National Telecommunications and Information Administration (NTIA), which is a bureau within the Department of Commerce, created and implemented a digital-to-analog converter box subsidy program to provide households with up to two \$40 coupons toward the purchase of converter boxes that allow consumers to continue viewing over-the-air signals on analog television sets. Additionally, the government, the television broadcast industry, cable and satellite providers, and other carriers of the broadcast signal have established several educational efforts informing consumers about the DTV transition and the subsidy program. However, the success of the DTV transition and the subsidy program requires consumers' understanding about the transition and the steps needed to continue receiving a television signal. In addition, consumers will rely on retailers to provide information, as well as to supply eligible converter boxes.

You asked us to provide information on the progress of the DTV transition. As part of our ongoing review of issues related to the transition, we determined (1) what consumer education efforts have been undertaken by

¹The prices of eligible converter boxes range from \$40 to over \$90.

private and federal stakeholders and (2) how effective NTIA has been in implementing the converter box subsidy program, and to what extent consumers are participating in the program.

To meet these objectives, we interviewed agency officials from the Federal Communications Commission (FCC) and NTIA and reviewed their consumer education documents, orders, rules, and proposed rules. We also interviewed private sector stakeholders representing the broadcasting, retailer, manufacturing, and cable industries and reviewed publicly available information on their consumer education planning. Furthermore, we discussed the effectiveness of consumer education efforts with various advocacy groups identified as NTIA partners that represent hard-to-reach populations. We also analyzed date-specific data from NTIA on coupon applications, requests, issuance, redemptions, and expirations and examined NTIA timeliness in issuing coupons from the beginning of the converter box subsidy program in January 2008 through June 2008. We conducted data reliability testing and determined that the data used in this report were sufficiently reliable for our purposes. We also conducted a "mystery shopper" study—that is, we discussed the transition with randomly selected retailers without identifying ourselves as government employees—to determine retailer preparedness for the converter box subsidy program, including the level of retailer knowledge about the program and the availability of converter boxes. In conducting the mystery shopper study, we visited 132 store locations in 12 cities from April to early May 2008. Appendix I contains a detailed discussion of our objectives, scope, and methodology.

We performed our review from February 2008 to September 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our review objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Results in Brief

Private sector and federal stakeholders have undertaken various consumer education efforts to raise awareness about the DTV transition. For example, the National Association of Broadcasters (NAB) and the National Cable and Telecommunications Association have committed over \$1.4 billion to educate consumers about the transition. This funding has supported the development of public service announcements, education programs for broadcast, Web sites, and other activities. NAB has

developed 15-second and 30-second public service announcements in both English and Spanish and closed-captioned versions. In addition, the Consumer Electronics Association and most national retailers participating in the converter box subsidy program have developed consumer education campaigns to raise awareness of the DTV transition and the subsidy program. For example, some national retailers have developed informational videos for their in-store displays, and some are developing partnerships with broadcasters and other groups. Federal stakeholders (FCC and NTIA) have developed consumer education plans that generally follow key practices for consumer education planning and target those populations most likely to be affected by the DTV transition. Specifically, these agencies identified 45 areas of the country as high risk, that is, those areas with at least 1 of the following population groups: (1) more than 150,000 over-the-air households, (2) more than 20 percent of all households relying on over-the-air broadcasts, or (3) a top 10 city of residence for the largest target demographic groups. The target demographic groups include seniors, low-income, minority and non-English speaking, rural households, and persons with disabilities. FCC and NTIA have developed partnerships with organizations that serve these hard-to-reach populations. For example, FCC has participated in events with the National Social Worker Association, and NTIA has worked with a coalition of aging organizations.

NTIA is effectively implementing the converter box subsidy program, but its plans to address the likely increase in coupon demand as the transition nears remain unclear. As of June 2008, NTIA has issued approximately 17 million coupons, but as of that date only 9 percent of U.S. households had requested coupons. As found in our recent consumer survey, up to 35 percent of U.S. households could be affected by the transition because they have at least one television not connected to a subscription service, such as cable or satellite. In U.S. households relying solely on over-the-air broadcasts (approximately 15 percent), of those who intend to purchase a converter box, 100 percent of survey respondents said they were likely to request a coupon. Therefore, a spike in demand for converter box coupons is likely as the transition date nears. According to NTIA, a similar increase in requests around the transition date may cause a delay in issuing coupons. However, we found that NTIA has no specific plans to address

²GAO, Digital Television Transition: Broadcasters' Transition Status, Low-Power Station Issues, and Information on Consumer Awareness of the DTV Transition, GAO-08-881T (Washington, D.C.: June 10, 2008).

an increase in demand, and that it has encountered challenges in issuing coupons within its requirement of 10 to 15 days from the date the coupon applications were approved. Given the challenges to meeting this requirement and NTIA's lack of a clear plan to address a potential spike in demand, consumers might incur significant wait time before they receive their coupons and might lose television service during the time they are waiting for the coupons. Regarding participation in the converter box subsidy program, we analyzed coupon data in areas of the country comprising predominantly minority and senior populations and found that participation varies. For example, we found that zip codes with a high concentration of Latino or Hispanic households had noticeably higher request rates (20 percent) compared with areas to predominantly non-Latino or non-Hispanic households (8 percent). However, households in both predominantly black and Hispanic or Latino areas were much less likely, compared with households outside these areas, to redeem their coupons once they received them. Additionally, we analyzed participation in the converter box subsidy program in the 45 areas of the country on which NTIA and FCC focused their consumer education efforts to determine participation of the target populations. We found coupon requests were about the same (9 percent) for zip codes in the 45 targeted areas compared with areas of the country that were not targeted. Retailers play an integral role in the subsidy program by selling the converter boxes and helping to inform their customers about the DTV transition and the subsidy program. Store representatives at most (118 of the 132) retailers we visited were able to correctly state that the DTV transition would occur in February 2009. Additionally, nearly all retailers (126) identified a coupon-eligible converter box as an option available to consumers so that they may continue watching television after the transition.

To help NTIA prepare for a potential increase in demand for converter box coupons and so that consumers are not left waiting a lengthy amount of time for requested coupons, we recommend that the Secretary of Commerce direct the Administrator of the NTIA to develop a plan to manage volatility in coupon requests to ensure that coupons are processed and mailed within 10 to 15 days from the day the coupon applications are approved, per NTIA's stated requirement.

We provided a draft of this report to the Department of Commerce (which contains NTIA) and FCC for their review and comment. In response, Commerce did not state whether it agreed or disagreed with our recommendation, but the department did say that it shares our concern about an increase in coupon demand as the transition nears. Furthermore, Commerce's letter stated it is committed to doing all that it can within its

statutory authority and existing resources to ensure that all Americans are ready for the DTV transition. In its letter, FCC noted consumer outreach efforts it has taken related to the DTV transition. See appendixes IV and V for written comments from Commerce and FCC, respectively.

Background

The DTV transition will require citizens to understand the transition and the actions that some might have to take to maintain television service. For those households with subscription video service on all televisions or with all televisions capable of processing a digital signal, no action is required. However, households with analog televisions that rely solely on over-the-air television signals received through rooftop or indoor antennas must take action to be able to view digital broadcast signals after analog broadcasting ceases. The Digital Television Transition and Public Safety Act of 2005 addresses the responsibilities of two federal agencies—FCC and NTIA—related to the DTV transition. The act directs FCC to require full-power television stations to cease analog broadcasting by February 17, 2009. The act also directed NTIA to establish a \$1.5 billion subsidy program through which households can obtain coupons toward the purchase of digital-to-analog converter boxes. In August 2007, NTIA selected the International Business Machines Corporation (IBM) as the contractor to provide certain services for the program. On January 1, 2008, NTIA, in conjunction with IBM and in accordance with the act, began accepting applications for up to two \$40 coupons per household³ that can be applied toward the purchase of eligible digital-to-analog converter boxes and, in mid-February 2008, began mailing the coupons. Initially, during the first phase of the program, any household is eligible to request and receive the coupons, but once \$890 million worth of coupons has been redeemed, and issued but not expired, NTIA must certify to Congress that the program's initial allocation of funds is insufficient to fulfill coupon requests. NTIA will then receive \$510 million in additional program funds,

³Households requesting coupons must submit the name of the person requesting the coupon and a valid United States Postal Service address. A post office box will not be considered a valid address, except in the cases of residents of American Indian reservations, Alaskan native villages, and other rural areas without home postal delivery. In April 2008, NTIA issued a notice of proposed rulemaking to change the household eligibility and application process for individuals residing in nursing homes and households that use post office boxes. The comment period, for the proposed rulemaking, closed June 9, 2008, and NTIA has indicated its intent to complete the rulemaking as soon as possible.

