

**PUBLIC TELEVISION AND NEXT GENERATION
NON-BROADCAST REVENUE OPPORTUNITIES**

Next Generation television (ATSC 3.0), using Internet Protocol, robust modulation advancements and enhanced compression, offers extraordinary flexibility and opportunities for broadcasters. While continuing its core mission of providing high quality, free over-the-air educational television programming to over 97 percent of our population, including the territories, Public Television is eager to embrace the non-broadcast datacasting opportunities that Next Gen presents to enhance the public services we offer. In addition to broadcast programming, those public services broadly encompass public safety, education, civic leadership and other supplementary services.

Next Gen datacasting will allow Public Television to deliver encrypted and targetable IP data, including video and other large files, and thereby provide a wireless IP delivery network that is natively multicast and not subject to congestion or delay, like the television signals carrying it. Among the potential enhancements to Public Television services afforded by Next Gen are the following examples:

A. Public Safety

- First Net support and backup facilities to dramatically improve system reliability and to immediately reach rural and remote areas. (America's Public Television Stations have already committed 1 Mbps of their datastream to support FirstNet.)
- Crisis support by delivering targeted video, building blueprints and other files to First Responders in the field, including deeply within heavily structured buildings
- Localized AMBER Alerts with rich media information on victims, suspects, location and vehicles
- Weather and disaster emergency notification with localized event mapping, evacuation routes, and emergency advice in multiple languages

B. Education

- Distance learning on a customized local level to supply teachers, students and home-schooled children with course materials, lectures, class discussions and virtual field-trips to be distributed via wi-fi within schools and homes (as well as to portable devices) with little or no infrastructure required
- Training programs for government and non-government entities including police, fire, medical and business. (Workforce development is a growing specialty of Public Television; VegasPBS, for example, is already the largest provider of such services in the State of Nevada.)
- Broadband-like information to those without access to the Internet

C. Civic Leadership

- State government official legislative proceedings (*e.g.* C-SPAN-like distribution of state proceedings)
- Candidate debate distribution (local and state elections)
- Local history/documentary educational information and immersive experiences

D. Ancillary/Supplementary Revenue Opportunities

- Local datacast services provided to businesses, especially in small-town and rural America (*e.g.* agriculture, banking, home security, automotive GPS, building infrastructure maintenance, *etc.*)