



SCHOOL OF
COMMUNICATIONS

**Testimony of
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**Before the
Subcommittee on Telecommunications and the Internet
Committee on Energy and Commerce
U.S. House of Representatives**

**Hearing on
“Status of the DTV Transition: 154 Days and Counting”**

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Key Points

Based on our work fielding phone calls to television stations on September 8, 2008 in Wilmington, North Carolina for the ten hours immediately following the market's switch from analog to digital television, we make the following recommendations:

- More field tests should be conducted. Broadcasters across the country should be blinking the analog signal more often and during viewers' favorite programs to create a sense of urgency that they need to prepare for the digital transition.
- More can be done at the point of sale of converter boxes (likely to be Walmart) to educate consumers about antenna frequency, height and direction. The local broadcast engineering staff should be busy over the next month testing signal strength at local points throughout their designated market areas, creating one page documents with neighborhood level data related to antenna positioning. Government communication need to be improved to address antenna information.
- Television is the primary way residents are learning about the digital transition. Analog television signals can be used more effectively during the transition by having local talent demonstrate how to connect converter boxes, antennas and correct set-up a new digital television receiver. This loop should play continuously during the actual transition and before during testing phases. The FCC's call center phone number and information about local centers established to assist can run as a crawl across the bottom of the screen.
- Television stations should establish models of signal reception environments so they can handle calls to the station effectively. More staff will be needed the day of the transition and for a few days immediately following to handle calls.
- Communities will have some hardship cases of residents unprepared. Broadcasters and retailers should be empowered with the ability to provide digital converter boxes to address these situations and be assured of compensation to follow.
- The weeks before the transition and especially on the holiday weekend of the digital transition, entice them to viewers to switch by offering exclusive programming on the digital channel.

- The most important lesson from Wilmington's test was that the vast majorities of citizens trusted the government's decision and were prepared.

Testimony

Good Morning Chairman Markey, Ranking Member Stearns and Members of the Subcommittee. My name is Connie Ledoux Book. I am the associate dean in the School of Communications at Elon University in North Carolina. I began working to understand the impact of the digital transition on consumers in 1997. I worked with Capitol Broadcasting in Raleigh, the nation's first commercial digital broadcaster, to study consumer reaction to high definition and to plan consumer awareness and education strategies related to the DTV transition. That work is detailed in a book I wrote on digital television and it is what brought me to Wilmington with a group of bright and enthusiastic Elon University students last week. We handled 172 calls that came into local television stations and the Time Warner Cable call center from noon to 10 p.m. on the day of the transition. One of those students, broadcast communication senior, Lauren Limerick, is here with me today. She gracefully and patiently took a number of calls last Monday.

We are grateful for the opportunity to share what we learned in that process.

The Wilmington early DTV transition demonstrated a best case scenario in the country and because it is a best case scenario offers significant lessons for stakeholders as we move forward with implementing the full digital transition next February. Today I'd like to share a few of those lessons and some things broadcasters and communities can accomplish as they prepare for the full transition next February.

Television is the primary source of information about the digital television transition.

The information campaign in Wilmington was a hands down success. Virtually everyone that faced disrupted signals and called knew about the transition. The majority had purchased a converter box or new digital television receiver to ensure they were ready. The means employed by the FCC, local government officials, local broadcasters and other grassroot efforts at schools, churches and senior centers around Wilmington--worked. The rest of the country will need to follow this example. We asked callers where they heard the news about the digital television transition and the overwhelming majority said they had heard about the transition on television. That lets us know broadcasters and cable companies need to continue using television to tell the

story of the digital transition. We have some suggestions on how they might use those television signals more effectively.

Blink the analog signal more often and during viewers' favorite programs.

Prior to the switch on Monday, Wilmington broadcasters conducted what I call a series of *blinking tests*—where they interrupted analog programming with a slate that said in a nutshell, “If you are looking at this, you aren’t ready for the digital transition.” Those blinks were conducted at noon and 7:30 p.m., 1:00 and 5:00 minutes respectively. A few calls and subsequent problems solved resulted from those interrupted analog signals. We recommend that other markets in the U.S. start blinking their analog signal more frequently and during the most popular television programs. That may sound odd, but the truth is a viewer can forgive you for missing 5:00 minutes of their favorite program, but not the whole hour. We learned that in Wilmington when phones heated up at WECT after Oprah Winfrey went on the air at 3:00 Monday afternoon with the launch of her new fall season. Those Wilmington viewers, left with a slate telling them to call a 1-800 number or a county office, weren’t thinking kindly of the new digital TV mandate. By interrupting their favorite programs, viewers will have a sense of urgency that they need to get ready.

They are headed to Walmart to buy that converter box.

In Wilmington most of the callers had ordered and redeemed coupons for their digital converter boxes. Elon students assessing the retail conditions found Walmart to be the primary point of purchase. When local residents went to Walmart and purchased their boxes, they did so from a crowded shelf of products. At the top of the shelf was a small countdown clock and a note on white paper saying the switch was scheduled for September 8th. Unfortunately, just below that was a notice letting customers know that they were sold out of converter boxes. Store retail clerks estimate that they sold out of the converter boxes 72 hours before the transition was set to commence.