⁴NTIA established technical and performance specifications that converter boxes must meet to be eligible for the subsidy program.

but households requesting coupons during this second phase must certify that they do not receive cable, satellite, or any other pay television service. As of June 24, 2008, in response to NTIA's statement certifying that the initial allocation of funds would be insufficient, all appropriated coupon funds were made available to the program. Consumers can request coupons up to March 31, 2009, and coupons can be redeemed through July 9, 2009. As required by law, all coupons expire 90 days after issuance. As unredeemed coupons expire, the funds obligated for those coupons will be returned to the subsidy program.

Retailer participation in the converter box subsidy program is voluntary; however, participating retailers are required to follow specific program rules to ensure the proper use and processing of converter box coupons. Retailers are obligated to, among other things, establish systems capable of electronically processing coupons for redemption and payment and tracking transactions. Retailers must also train their employees on the purpose and operation of the subsidy program. According to NTIA officials, NTIA initially explored the idea of setting requirements for training content, but decided to allow retailers the flexibility of developing their own training programs and provided retailers with sample training materials. Certification requires retailers to have completed an application form by March 31, 2008, and to attest that they have been engaged in the consumer electronics retail business for at least 1 year. Retailers must also register in the government's Central Contractor Registration database, ⁶ have systems or procedures that can be easily audited and that can provide adequate data to minimize fraud and abuse, agree to be audited at any time, and provide data tracking each coupon with a corresponding converter box purchase. NTIA may revoke retailers' certification if they fail to comply with these regulations or if any of their actions are deemed inconsistent with the subsidy program. Converter boxes can also be purchased by telephone or online and be shipped directly to a customer's home from participating retailers. At the time of our review, 29 online retailers were participating in the converter box subsidy program. As of

 $^{^5}$ With the additional \$510 million, total program funding is \$1.5 billion, which includes up to \$1.34 billion in coupon funds and up to \$160 million in administrative funds.

⁶The Central Contractor Registration database is the primary registrant system for collecting, validating, storing, and disseminating data in support of agency acquisition missions. Furthermore, the Central Contractor Registration facilitates electronic financial transfers through electronic fund transfers. According to NTIA officials, registration in the Central Contractor Registration database does not mean that the registrant is a government contractor.

July 23, 2008, there were three instances of retailers previously listed as participating in the program that were no longer identified as participating online retailers. Additionally, 13 telephone retailers were listed as participating in the program, 2 of which are associated with national retailers.

Private and Federal Stakeholders Have Undertaken a Myriad of Activities Aimed at Increasing the Public's Awareness of the DTV Transition Private sector stakeholders from the broadcast, cable, retail, and consumer electronics industries have committed over \$1 billion to voluntary and required consumer education efforts to inform the public of the DTV transition. Also, FCC and NTIA have ongoing consumer education efforts targeting households that rely on over-the-air broadcasts and targeting hard-to-reach populations, such as minority and non-English speakers, seniors, and rural households. The government consumer education plans generally follow key practices for consumer education planning.

Private Stakeholders Have Established Education Efforts to Inform the Public about the DTV Transition

Private sector stakeholders, such as broadcasters, cable providers, and the Consumer Electronics Association, have undertaken various education efforts to increase public awareness about the DTV transition.7 NAB and the National Cable and Telecommunications Association initiated DTV transition consumer education campaigns in late 2007 at an estimated value of \$1.4 billion combined. NAB has produced six versions of a public service announcement, including 15-second and 30-second versions in both English and Spanish and close-captioned versions. Private sector stakeholders have also produced DTV transition educational programs for broadcast and distribution, developed Web sites that provide information on the transition, and engaged in various other forms of outreach to raise awareness. Examples of outreach by some private stakeholders include attending and distributing information at industry events and conferences, such as speakers' bureaus and road shows, and initiating an educational contest to find the oldest working television that receives over-the-air broadcasts. Additionally, most of the national retailers participating in the NTIA converter box subsidy program are providing materials to help inform their customers of the DTV transition and the subsidy program.

⁷FCC requires broadcasters, cable and satellite providers, and consumer electronics manufacturers to provide a minimum level of DTV transition consumer education. See appendix III for additional information on these FCC requirements.

Examples of these materials include informational brochures in English and Spanish, educational videos and in-store displays in English and Spanish, informational content on retailer Web sites, and information provided in retailer advertising in Sunday circulars. Some of the national retailers with whom we spoke are also engaging in partnerships with other organizations. For example, one national retailer is partnering with local broadcasters to run DTV television spots and with print media outlets and magazines to help inform the public about the transition. The private sector has also conducted surveys to gauge consumer awareness. For example, NAB, the Consumer Electronics Association, Consumers Union, and Best Buy Company, Inc., have all surveyed consumers nationwide regarding their level of understanding and awareness of the DTV transition.

Federal Government Education Efforts Target Hard-to-Reach Populations, and Plans Generally Follow Key Practices for Consumer Outreach

FCC and NTIA also have ongoing DTV consumer education efforts, which target populations most likely to be affected by the DTV transition. Specifically, they focused their efforts on 45 areas of the country that have at least 1 of the following population groups: (1) more than 150,000 overthe-air households, (2) more than 20 percent of all households relying on over-the-air broadcasts, or (3) a top 10 city of residence for the largest target demographic groups. The target demographic groups include seniors, low-income, minority and non-English speaking, rural households, and persons with disabilities. According to NTIA, its consumer education efforts will specifically target these 45 areas by leveraging partnerships and earned media spots (such as news stories or opinion editorials) to better reach the targeted populations. FCC indicated that while its outreach efforts focus on the targeted hard-to-reach populations, the only effort specifically targeting the 45 locations has been to place billboards in these communities. According to FCC, contracts exist for billboards in 26 of the 45 markets, and it is working to place billboards in the other 19 markets. Furthermore, FCC and NTIA have developed partnerships with some federal, state, and local organizations that serve the targeted hard-toreach populations. FCC and NTIA believe the partners can serve as trusted voices to inform the targeted populations about the DTV transition. As shown in table 1, there have been outreach efforts to all targeted populations. A few of the partners we contacted indicated that while they agreed to help inform the populations they serve, they had very little funding to support widespread dissemination of this information, and that they would like monetary support from the government to do so. We also found one instance of an organization listed as a partner by NTIA that had not agreed to disseminate DTV information because it could only focus on its primary mission.

Table 1: Examples of FCC and NTIA Consumer Outreach Efforts to Targeted Populations

Targeted population	Consumer outreach effort
Seniors	NTIA conducted a train-the-trainer "Webinar," reaching approximately 200 individuals who are now conducting outreach to seniors.
Low-income	FCC placed exhibits at four state/territory chapter meetings of the National Social Worker Association.
Minority and non-English speaking	NTIA participated in an Asian Pacific American Heritage Month event in San Francisco, along with approximately 100 community leaders.
Rural households	FCC and NTIA, in conjunction with the U.S. Department of Agriculture, participated in a National 4H Youth Conference and conducted a train-the- trainer session for approximately 100 youth members.
Persons with disabilities	FCC attended several conferences, including the National Black Deaf Advocates Conference, to distribute DTV materials.

Sources: FCC and NTIA.

We previously reported on nine key practices for consumer education planning: defining goals and objectives, analyzing the situation, identifying stakeholders, identifying resources, researching target audiences, developing consistent and clear messages, identifying credible messenger(s), designing the media mix, and establishing metrics to measure success. We analyzed FCC's and NTIA's consumer education plans and found that they reflect almost all of the key practices that we previously identified for overcoming potential challenges in such planning. For example, NTIA has defined four primary objectives, including (1) increasing awareness of the converter box subsidy program, (2) generating requests for coupons, (3) engaging partners to disseminate information about the subsidy program, and (4) providing media

information about the subsidy program, and (4) providing media information and tools needed to report on the program. FCC has made consumer outreach one of its primary goals for the DTV transition and has set goals for distributing publications; participating in events and conferences; and coordinating with federal, state, and local entities. Furthermore, NTIA and FCC conducted audience research on targeted

⁸GAO, Digital Television Transition: Increased Federal Planning and Risk Management Could Further Facilitate the DTV Transition, GAO-08-43 (Washington, D.C.: Nov. 19, 2007).

populations and identified geographic areas most likely to be affected. The NTIA contractor for the subsidy program completed a study of both general consumers and those who fall into the target audiences to help develop the message and materials for the program. This process included developing, testing, and refining the message, with the goal of exploring the target audiences' reactions to the message. For additional information on the key practices and the FCC and NTIA consumer education plans, see appendix II.

NTIA Is Effectively
Implementing the
Converter Box
Subsidy Program, but
Concerns Exist about
NTIA's Ability to
Manage a Potential
Spike in Coupon
Demand

NTIA has processed and issued coupons to millions of consumers, but a sharp increase in demand might affect NTIA's ability to respond to coupon requests in a timely manner. With relatively low participation rates to date, a spike in demand leading up to the transition is likely and, given the processing time required in issuing coupons, NTIA's preparedness to handle volatility in coupon demand is uncertain. Coupon requests and redemptions by the targeted hard-to-reach populations have varied compared with participation in the rest of the country, with some populations having higher request rates but redeeming the coupons at a lower rate. Retailers play a crucial role in the converter box subsidy program, and the national retailers we contacted have taken steps to inform their consumers and train their employees about the subsidy program.

