

## HD/SD Case Study - WBMA-TV

WBMA-TV has always been the little station that could – a municipal station with a broad mandate to cover all aspects of community life: from government, to sports, cultural events, and news. As a result, you're just as likely to see a concert on their channel as an emergency weather alert, election results, a basketball game, or a press conference. And in 2012, WBMA-TV became the first New Jersey PEG station to broadcast in HD - over the Internet.

Bob Duthaler, the station's Executive Director, prides himself on keeping his station in the forefront of broadcast technology. That's why he adopted TelVue's HD/SD Simulcast System to show off his station's high production values, while sending the required SD signal to the cable and telco carriers. "We shoot a good portion of our programs on HD," Duthaler explains, "But the biggest disappointment was not to be able to broadcast to our community in HD."



WBMA Studio - Bloomfield, NJ

The HD/SD Simulcast System makes WBMA-TV's live, linear, and VOD signals available in HD on all devices, ranging from the large-screen TV to PCs, tablets, and smartphones. To accomplish this, WBMA-TV installed TelVue's latest generation HD/SD Simulcast broadcast system, that combines the best features of both IP and SDI workflows, and supports standard MPEG-2 and modern H.264 codecs.

Many PEG stations still broadcast a mix of HD and SD programming. The HD/SD Simulcast System lets the programmer upload either format to the HyperCaster, and the ProVue decoders for each chain (HD and SD chain) handle the up/down conversion as needed. "That's one of the great features of this system," says Duthaler. "Even if you add SD content to the HD player, the ProVue will automatically up- or down-convert programs to the designated output. You don't need to pre-convert programs."

It's clear that Bloomfield viewers want to see their local channel in HD. Duthaler says the township recently conducted a survey of cable viewers (as part of the franchise agreement), and found that 98% of people who get HD programming said they also want to see WBMA-TV in HD.

Until WBMA-TV is granted an HD cable channel, these viewers will have to resort to Internet-delivered

alternatives. One of the more popular ways to broadcast HD to large screens is through an Internet-connected box like Roku, which is how some Bloomfield residents are currently watching their community TV. Roku is an Over-the-Top box that can be connected to any Internet-ready TV, and offers channels as apps. (For example, you can see all of TelVue's CloudCast customers in the PEG.TV Roku app.) "A lot of people are impressed with the switch and love the HD viewing. You don't have to wait for the cable company," says Duthaler. "We're proving that."



WBMA-TV TelVue® CloudCast™ Player

The video stream is delivered to Roku via the TelVue CloudCast service, which also reaches viewers on PCs, and handheld devices. If a viewer is accessing the video from a smaller device like a tablet or mobile phone, CloudCast can detect this, and automatically adjust the signal through adaptive bitrate (ABR) technology, to optimize streaming for each individual device and bandwidth capacity.

An additional benefit to broadcasting in HD has been a more efficient time management. Duthaler describes how this changed WBMA-TV's workflow: "Before, we had to re-encode to SD to get our programs on to the broadcast server. Now, we upload HD directly to the server. This HD/SD system takes that step out of the workflow, and saves us a lot of time that used to be spent encoding and moving files around."

That time is now well spent producing original programs, and covering the town of Bloomfield, as it deserves to be covered.

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