When the opportunity arose for WFMZ-TV to open a street level, glass-front broadcast studio at the entrance to the Lehigh Valley Phantoms new Pennsylvania Power and Light Center arena in Allentown, PA, the broadcast station jumped at the chance. The space, part of a $1 billion redevelopment in downtown Allentown, would become the home of WFMZ-TV's daily noon newscast.

As WFMZ-TV General Manager Barry Fisher and his team began to design the studio, they realized that physical space for equipment would be very limited.

"When you find a location like this, you don’t necessarily get all the space you want. We needed to get creative with the design and equipment, including cameras and a video wall, that would provide not only exceptional video quality, but also fit in our limited space," said Fisher.
After testing out a number of camera solutions, WFMZ-TV selected nine mounted remote control Panasonic AW-HE130 pan/tilt/zoom cameras for downtown studio, newsroom & WX shots. The cameras, which measure approximately 7” x 9” x 9”, were easily mounted into the space. The AW-HE130s incorporate high-sensitivity, low-noise ½.86” 3-MOS imagers that produce stunning pictures, even in low light conditions. They also include key broadcast features including Power over Ethernet+ (POE+) for easier integration, and multi-stream transmission of H.264 HD video and audio (up to 1080/60p at 24Mbps.). All equipment is mounted in the ceiling, including control and interface systems, creating a very clean, pristine public space with windows on each side.

The cameras are controlled remotely by producers in the station’s main studio in nearby Salisbury Township.

“The cameras were easily integrated into our main studio five miles away,” said Fisher. “To make this practical, we needed the space to function like a studio without all of the equipment you’d normally find in a TV station. Via a fiber connection, the broadcast and all data are transmitted between the studios without any latency. Our anchors just have to head down to the studio at noon, turn on the lights and we’re ready to go.”

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Additionally, WFMZ-TV needed a video wall solution to serve as a backdrop for its anchors and also show WFMZ-TV’s content to passersby when not broadcasting the news. Again, due to space limitations, Fisher and his team required a video wall solution with not only a small footprint and thin bezel, but also one that included integrated content management software. Many video wall displays require an additional device for content management, but WFMZ-TV could not afford to sacrifice any additional real estate.

The station tested multiple consumer displays, but none were thin or bright enough. The station found an ideal solution with Panasonic’s 55” TH-55LFV50 LCD video wall professional displays, installed in a 4x4 configuration. These direct LED backlight professional displays are ideal for installations in bright locations. The displays offer exceptional 800cd/m2 brightness, and a high level of contrast for superior color reproduction. The TH-LFV50 professional displays are built for 24-hour, 7 days a week operation and include a built-in cooling fan which prevents overheating in the upper screens of a multi-screen installation. The displays include a super narrow 5.3-mm bezel so borders can barely be seen, making nearly seamless images vibrant, natural and eye-catching. The displays also include integrated software to easily manage content on each screen, in virtually any configuration, eliminating the need for any additional equipment.

Since broadcasting began from the studio last fall, feedback from viewers has been resoundingly positive.

“Viewers and passerbys are impressed with the new studio” said Fisher. “It enables us to easily be a daily part of one of the communities we serve.” The studio is used daily for the noon newscast and evening newscast during special events. “The operation and simplicity of the studio equipment have been beyond expectations.”