NTIA Has Implemented Systems to Process Requests and Issue Coupons, but NTIA's Ability to Respond to Volatile Coupon Demand Is Uncertain NTIA and its contractors have implemented comprehensive systems to administer the converter box subsidy program. The contractors working with NTIA—IBM and its subcontractors—have implemented systems (1) to process coupon applications, (2) to produce and distribute coupons to consumers, and (3) for retailers to process coupons and receive reimbursement for the coupons from the government. Millions of consumers have requested converter box coupons, and most of the requested coupons have been issued. Through June 2008, households had requested almost 19 million coupons. NTIA had issued over 92 percent of all coupon requests, for more than 17 million coupons. Of those coupons issued, about 4.9 million (28 percent) had been redeemed and 13 percent had expired.⁹ At the time of our review, consumers were not eligible to

⁹Our redemption rate was calculated by dividing the number of redeemed coupons by the total number of issued coupons as of June 30, 2008. The total number of issued coupons includes coupons that had been redeemed, had expired, and had not yet expired as of that date.

reapply for coupons that expired before they were used. Rather, funds obligated for expired coupons were to be returned to the subsidy program. According to NTIA, it had anticipated and budgeted for the distribution of additional coupons as funds from expired coupons are returned to the program, and it is working closely with its contractor to ensure that as many coupons as possible can be distributed.

After an initial spike at the beginning of the program, coupon requests have remained steady and have averaged over 103,000 requests per day. Coupon redemptions, since coupons were first issued in February 2008, have averaged over 36,000 per day. Figure 1 illustrates the cumulative requests, issuances, redemptions, and expirations of coupons, from the inception of the subsidy program (January 2008) through June 2008.

Figure 1: Cumulative Converter Box Coupon Requests, Issuances, Redemptions, and Expirations through June 2008

Number of coupons (in millions)

20

15

10

5

Day

Coupons requested
Coupons issued
Coupons redeemed
Source GAO analysis of NTIA data.

In our recent consumer survey, we found that 35 percent of U.S. households are at risk of losing some television service because they have at least one television not connected to a subscription service, such as cable or satellite. However, through June 2008, only 9 percent of U.S. households had requested converter box coupons, and less than 3 percent had redeemed these coupons. As the transition date nears, there is the potential that many affected households that have not taken action might begin requesting coupons. Our consumer survey found that of those at risk of losing some television service and intending to purchase a converter box, most will likely request a coupon. In fact, in households relying solely on over-the-air broadcasts (approximately 15 percent), of those who intend to purchase a converter box, 100 percent of survey respondents said they were likely to request a coupon.

Consumers have incurred significant wait times in the processing of their coupon requests, but NTIA's processing time from receiving requests to issuing coupons is improving, as shown in figure 2. NTIA requires that 98 percent of all coupon requests be issued within 10 days, and the remainder be issued within 15 days from the date the coupon applications are approved. From February 17 through June 30, 2008, our analysis shows that the average duration between coupon request and issuance is over 19 days. In aggregate, 36 percent of all coupon requests have been issued within 10 days, and 54 percent of all coupon requests have been issued more than 15 days after being requested. From May 1 through June 30, 2008, the average processing time from coupon request to issuance was 9 days.

¹⁰For the purposes of our analysis, we assumed that all coupons were issued in the order they were received. According to NTIA, coupon issuance was to begin 1 year from the transition. Therefore, the processing time between coupon requests and issuance was calculated beginning on February 17, 2008.

Figure 2: Average Coupon Processing Time from Request Date, through June 2008

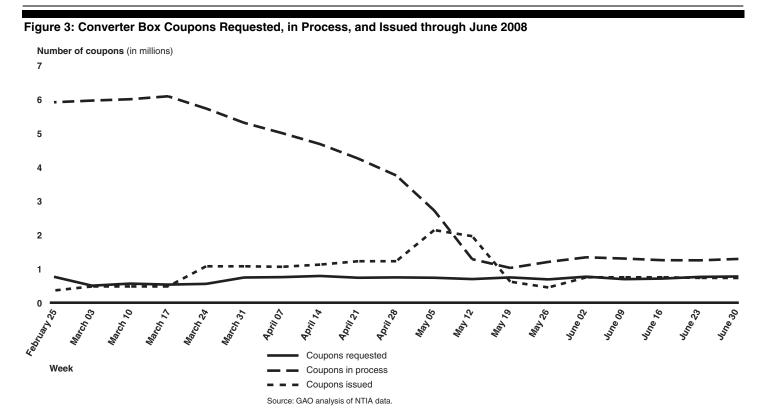
Processing time (number of days)
40
35
30
Coupon requests submitted on February 18 had an average processing time of 38 days

NTIA requires that 98 percent of all coupon requests be issued within 10 days of application approval

15
10
5
Day

Source: GAO analysis of NTIA data.

Throughout the course of the subsidy program, NTIA has increased its capacity to issue coupons, at times issuing as many as 500,000 coupons per day. However, the number of coupons issued per day varies greatly and, as shown in figure 3, has declined since peaking in early May 2008.



Given the processing time required in issuing coupons, NTIA's preparedness to handle volatility in coupon demand is unclear. Fluctuation in coupon requests, including the potential for a spike in requests as the transition date approaches, could adversely affect consumers. When NTIA faced a deluge of coupon requests in the early days of the converter box subsidy program, it took weeks to bring down the deficit of coupons requested to coupons issued. According to NTIA, it expects a similar increase in requests around the transition date, and such an increase may cause a delay in issuing coupons. As a result, consumers might incur significant wait time before they receive their coupons and might lose television service during the time they are waiting for the coupons. NTIA told us it has discussed options to address the increase in requests, such as downloadable coupons. NTIA interprets the statute, however, as requiring it deliver all coupons using the U.S. Postal Service. While NTIA and its contractors have demonstrated the capacity to process and issue large numbers of coupon requests over short periods, they have yet to establish specific plans to manage a potential spike or a sustained increase in demand leading up to the transition.

Participation in the Converter Box Subsidy Program by Hard-to-Reach Populations Varies We analyzed data to compare areas of the country that comprise predominantly minority and elderly populations with the rest of the U.S. population and found some differences in the coupon request, redemption, and expiration rates for Hispanic, black, and senior households compared with the rest of the U.S. population. For example, zip codes with a high concentration of Latino or Hispanic households had noticeably higher request rates (20 percent) compared with non-Latino or non-Hispanic zip codes (8 percent). However, households in predominantly black and Latino or Hispanic zip codes were less likely, compared with households outside these areas, to redeem their coupons once they received them. As shown in table 2, the overall rate of redemption for the converter box subsidy program is 28 percent, but only 19 percent of coupons have been redeemed in predominantly Latino or Hispanic areas. In predominantly black areas, 22 percent of coupons have been redeemed.

Furthermore, we found that in areas of the country with a high concentration of seniors, fewer coupons were requested (7 percent) compared with areas of the country that did not have a high concentration of seniors (9 percent). Redemption rates for the senior population were similar to the redemption rates in the rest of the country. Regarding coupon expirations, we found a wide variance between minority and senior populations compared with the population as a whole. For example, the areas comprising Latino or Hispanic households only allowed 4 percent of their coupons to expire, while areas with predominantly senior populations allowed 21 percent of their coupons to expire.

Table 2: Request, Redemption, and Expiration Rates of Converter Box Coupons through June 2008

	Request rate	Redemption rate	Expiration rate
U.S. population	9.1%	28.0%	12.8%
Latino or Hispanic	19.8	19.4	4.3
Black	9.2	21.5	11.2
Seniors	6.9	27.5	21.0

Source: GAO analysis of NTIA data.

 $^{^{11}}$ Zip codes where 50 percent or more of the population, according to the 2000 U.S. Census data, were part of one of the identified demographic groups—minority or elderly—were used in this analysis.

The higher coupon request rates for Latino or Hispanic households compared with the non-Latino or non-Hispanic areas might be due to the consumer education efforts of the Spanish speaking broadcasters. An advocacy group representing Hispanics told us that the outreach efforts of Spanish speaking broadcasters, such as Univision, Telemundo, and Azteca America, have been effective in educating their viewers on the DTV transition. While the advocacy group had high praise for these broadcasters, it and another advocacy group representing minority populations that we contacted expressed concerns about certain aspects of the consumer education and outreach efforts by federal and private sector stakeholders. Specifically, these groups expressed concerns about the lack of funding for outreach to targeted vulnerable populations, the possibility of misinformation being provided by retailers to consumers, a lack of technical assistance to the targeted populations (such as assisting the elderly with connecting the converter boxes to their televisions), and the absence of rapid response planning to assist the targeted populations if funds for the converter box subsidy run out. Furthermore, these advocacy groups stated they believe the current transition messaging is very general and not targeted toward at-risk populations. As such, one group believes current messaging does not lead the at-risk populations to being fully aware of what they may need to do to prepare for the transition. Another group stated that targeted outreach efforts to its member organizations and populations are very general, and that outreach efforts on the transition and converter box subsidy program have not resonated with their communities.