Figure 1
Walmart Store in Wilmington, Sold-out of DTV Converter Boxes



More can be done at the point of sale of the converter box. The primary issue with callers was not that the converter box wasn't working, but that the antenna wasn't picking up signals. In Wilmington, analog signals sat on one tower and digital signals another. All the digital signals were UHF. These issues would be the primary ones that caused disruption. Working with key retailers, like Walmart, broadcasters should create documents that use step-by-step visual instructions to walk through the local information needed to install the best antenna and to point it in the right direction. To accomplish this, *the local broadcast engineering staff should be busy over the next month testing signal strength at local points throughout their designated market areas, creating one page documents with neighborhood level data.* For example, we received calls from different pockets of Wilmington and residents would report, "Nobody on my street can get a signal." This street level, neighborhood level handout should be available at the point of converter box sale, as well as directly placed in residents' mailboxes. Neighborhood fire stations, grocery stores and libraries could also provide these valuable documents. All public buildings could have this information posted. We strongly recommend broadcasters get busy creating them. As a side note, some of the documents created by the government use pictures of rabbit ears as the right equipment needed to receive digital signals. This picture can be misleading to consumers. A significant likelihood exists that a viewer will need a fixed antenna mounted outdoors or placed in an attic to receive good digital signals. Additionally, government documents fall short of providing information about towers and UHF versus VHF signals. All of these pieces of the puzzle will be important to those residents that rely on over-the-air television signals.

Use television more effectively during the actual transition.

When the switch happened at noon, the analog signals carried a universal slate on all stations that told viewers to call the toll free number. The slate also included information about local offices, churches and community colleges where volunteers were working to resolve issues. Even with these directions, 172 Wilmington residents decided to call their local broadcasters, a telephone number they probably had to look up. A majority of these callers were elderly residents, the average age was 60 years old, and frequently there was someone calling on their behalf.

People have a relationship with their local broadcaster, especially the older, often homebound viewer. Research shows that local station personalities can provide a sense of security and safety to heavy television viewers. *Local station talent should be the key information providers about the digital transition and how to set up a digital converter box.*

While a slate on the analog channel was needed to inform viewers of the transition, we would recommend this information be placed in a crawl and that unique station programming using local talent that walked them through what was necessary to set-up and acquire a digital signal be played on the analog channel. For example, residents in Atlanta should have Monica Kauffman explain how to set up the converter box and antenna. Then a graphic should appear that shows where the tower broadcasting the digital signal is located to help with directing the antenna.

Hispanic viewers should hear from their favorite Univision or Telemundo talent, explaining in Spanish what they need to do to receive over-the air signals. These local broadcast messages, featuring local talent, could be played on a continuous loop on the analog signals. Local papers should also publish maps of the tower locations. These materials, available during blinking tests and on the day of the transition, will increase the comfort level of viewers and provide them the tools to solve their reception issues without having to make a call. And if all that doesn't work, they can call the 1-888 phone number, or as in Wilmington, the fire department who was set up on transition day to make a house call, fix the digital signal reception and check the smoke alarm batteries.

Models of signal reception environments at local stations.

If they do call and our data suggest some will, television stations need to set up prototype viewing environments so that as callers explain their reception issues to station employees, the employee can have a visual in front of them of what the caller is experiencing and more effectively walk them through resolving the problem.

You will have some hardship cases.

We interviewed a woman at Radio Shack the day before the switch, distressed because she had moved after ordering a converter box coupon for her old address. We also heard from a Walmart sales clerk that a few residents were in the day before the switch with expired coupons. In these situations, we need to create an emergency converter box distribution option. Broadcasters might be provided a set number of boxes to have on hand to resolve these issues. And truth be told, broadcasters could buy them—they are the ones that immediately benefit from making sure their signal arrives to the home. Retailers might also be empowered to accept a coupon when the situation merits it and know that they will be reimbursed by the NTIA program.

The weekend of the digital transition, entice them to switch with exclusive digital programming.

When the nation switches to digital in February, it will be the day after a long weekend, which includes Valentine's Day and President's Day. That long weekend could serve as important get ready days where broadcasters and civic stakeholders could show their community "some love" and make sure the digital signal is good to go. On President's Day, February 16th, the day before the switch, or even the weekend before the official switch, we strongly recommend that the digital signal carry enticing programming not available on the analog side. Programming that is universally appealing. Perhaps Oprah Winfrey would be willing to create a special program and show broadcasters a little love that day. Or perhaps a local high school basketball tournament, a talent show, a famous concert or movie, something to motivate folks to make the last minute switch.

The most important lesson from Wilmington's test, citizens trusted their government and got ready.

But perhaps the most important story from Wilmington is that the American people trusted their government and in good faith prepared for the mandated switch, trusting that the promise and the potential of the spectrum this makes available will be good for our Country. That's the real story from Wilmington. We watched it happen. I strongly encourage our elected and appointed government officials, as well as our nation's broadcasters, to act with expedited efficiency on the people's faith in our government's decision.

Respectfully submitted,

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