The Digital Transition

How Does this effect your class?
3D Films to Save Movie Theaters...Again?

- 3D films are one way for movie theaters to compete with the wide range of entertainment options available in today’s digital marketplace.
- DreamWorks Animation SKG will move to releasing only 3D films as early as 2009.
- Sounds familiar to those of us in the 3D community. It may well be that we remember the last time this rallying cry was heard—in the early 1950s when the threat to movie houses was a technology you might be not old enough to remember—broadcast TV.

IMAX is the same story!

- IMAX is the capacity to display images of far greater size and resolution than conventional film display systems.
- A standard IMAX screen is 22 meters (72 ft) wide and 16.1 meters (53 ft) high, but can be larger.

What is the digital television transition?

- At midnight on or before June 12, 2009, all full-power television stations in the United States will stop broadcasting in analog and switch to 100% digital broadcasting.
- Digital broadcasting promises to provide a clearer picture and more programming options and will free up airwaves for use by emergency responders.
The Digital Delay

- On February 11, 2009, the President signed into law the DTV Delay Act. Section 2 of the DTV Delay Act amends subsection 3008(a) of the Deficit Reduction Act to extend the date by which low power television stations may apply for a grant through the Conversion Program from February 17, 2009, until June 12, 2009.


- Gives U.S. households additional time to prepare for this historic switch.
- Has reached its funding ceiling.
- No additional funding for the coupon program – yet.
- 12 million coupon issued nationwide since the program kicked off in February – get yours if you can.

What are people thinking?

- These are some of the transition’s challenges:
  - Awareness
  - Understanding
  - Trust
  - Economics
People choose over-the-air TV for their homes.

“My kids are young…I feel we already have enough options.”

“I’m hardly at home, constantly on the road. It wouldn’t be worth it for me.”

~ Focus Group Participants

There is massive confusion about what the transition means for people.

“High-definition TV is coming and we have to make sure to get an HDTV because in 2009 all TV will be digital, and our old sets won’t work.”

~ Focus Group Participant

People are counting on TV for clear, credible and factual information.

“TV has credibility.”

~ Focus Group Participant
People have strong emotions about the change when they first learn about it.

“I think it’s being kind of crammed down our throats whether we like it or not.”
~ Focus group participant

People are satisfied with the way their TV is now.

“I like the standard channels I get right now.”
~ Focus group participant

Why Are Full-Power TV Broadcast Stations Switching to All-Digital?

- Most importantly bandwidth can be now auctioned off – balancing budget
- Analog spectrum re-allocated for Public Safety
- Digital is more efficient - so broadcast stations can offer:
  - Better TV picture/sound
  - More programming options (multicasting)
  - Analog spectrum auctioned for advanced wireless services
How are we doing so far in the world of the digital transition?

- Yellow – In Progress
- Red – Switched
- Green – Haven’t Started

What is DTV?

- Video DTV

Video
What Should I Do To Be Ready?

- Connect your analog TV to a digital-to-analog converter box
- Buy a digital television (a TV with a built-in digital tuner)
- Subscribe to a paid TV service (such as cable or satellite TV)

If you receive good quality reception on VHF channels (2-13) and UHF channels (14-51), your existing antenna should work for digital broadcasts.

- Buy a digital television (a TV with a built-in digital tuner)
  - You do not need an HDTV
  - If you receive good quality reception on VHF and UHF channels, your existing antenna should work for digital broadcasts.
What Should I Do To Be Ready?

- Subscribe to a paid TV service (such as cable or satellite TV)
  - Cable companies are not required to switch to digital
  - For voluntary business reasons, cable companies may switch some or all of their channels from analog to digital
  - If you have an analog TV that does not receive local broadcast stations through your paid provider – you will need a digital-to-analog converter box to watch digital broadcasts.

Will My Analog TV Still Receive Free Over-The-Air Broadcasts?

- Yes – Analog TVs will work with a digital-to-analog converter box
  - $40 – $70 retail cost
  - NTIA (National Telecommunications and Information Administration) administering coupon program
  - U.S. households can request up to two $40 coupons
  - Coupons good for eligible boxes

DTV or HDTV

- Transition is from analog to digital, NOT from analog to high definition
  - High definition TV (HDTV) is a form of DTV that provides higher resolution pictures and multichannel audio
**DTV or HDTV**

- Can view HDTV broadcasts on SDTVs and analog TVs connected to digital-to-analog converter boxes, just not in full HDTV quality
- DTV and HDTV sets are not the same
  - Not necessary to purchase HDTVs in order to view DTV
  - SDTVs are comparably priced to analog TVs
  - DTV includes standard definition (SDTV) and high definition (HDTV) formats

---

**DTV or HDTV**

- Low Power Television (LPTV)
  - While the majority of consumers in the U.S. can receive the programming of full-power over-the-air stations, there are three other categories of broadcast TV stations: “low-power,” “Class A,” and “translator” stations
  - There is currently no statutory deadline for these stations to convert to digital broadcasting
  - There are 1,758 full-power stations in the United States
  - Some full power stations are around 5 million watts

---

**Digital-to-Analog Converter Boxes and Analog Broadcasts**

- Full-power broadcast stations can continue to broadcast in analog until February 17, 2009. Also, low-power, Class A, and translator TV stations can continue to broadcast in analog after February 17, 2009.
- Consumers who want to view programming from these stations should look for digital-to-analog converter boxes that have "analog pass-through" capability
  - Consumers must turn off the power to these boxes and tune their TV sets to the analog channel they want to watch.
  - Or use an A/B switch
If You Subscribe To a Paid Service Like Cable Or Satellite TV

- Cable Subscribers – Cable companies are not required to switch their systems to digital.
- You need to get “digital cable” equipment - This is not the same as a digital-to-analog converter box.
- Satellite TV Subscribers – If you do not get local broadcast stations through your satellite provider, you will need a digital-to-analog converter box to watch digital broadcasts on any analog TV in your home.

DTV Closed Captioning

- Closed captioning displays the audio portion of television programming as text on the TV screen.
- FCC rules require that:
  - DTV receivers include closed captioning display capability.
  - Digital-to-analog converter boxes pass through closed captions.
- Converter box captioning capabilities:
  - All converter boxes receive closed caption signals and can pass them through to your TV automatically.
  - Some converter boxes will generate captions through the converter box itself.

DTV or HDTV

- Video - HDTV Formats Explained.
Video

The Digital Transition

Greg Gromak
DIG2030C