To determine participation in the converter box subsidy program in the 45 areas of the country receiving targeted outreach by NTIA and FCC, we analyzed NTIA coupon data (including requests, redemptions, and expirations) in the 45 areas compared with the rest of the country not targeted by NTIA and FCC. We found participation levels were about the same in the targeted areas compared with the rest of the country. As we have previously mentioned, the 45 areas were targeted for the level of atrisk households, including households relying on over-the-air television. Therefore, the portion of the population in those 45 areas requiring action to continue viewing television broadcasts should be higher than in other areas of the country. However, we found that in the 45 targeted areas, 8.8 percent of households have requested coupons compared with 9.4 percent for the rest of the country not targeted by NTIA and FCC. We also found similarities between the 45 targeted areas and the rest of the country when looking at the coupon redemption and expiration rates. According to NTIA, similarities in request, redemption, and expiration rates between the 45 targeted areas and the rest of the country is viewed as a success.

Retailers Are Participating in the Converter Box Subsidy Program, but Lacked Guidance from NTIA at the Time of Our Review As the sellers of the converter boxes, retailers play a crucial role in the converter box subsidy program and are counted on to inform consumers about it. To do so, many national retailers are using in-store video programming, signage, and brochures to inform consumers. At the time of our review, seven national retailers were participating in the subsidy program. 12 Three national retailers participating in the program told us they display programming about the transition on televisions at their store locations. One of these stores said it developed two consumer education videos, which run along with other programming on in-store displays. These videos provide information in both English and Spanish on the DTV transition, consumers' options for maintaining television service after the transition, and information about how to set up digital-to-analog converter boxes on analog televisions. Additionally, all of the retailers we spoke with indicated that signs and informational pamphlets about the DTV transition would be part of their in-store education campaigns. Retailers wanting to participate in the converter box subsidy program must become certified and are obligated to, among other things, train employees on the purpose and operation of the subsidy program. All of the retailers with whom we spoke told us they were training employees on the DTV transition and the subsidy program, although the retailers varied in which staff must complete training. For example, one retailer told us that all employees working in sales, customer service, call centers, and facilities handling warranties and service must complete DTV transition-related training. Another retailer told us that although it provides some training to its sales staff, most of the training is focused on employees working at cash registers.

As part of our work, we conducted a "mystery shopper" study by visiting 132 randomly selected retail locations in 12 cities across the United States that were listed as participating in the converter box subsidy program. We did not alert retailers that we were visiting their stores or identify ourselves as government employees. During our visits, we engaged the retailers in conversation about the DTV transition and the subsidy program to determine whether the information they were providing to customers was accurate, and whether individual stores had couponeligible converter boxes available. While not required to do so, some

¹²The seven national retailers include Best Buy Company, Inc.; Circuit City Stores, Inc.; Kmart (a subsidiary of Sears Holdings Corporation); Radio Shack Corporation; Sears Holdings Corporation; Target Corporation; and Wal-Mart Stores, Inc. We spoke with representatives from each of these retailers, with the exception of Wal-Mart Stores, Inc., which declined to speak with us.

stores we visited had informational material available and others had signs describing the DTV transition and the subsidy program. The informational materials included retailer-produced brochures and fliers, NTIA-produced fliers, and converter box subsidy applications. We also determined whether the information that retailers were providing to customers was accurate, and whether individual stores had coupon-eligible converter boxes available. At most retailers (118) we visited, a representative was able to correctly identify that the DTV transition would occur in February 2009. Additionally, nearly all (126) retailers identified a coupon-eligible converter box as an option available to consumers to continue watching television after the transition. Besides coupon-eligible converter boxes, representatives identified other options to continue viewing television after the transition, including purchasing a digital television (67) or subscribing to cable or satellite service (77). However, in rare instances, we heard erroneous information from the retailers, including one representative who told us that an option for continuing to watch television after the transition was to obtain a "cable converter box" from a cable company and another representative who recommended that we buy an "HD tuner." Since participating retailers are obligated to train their employees on the purpose and operation of the subsidy program, we observed whether the representative was able to explain various aspects about the program. As table 3 shows, a vast majority of the representatives were able to explain how to receive or apply for a coupon and the value of the coupon, while a similar number were able to explain the converter boxes eligible for the subsidy program and who needs a converter box.

Table 3: Retailer Representatives Able to Explain Certain Aspects of NTIA's Converter Box Subsidy Program

Was representative able to explain the following aspects of the converter box subsidy program?		No
How to receive or apply for the coupon	117	10
Value of the coupon	119	8
Which converter boxes were eligible for the subsidy program	110	14
Who needs a converter box	108	14

Source: GAO.

Note: Questions were not asked uniformly to all salespeople; therefore, the number of responses to each question is not identical.

Although we could obtain information from the majority of the stores that we visited and that were listed as participating in the subsidy program, in a few instances, we were not able to ask questions and observe whether the information provided was accurate. In two instances, there was no retailer at the store location listed as a participating retailer on NTIA's Web site (https://www.dtv2009.gov/VendorSearch.aspx). In another instance, the location listed was under construction and had not yet opened. In two additional instances, the locations listed were private residences—one was an in-home electronics store, and the other was a satellite television installer working from a house. We asked NTIA how it ensured the accuracy of the list of participating retailers on its Web site, and according to NTIA, ensuring the accuracy of the list is the responsibility of the retailers. NTIA said it provides a list of locations to each retailer prior to placing the list on the Web site, and retailers can update addresses or add new listings as warranted.

At the time of our review, retailers told us that it would be useful to have guidance from NTIA on how to handle the refunds of converter boxes purchased with a government coupon. Some retailers said that they were tracking returns in their own systems and awaiting guidance from NTIA on how to return funds to the government from returned boxes. As part of NTIA's final rule on the converter box subsidy program, consumers may not return a coupon-eligible converter box to a retailer for a cash refund for the coupon amount. Therefore, if a customer returns a converter box purchased with a coupon, the retailer can only refund to the customer the amount paid for the converter box above the value of the coupon, and the retailer must refund the value of the coupon to NTIA. One of the retailers told us that it had developed an in-house accounts payable system to track converter boxes that are returned because it had no guidance from NTIA on how to return funds to the government. In July 2008, NTIA provided guidance to the retailers on how to handle the returns of coupon-eligible converter boxes. According to the guidance, retailers must have agreed to the terms by August 15, 2008, or face deactivation from the subsidy program.

Conclusions

NTIA estimates that it will see a large increase in the number of coupon requests in the first quarter of 2009. In addition, our analysis confirms that a spike in coupon requests is likely as the transition nears. However, NTIA has not developed a plan for managing that potential spike or sustained increase in coupon demand. The time required for processing coupons has improved from when consumers incurred significant wait times to receive their coupons at the beginning of the program, but, until recently, NTIA fell short of its requirement for processing coupons within 10 to 15 days from the date the coupon applications were approved. Given the relatively low participation rates to date and the amount of time it took to process

the spike in coupon requests in the early days of the program, NTIA's ability to handle volatility in coupon demand without a plan is unclear. Consequently, consumers face potential risks that they might not receive their coupons before the transition and might lose their television service after February 17, 2009.

Recommendation for Executive Action

To help NTIA prepare for a potential increase in demand for converter box coupons and so that consumers are not left waiting a lengthy amount of time for requested coupons, we recommend that the Secretary of Commerce direct the Administrator of NTIA to develop a plan to manage volatility in coupon requests so that coupons can be processed and mailed within 10 to 15 days from the day the coupon applications are approved, per NTIA's stated requirement.

Agency Comments

We provided a draft of this report to the Department of Commerce (which contains NTIA) and FCC for their review and comment. In response, Commerce did not state whether it agreed or disagreed with our recommendation, but the department did say that it shares our concern about an increase in coupon demand as the transition nears. Commerce believes that NTIA has monitored coupon demand throughout the program, has effectively responded to those demands, and will adjust the program's operation as necessary to address consumer demand as the transition date approaches. Furthermore, Commerce's letter stated it is committed to doing all that it can within its statutory authority and existing resources to ensure that all Americans are ready for the DTV transition. In its letter, FCC noted consumer outreach efforts it has taken related to the DTV transition, some of which were announced after we concluded our audit work at the commission. For example, FCC stated that in 81 markets, the Chairman, a commissioner, or FCC senior staff would hold a public event, such as a town-hall meeting, workshop, or roundtable discussion, to highlight the steps consumers need to take to be prepared for the DTV transition. See appendixes IV and V for written comments from Commerce and FCC, respectively.

We are sending copies of this report to interested congressional committees, the Secretary of Commerce, and the Chairman of FCC. We will make copies available to others upon request. In addition, the report will be available at no charge on the GAO Web site at http://www.gao.gov.

If you or your staffs have any questions concerning this report, please contact me on (202) 512-2834 or sold-steinm@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix VI.

Mark L. Goldstein

Director, Physical Infrastructure Issues

List of Requesters

The Honorable Edward J. Markey
Chairman
The Honorable Cliff Stearns
Ranking Member
Subcommittee on Telecommunications and the Internet
Committee on Energy and Commerce
House of Representatives

The Honorable Herb Kohl Chairman Special Committee on Aging United States Senate

The Honorable Daniel K. Inouye Chairman Committee on Commerce, Science, and Transportation United States Senate

The Honorable Joe Barton Ranking Member Committee on Energy and Commerce House of Representatives

The Honorable Bill Nelson United States Senate

The Honorable Fred Upton House of Representatives

Appendix I: Objectives, Scope, and Methodology

The objectives of this report are to provide information on issues surrounding the digital television (DTV) transition, specifically, (1) what consumer education efforts have been undertaken by private and federal stakeholders and (2) how effective the National Telecommunications and Information Administration (NTIA) has been in implementing the converter box subsidy program, and to what extent consumers are participating in the program.

To obtain information on consumer education efforts, we reviewed federal agency consumer education planning documents, agency orders, rules, proposed rules, and testimony statements from the Federal Communications Commission (FCC) and NTIA. We analyzed and compared federal consumer education plans with key practices for consumer education planning that were developed by an expert panel in our previous work on the DTV transition. This analysis was used to determine the extent that federal consumer education plans incorporated the key practices for effective consumer education planning. We also reviewed publicly available information on private sector consumer education planning and consumer awareness surveys conducted by industry groups, such as the Consumer Electronics Association (CEA), the National Association of Broadcasters (NAB), and Consumers Union. In addition, we spoke with government and private sector stakeholders involved in the transition, including FCC and NTIA officials. We also spoke with representatives from the broadcasting, retailer, manufacturing, and cable industries, including NAB, the Community Broadcasters Association, the Consumer Electronics Retailers Coalition, the North American Retailer Dealers Association, CEA, and the National Cable and Telecommunications Association. Lastly, we contacted all national retailers participating in the NTIA converter box subsidy program and spoke with six of the seven national retailers, including Best Buy Company, Inc.; Circuit City Stores, Inc.; Kmart (a subsidiary of Sears Holdings Corporation); Radio Shack Corporation; Sears Holdings Corporation; and Target Corporation about their consumer education efforts. Only one national retailer, Wal-Mart Stores, Inc., declined the opportunity to speak with us about its DTV consumer education efforts.

¹GAO, Digital Television Transition: Increased Federal Planning and Risk Management Could Further Facilitate the DTV Transition, GAO-08-43 (Washington, D.C.: Nov. 19, 2007), 26.

To determine how effective NTIA and its partners have been in implementing the converter box subsidy program, we analyzed coupon data on request, redemption, and expiration rates. To examine NTIA's timeliness in issuing coupons, we analyzed data for each day of the subsidy program, beginning on January 1, 2008, through June 30, 2008. Operating under the assumption that all coupons were issued in the order the requests were received, we calculated the average daily processing time for applications received. Furthermore, we analyzed date-specific data from NTIA on coupon applications, requests, issuance, redemptions, and expirations. To determine participation by the targeted hard-to-reach populations, NTIA provided us with a list of zip codes for the 45 areas of the country identified in FCC and NTIA consumer education plans. We analyzed the NTIA data by zip codes to draw comparisons across demographic differences. To do so, we merged the NTIA zip code data with data from the 2000 Census SF-3 summary file Zip Code Tabulation Areas. From the census data, we grouped zip codes into urban and rural categories and looked at coupon requests, redemptions, and expirations for zip codes that were over 50 percent black or Hispanic/Latino. Furthermore, we discussed the effectiveness of the consumer education with advocacy groups representing hard-to-reach populations, including AARP, the National Hispanic Media Coalition, Leadership Conference on Civil Rights, the American Association of People with Disabilities, and National 4-H Headquarters. To assess the reliability of these data, we reviewed related documentation and conducted manual testing of certain source databases. We also interviewed knowledgeable agency officials about the quality of these data. As a result, we determined that these data were sufficiently reliable for the purposes of this report. We also conducted a "mystery shopper" study to determine the extent of retailer preparedness for the converter box subsidy program, including (1) retailer knowledge about the subsidy program, (2) the availability of converter boxes, and (3) whether retailers were attempting to up-sell to consumers who were interested in the program. We conducted the mystery shopper study from April 14, 2008, to May 2, 2008. The sample of retail stores that we visited was generated and randomly selected on April 11, 2008, from the list of participating retail stores identified on the NTIA Web site (https://www.dtv2009.gov/VendorSearch.aspx). Our sample was limited to store locations within a 15-mile radius of each GAO field office's and GAO headquarters' 5-digit zip code. For the study, we visited 132 store locations in 12 cities—Atlanta; Boston; Chicago; Dallas; Dayton; Denver; Huntsville; Los Angeles; Norfolk; San Francisco; Seattle; and Washington, D.C. The results of this study are not representative of retailer preparedness across the nation and are only applicable to the locations that we visited. However, our sample was sufficient to make basic statistical generalities

Appendix I: Objectives, Scope, and Methodology

and collect anecdotal evidence on the general level of retailer preparedness at that point in time. Additionally, the time frame in which the study was conducted limited our sample to retailers that were participating in the converter box subsidy program at that time (which included national retailers Best Buy Company, Inc.; Circuit City Stores, Inc.; Radio Shack Corporation; and Wal-Mart Stores, Inc.).

We conducted this review from February 2008 to September 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient and appropriate evidence to provide a reasonable basis for our findings and conclusions based on our review objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

In our previous work on the DTV transition, we convened an expert panel to discuss consumer education issues applicable to the transition. These issues included potential challenges that may obstruct efforts and the key planning components of a consumer education campaign that will help overcome some of those challenges. As shown in table 4, we analyzed FCC and NTIA consumer education plans and compared them with the key practices for consumer education planning. We found that the federal plans address nearly all of the key practices. (See detailed discussions of these practices following the table.)

Table 4: Key Practices Comparison to FCC and NTIA Consumer Education Plans

Key practice	Did FCC plan address key practice?	Did NTIA plan address key practice?
Define goals and objectives	Yes	Yes
Analyze the situation	Yes	Yes
Identify stakeholders	Yes	Yes
Identify resources ^a	No	No
Research target audiences	Yes	Yes
Develop consistent, clear messages	Yes	Yes
Identify credible messenger(s)	Yes	Yes
Design media mix	Yes	Yes
Establish metrics to measure success		
Process metrics	Yes	Yes
Outcome metrics	No	Yes⁵

Source: GAO analysis of FCC and NTIA data.

^aBudget and other resource information was not provided within the consumer education plans available for our review.

^bThe outcome metrics that NTIA uses measures only over-the-air household participation and not participation by other hard-to-reach populations.

¹GAO-08-43.

²The challenges highlighted by the expert panel included prioritizing limited resources, educating consumers who do not necessarily need to take action, reaching underserved populations, and aligning stakeholders.

Key Practice 1: Define goals and objectives. Both FCC and NTIA defined the goals and objectives of their consumer education plans. The FCC plan's stated goal is to identify channels and outreach activities not yet utilized to ensure that the American public is made aware of the DTV transition so they can benefit from it and, if necessary, take action to be prepared for the transition. The NTIA plan's stated goal is to educate U.S. residents who receive over-the-air broadcasts on analog television about the DTV transition and the converter box subsidy program. The objectives of the NTIA plan are to (1) increase awareness of the subsidy program as one option available to consumers; (2) generate requests for coupons through various request methods, such as toll-free numbers, Web site visits, or written or faxed correspondence; (3) engage program partners to disseminate information about the subsidy program; and (4) provide media information and the tools needed to report on the program.

Key Practice 2: Analyze the situation. Both FCC and NTIA analyzed the situation related to market conditions, including competing voices or messages, and constraints on timing. For example, FCC's plan provides an analysis that determined the segments of the population most vulnerable to the transition (i.e., over-the-air viewers). Included in this analysis is the general resistance and skepticism to change beyond the public's control; the challenge to ensure accurate, consistent, and coordinated information between public and private sector stakeholders; and the potential for the news media to pursue new angles and issues related to the DTV transition. The NTIA plan addressed situation analysis in two primary ways, including (1) media environment and (2) partner environment. The media environment analysis assessed keeping the media interested and engaged at critical times, recognizing that the consumer education campaign would be in operation in a "crowded media environment" competing with the 2008 presidential elections and the holiday season for public attention. Additionally, NTIA assessed that different organizations would be engaged in its transition outreach activities, and that NTIA would be challenged with engaging partners that are in a position to carry messages most effectively and efficiently to target audiences, and ensuring they deliver accurate information about the subsidy program.

³This FCC plan is noted as being in addition to and augmenting current FCC plans by providing recommendations to complement current FCC outreach efforts.

Key Practice 3: Identify stakeholders. Both FCC and NTIA identified and engaged stakeholders that would be involved with communication efforts, including the roles and responsibilities of each stakeholder. For example, the FCC plan emphasizes and recommends the use of various stakeholders to be involved in consumer outreach, such as broadcast outlets; media services, such as radio, print, and online news services; and other directto-consumer methods of outreach, including outdoor and transit public service advertising and outreach through grocery store chains. ⁴ The NTIA plan also identifies various organizations as partners, such as the major broadcast networks and other federal agencies. In addition to identification, NTIA has developed a tiered approach to partnerships with other organizations. The tiered partner system identifies the level of impact and communication capability a partner may have on outreach based on the organization's ability to reach the program's target populations. The NTIA plan also outlines the minimum level of commitment from the tiered partner and the amount of support the partner would receive from NTIA.

Key Practice 4: Identify resources. Short-term and long-term budgetary resources and other resources were not identified or available in the planning documents used for our comparison of FCC and NTIA consumer education plans to the key practices for consumer education planning. However, FCC had \$14.5 million in allocated and reprogrammed funds for consumer education in fiscal year 2008, and also requested an additional \$20 million for fiscal year 2009. NTIA was allocated \$5 million for consumer education.

⁴The Kroger Company and Safeway, Inc., are two grocery store chains mentioned in the FCC consumer education plan.

⁵Tier 1 partners are national organizations that have the ability to reach the coupon program's targeted populations in most areas of the country and have a deep stake in the DTV transition. Tier 2 partners are regional or local organizations that have the ability to reach one or more targeted vulnerable populations and the ability to conduct on-the-ground activities. Tier 3 partners are any organizations that have expressed an interest in disseminating information and notifying constituencies, but have little or no relation to the targeted populations or the DTV transition.

⁶According to the Joint Explanatory Statement accompanying the 2008 Consolidated Appropriations Act (Pub. L. No. 110-161), FCC was provided with \$2.5 million for DTV consumer education and requested and received approval to reprogram \$12 million in unspent funds in early July 2008.

Key Practice 5: Research target audiences. Both FCC and NTIA conducted audience research to determine needs, preferences, and characteristics as well as possible audience-specific obstacles, such as access to information. FCC and NTIA identified the target audiences who would be hard to reach, most unaware of the transition, and most reliant on over-the-air broadcasts (i.e., minorities, rural residents, persons with disabilities, seniors, and low-income individuals). NTIA prioritized its outreach efforts to 45 market areas that have high concentrations of households most likely to be reliant on over-the-air broadcasts. FCC also used NTIA's geographic prioritization data to focus its outreach efforts.

Key Practice 6: Develop consistent, clear messages. FCC and NTIA developed clear and consistent messages based on audience research and goals. For example, FCC's consumer education plan messaging is divided into three timeline phases that determine the type of information outreach efforts emphasized and is focused on providing clear and simple information to consumers that is accessible to all target populations through a variety of formats and languages. The phases described in the FCC plan are (1) transition basics (February to April 2008)—consumers need to know the transition is happening and may need to take action; (2) transition detail (May to October 2008)—consumers receive more specific information, such as how to choose a DTV, the need for an antenna, how to get a coupon and converter box, and how to hook up a converter box; and (3) transition urgency (September 2008 to February 2009)—consumers need to act now and take action to avoid losing their television viewing signal if they are affected. NTIA has also developed and tested campaign messaging that resonates with target audiences and changes over time to suit the needs of the converter box subsidy program.⁷ The NTIA plan divides messaging into two phases: (1) awareness/educate and (2) action/participate. During the first phase, campaign messaging focused on the digital transition, what the converter box subsidy program is, why it exists, the benefits of the transition and the converter box, options for consumers to navigate the transition, and how to participate in the program. Phase two provides the same information, but the emphasis shifts to taking action to avoid the loss of television signals and taking advantage of the subsidy program.

⁷IBM Global Business Services, U.S. Department of Commerce, National Telecommunications and Information Administration, *Consumer Testing Results Report* (Gaithersburg, MD: November 2007).

Key Practice 7: Identify credible messenger(s). FCC and NTIA identified in their consumer education plans partners who would be delivering the messages and ensuring they are credible with audiences. Specifically, the FCC plan identifies (1) the national media, such as the broadcast networks, national radio, cable networks, online outlets, magazines, and industry trade publications; (2) over-the-air markets, including local television and radio stations and major daily newspapers; and (3) target population media services and sources, which are based on the media habits and preferences of the vulnerable populations, as credible messengers. NTIA identified two broad groups of credible messengers, including earned media and partners. Earned media messengers fall into three categories, which consist of (1) the national media, including the major broadcast networks, cable networks, online outlets, magazines, and industry trade publications; (2) geographically targeted media consisting of local television and radio stations and major daily newspapers; and (3) demographically targeted media based on the media habits and preferences of the target populations.

Key Practice 8: Design media mix. Both FCC and NTIA identified in their consumer education plans methods and frequency of messaging to reach target audiences. The FCC and NTIA plans present various types of media services, such as satellite and radio media tours, background briefings, editorial meetings, online chats, over-the-air market outreach, and radio advertisements that will be used to generate media coverage and as methods of outreach to inform target groups. In addition, the FCC plan recommends direct-to-consumer initiatives, such as outdoor and transit public service announcements and outreach through grocery store chains. FCC also includes a timeline that denotes by month when it will engage in outreach by messaging phases.

Key Practice 9: Establish metrics to measure success. FCC and NTIA have established process metrics to measure the success of their consumer outreach, but only NTIA has created outcome metrics. Process metrics track the quantity, quality, and timeliness of work and have been established by both FCC and NTIA. For example, FCC and NTIA have measures tracking the distribution of materials, which enables them to report on the quantity of materials mailed and the audience receiving the materials. In addition, both FCC and NTIA will track media coverage, including earned media and media coverage, of other DTV transition stakeholders. NTIA has also implemented outcome metrics—which evaluate how well a consumer education campaign influenced attitudes or behaviors to determine if the target populations were adequately receiving the message. For example, according to NTIA, it tracks coupon requests

and redemptions of over-the-air households for the purpose of measuring the impact of its consumer education. NTIA said it reviews coupon request data every 2 weeks and compares the coupon requests by over-the-air households with the estimated number of over-the-air households in major geographic areas of the country. According to NTIA, if an area exists where less than 20 percent of the over-the-air households in a market have ordered coupons, NTIA will increase its outreach efforts in that area. NTIA also indicated that it uses coupon request data to monitor the 45 targeted areas and uses these data to determine if it is reaching the hard-to-reach populations. Furthermore, NTIA indicated that it would use publicly reported consumer awareness survey information from industry participants and others to track progress in consumer awareness for other populations. NTIA states in its plan that these measures will indicate the success of its education efforts and highlight areas that need additional focus. The use of monthly coupon application and redemption data in comparison to over-the-air households measures the effect of consumer education efforts on the population as a whole, but does not determine whether the targeted hard-to-reach populations have been influenced and have applied for and redeemed converter box coupons.

Appendix III: Federal Communications Commission DTV Consumer Education Order

FCC adopted a final DTV consumer education order in February 2008, which requires broadcasters, cable and satellite providers, certain telephone service providers, and certain consumer electronics manufacturers to provide a minimum level of DTV transition consumer education. For example, commercial broadcasters are required to choose one of two education options, and noncommercial broadcasters must select one of three education options. These options determine the number of public service announcements, crawls, or other on-air consumer education programming they must air and report to FCC per quarter. FCC officials told us that FCC has collected the required report filings for broadcasters for the first two quarters since the FCC order took effect. Cable and satellite providers are required under the order to provide information on the DTV transition in billing notices to their customers. Consumer electronics manufacturers are required to include information with certain television-related devices that explain what effect, if any, the DTV transition will have on the devices' use. FCC also requires telephone companies that participate in the Low Income Federal Universal Service program to provide information on the transition to their Life-line and Link-up customers, either as part of the billing notice or in a stand-alone mailer, such as a postcard. According to FCC, it has sent compliance surveys to the nine largest cable and satellite providers and the nine largest telephone companies, and it intends to send compliance letters to the nine largest electronics manufacturers to assess their consumer education efforts. Furthermore, FCC stated that its Enforcement Bureau is working with NTIA to spot-inspect retailers that are participating in the converter box subsidy program. The purpose of the spot inspections is to detail and assess retailer employee training and consumer education plans and efforts. FCC Enforcement Bureau personnel, as of July 31, 2008, have visited 1,335 stores and conducted 1,291 interviews in 49 states and in Puerto Rico. According to FCC testimony, it has found that the majority of store managers are wellinformed about the DTV transition and the converter box subsidy program.

¹Federal Communications Commission, *DTV Consumer Education Initiative*, MB Docket No. 07-148, Report and Order, 23 FCC Rcd. 4134 (2008).

Industry sector	Consumer education requirements
Broadcasters	Commercial broadcasters must select either option one or option two, while noncommercial broadcasters may select any of the three options. The requirements of each option apply separately to the station's analog channel and primary digital stream.
	Option one: The station must air 1 public service announcement (PSA) and run 1 transition crawl in every quarter of every day. The requirement increases to 2 PSAs and crawls per quarter per day on April 1, 2008, and will increase to 3 of each on October 1, 2008. PSAs are in addition to, not in lieu of other PSAs.
	Option two: The station must air 16 PSAs per week and an average of 16 transition-related crawls, snipes, or tickers per week over each quarter through the transition period between 5:00 am and 1:00 am. Over the course of each calendar quarter, ¼ of all mandatory PSAs, crawls, snipes, or tickers must air between 6:00 pm and 11:35 pm (EST & PST) and between 5:00 pm and 10:35 pm (CST & MST).
	Option three: This option is open only to noncommercial stations, and the station must air 60 seconds per day of on-air consumer education, in variable time slots, including at least 7.5 minutes per month between 6:00 pm and 12:00 am. The requirement doubles beginning May 1, 2008, and increases to 180 seconds per day and 22.5 minutes per month between 6:00 pm and 12:00 am beginning November 1, 2008. All transition PSAs must be closed-captioned.
Cable and satellite providers	All cable and satellite providers are required to provide notice of the DTV transition to their subscribers in monthly bills or billing notices, either as part of the bill or as a "bill stuffer."
Consumer electronics manufacturers	Manufacturers of some television-related devices, such as television broadcast receivers, television interface devices, devices that record or display signals received from television broadcast receivers, and set-top boxes from cable/satellite providers, are required to include information with those devices explaining what effect the transition will have on their use. a
Telephone companies	Telephone companies participating in the Federal Universal Service Low-Income Program are required to provide notice of the transition to their customers as a bill stuffer, part of the bill itself, or use of a monthly stand-alone mailer (i.e., postcards). ^a
	0 500

Source: FCC.

^aThe bill notice, bill stuffer, separate mailing, or included information must be noticeable, state the transition date, and note that analog-only televisions may not work unless the viewer takes action. These documents must also note that analog-only televisions will continue to work for low-power, Class A, translator television stations; with a cable or satellite service; and for use with game consoles, VCRs, and DVDs. Furthermore, the notice must indicate that viewers can get additional information about the DTV transition by going to www.DTV.gov or by calling their cable provider, satellite provider, or telephone company. Additional information about the converter box subsidy program is available at www.dtv2009.gov or by calling NTIA (1-888-DTV-2009).

Appendix IV: Comments from the Department of Commerce



August 29, 2008

Mr. Mark L. Goldstein Director, Physical Infrastructure Issues Government Accountability Office 441 G Street, NW Washington, DC 20548

Dear Mr. Goldstein:

Thank you for the opportunity to comment on the Government Accountability Office's (GAO) Report provisionally entitled, "Digital Television Transition: Implementation of the Converter Box Subsidy Program Is Underway, But Preparedness to Manage an Increase in Subsidy Demand Is Unclear," GAO-08-1040. The Department of Commerce appreciates GAO's acknowledgment that the National Telecommunications and Information Administration (NTIA) is effectively implementing the TV Converter Box Coupon Program (Coupon Program). This recognition is underscored by the fact that to date, NTIA has distributed coupons to one of every nine households in the United States and its territories—in total, over 23 million coupons.

In the report, GAO recommends that NTIA develop a plan to manage volatility in coupon requests in the period of time leading up to the transition. The Department shares GAO's concern about an increase in coupon demand as the transition nears. Throughout this program, NTIA has monitored coupon demand and has effectively responded to those demands. The Coupon Program is currently processing household requests for about three million coupons monthly. As part of NTIA's plan for a potential spike in coupon requests, it has focused its consumer education message to urge consumers to act now to experience the immediate benefits of digital television. NTIA has been working with its partners to encourage over-the-air consumers to apply for coupons as soon as possible to avoid any delays in the processing of requests that could result from a last-minute rush. NTIA will adjust the Program's operation as necessary to address consumer demand as the February 17, 2009, deadline approaches.

The Department is committed to doing all that it can within its statutory authority and existing resources to ensure that all Americans are ready for the digital transition. Thank you again for the opportunity to share the Department's comments on this report. With less than six months remaining before the digital transition concludes, we are on track to achieve a smooth transition for the American public.

Sincerely,

Appendix V: Comments from the Federal Communications Commission



Federal Communications Commission Washington, D.C. 20554

August 28, 2008

Mr. Mark L. Goldstein, Director Physical Infrastructure Issues U.S. Government Accountability Office Washington, DC 20548

Dear Mr. Goldstein:

Thank you for the opportunity to review and provide comments on the Government Accountability Office's (GAO) Draft Report Digital Television Transition – Implementation of the Converter Box Subsidy Program is Underway, but Preparedness to Manage an Increase in Subsidy Demand is Unclear. In the Draft Report, GAO reviews (1) what consumer education efforts have been undertaken by private and federal stakeholders and (2) how effective NTIA has been in implementing the converter box subsidy program and to what extent consumers are participating in the program. This letter contains the Federal Communications Commission's (FCC) comments to the Draft Report.

The Commission's outreach effort places an emphasis on consumers who receive their television signals "over-the-air," those who are disproportionately impacted by the transition, and those who are hard to reach and may be unaware of the upcoming transition. As the Draft Report notes, the Commission has engaged in targeted measures to reach these groups, which include senior citizens; non-English speaking and minority communities; people with disabilities; low-income individuals; and people living in rural and tribal areas. Ketchum, an outside contractor hired by both the NTIA and the FCC, identified and recommended that we focus our efforts on 45 areas of the country with at least one of the following population groups: (1) more than 150,000 over-the-air households, (2) more than 20 percent of all households relying on over-the-air broadcasts, or (3) a top 10 city of residence of the largest target demographic groups.

The FCC has gone beyond specifically targeting only the 45 markets recommended by Ketchum. We have chosen to place additional resources into targeting at least 81 markets that are potentially more vulnerable than the rest of the country with respect to the transition – including all those markets with at least one of the following population groups: (1) more than 100,000 over-the-air households, (2) more than 15 percent of all households relying on over-the air broadcasts, or (3) otherwise recommended specifically by Ketchum for specialized outreach. In those 81 markets, the Chairman, a Commissioner or FCC senior staff will hold a public event, such as a town hall meeting, workshop, or roundtable, to highlight steps consumers need to take to be prepared for the digital transition.

Also concurrent with these visits, FCC staff will work to saturate each media market with earned media related to these visits, and will simultaneously encourage local radio and television broadcasters to run PSAs related to the transition. Additionally, in the days prior to each visit by the Commissioner, FCC staffers will be on the ground providing technical and outreach

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Mr. Mark Goldstein Page 2

assistance to local broadcasters, community leaders, and other stakeholders, to further publicize the transition to digital and help educate members of the community.

The FCC will also be coordinating with NAB to explore whether these markets may participate in a temporary turn off of their analog signals (so-called "soft tests"), as a means for stations and viewers to determine consumer readiness for the DTV transition. This is an unprecedented nationwide tour by the entire Commission, designed to educate consumers in these markets and especially those groups that are most vulnerable in the transition.

In addition to these specialized efforts, as you note, the FCC has placed or is placing billboards in those 45 markets recommended by Ketchum for specialized outreach. The decision to initially place billboards in those 45 markets was due to our prioritizing the limited resources the Commission has available for consumer outreach. We are exploring the possibility of placing billboards in all 81 of the markets where the Chairman, other Commissioners, and senior staff will be holding town hall meetings.

The Commission is not focused on the target areas at the exclusion of other areas of the country. The Commission is committed to doing everything within its statutory and budgetary capacity to make sure that no American is left behind. As the Draft Report recognizes, the FCC is engaged in outreach activities throughout the entire nation. We have hosted and participated in events and conferences; coordinated with federal, state, local, and tribal entities and private industry groups; conducted outreach through national and local media outlets; developed and distributed DTV publications; and conducted outreach and training sessions to targeted communities throughout the country.

Here are just a few statistics on the status of our education campaign.

- The Commission has conducted over 1584 DTV Awareness sessions, attended more than 351 conferences and events, held over 425 partnership meetings, and made over 7024 visits to various organizations around the country to disseminate DTV information.
- The Commission recently launched a Speakers Bureau for groups throughout the country
 to request speakers to discuss the upcoming transition to Digital Television (DTV) at
 their meetings in order to give all communities the opportunity to request a speaker at
 their events.
- Over 5.6 million pages of our DTV publications have been distributed to individual consumers and to consumer agencies and organizations nationwide.
- We have distributed over 8,600 posters nationwide. We are displaying DTV education posters in all 34,000 post offices across the nation.
- We have secured commitments from 36 states to display DTV materials in 1100 Department of Motor Vehicle locations.

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> We have distributed radio PSAs to radio stations throughout the country, and have just completed production of television PSAs, which will be distributed to commercial broadcasters nationwide.

The FCC's consumer outreach effort recognizes that some consumers will be disproportionately impacted by the transition, or are harder to reach than the general population.

For instance, we have placed special emphasis on reaching seniors. Through the work of our field agents, we have made visits to over 5098 senior centers in 50 states, plus the District of Columbia and two U.S. territories, where we have delivered DTV material. In addition, we have made 1496 presentations and answered questions from seniors about the DTV transition. We are working closely with the AARP and other senior organizations, presenting at their conferences and participating in interviews with their media.

We are also taking extra steps to reach non-English speakers and minorities, who disproportionately rely on over-the-air television reception.

- All of our DTV publications are available in Spanish. Also our most widely
 distributed DTV one-pager is now available in 20 languages: English, Spanish,
 Chinese, French, Korean, Russian, Tagalog, Vietnamese, Hmong, Japanese, Arabic,
 Cambodian, Navajo, Somali, Amharic, Yupik, Portuguese and Laotian, Creole, and
 Kurdish, as well as Braille and audio formats.
- We have conducted 16 DTV Awareness sessions, attended more than 23 conferences
 or events, had 9 partnership meetings, and made about 72 visits to various
 organizations all specifically targeting the Hispanic population.
- We have partnered with Univision to educate its Spanish-speaking audience, including outreach activities specifically targeted at seniors in the Hispanic community. Similarly we have partnered with the U.S. Hispanic Chamber of Commerce which will be conducting DTV awareness sessions with local chambers around the country. Recently, the FCC has participated in the League of United Latin American Citizens national conference and the National Council of La Raza's national conference.
- We have exhibited and presented DTV information at conventions and conferences targeting minority communities and umbrella organizations such as the Houston Black Expo, the Indiana Black Expo, and the National Black Expo 2008, the NAACP Convention, and the National Urban League Conference. In addition, the Commission is partnering with the leadership of the National Black Church Initiative to target outreach activities in predominantly African-American communities. The Commission is also partnering with the Harlem Consumer Education Council (HCEC) to educate both African-American and Spanish Harlem consumers at HCEC

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DTV outreach events. Earlier this year, the Commission conducted outreach at the Rainbow PUSH Wall Street Project Conference, in New York City.

Low-income households also generally rely more on over-the-air television signals due to the high costs of paid subscription services. One way we are reaching these consumers is through our partnership with the Department of Health and Human Services. Several HHS agencies disseminate DTV material to consumers eligible for their services.

One step we have taken to target rural viewers has been to place DTV transition materials at state and county fairs throughout the country. We will be disseminating transition materials to 193 state and county fairs in 26 states.

Regarding people with disabilities, Commission staff regularly attends targeted conferences and events to distribute DTV educational materials that will reach this vulnerable population. For example, the FCC has attended and provided DTV materials at the National Black Deaf Advocates Conference, the Vocational and Educational Services for Individuals with Disabilities Conference, and the Emergency Planning and Response for Special Needs and Disabilities Conference. We have recently attended the American Council of the Blind Annual Conference, the National Association of the Deaf Biennial Conference, and the Summer Quarterly Meeting of the National Council on Disabilities and discussed the DTV transition. Our website, www.DTV.gov, features a DTV educational video in American Sign Language. Our most commonly utilized publications are available in Braille and audio format and all of our fact sheets and advisories are available in large print. In addition, we have publications addressing DTV and closed captioning and video description. In addition, we recently created a chart of select features available on 32 coupon eligible digital-to-analog converter boxes. The chart, developed in response to recommendations from the Commission's Consumer Advisory Committee, as well as requests from groups representing people with disabilities, describes features of particular interest to the disabilities community. The chart, which is available on our website, has been distributed to various interested groups, will be updated as additional NTIAapproved converter boxes become available at retail stores and online.

The Draft Report indicates that the short-term and long-term budgetary resources and other resources were not identified or available in the planning documents used for your comparison of FCC and NTIA consumer education plans to the key practices for consumer education planning. The FCC has requested appropriated funds to support its DTV outreach efforts since 2006 when it first requested \$500,000 in the proposed fiscal year 2007 budget. In response to the FCC's request for \$1.5 million in the proposed budget for fiscal year 2008, on December 26, 2007, the Commission received authorization to spend \$2.5 million in appropriated funds on DTV outreach. On January 28, 2008 the Commission initiated the process for awarding a contract for DTV Consumer Education Support Services to strengthen the FCC's outreach efforts nationwide. This contract for national consumer education support was awarded on February 13, 2008 to Ketchum, Incorporated.

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On June 5, 2008 the Commission requested authorization to use \$12 million of prior year unobligated funds to expand efforts to educate consumers about the transition to DTV. The Commission received approval from the House on June 19, 2008, the Senate on July 8, 2008 and the final required action from the Office of Management and Budget on August 4, 2008 enabling the Commission to move forward with obligating and spending the \$12 million. Just two weeks later, on August 18, 2008, Chairman Martin announced the 81-city outreach tour to target educating consumers in the high over-the-air markets about the transition.

In addition, in the proposed budget for fiscal year 2009, the FCC requested \$20 million in appropriated funds for DTV outreach. The House and Senate appropriations committees both approved this request in the mark ups of the 2009 budget.

One technical point to note regarding Appendix III, as of July 31, 2008, Enforcement Bureau field agents have visited 1335 stores and conducted 1291 interviews in 49 states and the Commonwealth of Puerto Rico.

We appreciate the opportunity to review and comment on the Draft Report. If we can assist in any further way in the completion of this report, please let me know.

Sincerely,

Monica Desai Chief, Media Bureau

Appendix VI: GAO Contact and Staff Acknowledgments

GAO Contact	Mark L. Goldstein, (202) 512-2834, or goldsteinm@gao.gov
Staff Acknowledgments	In addition to the individual named above, other key contributors to this report were Sally Moino, Assistant Director; Colin Fallon; Simon Galed; Eric Hudson; Bert Japikse; Aaron Kaminsky; Michael Pose; and Andrew Stavisky.

Related GAO Products

Digital Television Transition: Broadcasters' Transition Status, Low-Power Station Issues, and Information on Consumer Awareness of the DTV Transition. GAO-08-881T. Washington, D.C.: June 10, 2008.

Digital Television Transition: Majority of Broadcasters Are Prepared for the DTV Transition, but Some Technical and Coordination Issues Remain. GAO-08-510. Washington, D.C.: April 30, 2008.

Digital Television Transition: Increased Federal Planning and Risk Management Could Further Facilitate the DTV Transition. GAO-08-43. Washington, D.C.: November 19, 2007.

Digital Television Transition: Preliminary Information on Progress of the DTV Transition. GAO-08-191T. Washington, D.C.: October 17, 2007.

Digital Television Transition: Preliminary Information on Initial Consumer Education Efforts. GAO-07-1248T. Washington, D.C.: September 19, 2007.

Digital Television Transition: Issues Related to an Information Campaign Regarding the Transition. GAO-05-940R. Washington, D.C.: September 6, 2005.

Digital Television Transition: Questions on Administrative Costs of an Equipment Subsidy Program. GAO-05-837R. Washington, D.C.: June 20, 2005.

Digital Broadcast Television Transition: Several Challenges Could Arise in Administering a Subsidy Program for DTV Equipment. GAO-05-623T. Washington, D.C.: May 26, 2005.

Digital Broadcast Television Transition: Estimated Cost of Supporting Set-Top Boxes to Help Advance the DTV Transition. GAO-05-258T. Washington, D.C.: February 17, 2005.

Telecommunications: German DTV Transition Differs from U.S. Transition in Many Respects, but Certain Key Challenges Are Similar. GAO-04-926T. Washington, D.C.: July 21, 2004.

Telecommunications: Additional Federal Efforts Could Help Advance Digital Television Transition. GAO-03-7. Washington, D.C.: November 8, 2002.

Telecommunications: Many Broadcasters Will Not Meet May 2002 Digital Television Deadline. GAO-02-466. Washington, D.C.: April 23, 2002.

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