Corporation for Public Broadcasting Appropriation Request and Justification FY 2020/FY 2022

Submitted to the Labor, Health and Human Services, Education, and Related Agencies
Subcommittee of the House Appropriations Committee
and
the Labor, Health and Human Services, Education, and Related Agencies Subcommittee of the
Senate Appropriations Committee

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This document with links to relevant public broadcasting sites is available on our Website at:

www.cpb.org

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FINANCIAL SUMMARY OF THE CORPORATION FOR PUBLIC BROADCASTING'S (CPB) BUDGET REQUESTS FOR FISCAL YEAR 2020/2022

FY 2022 CPB Funding

The Corporation for Public Broadcasting requests a \$495 million advance appropriation for Fiscal Year (FY) 2022. This is an increase of \$50 million compared to Congress' FY 2019/2021 appropriation. First proposed by President Ford as a five-year advance, the two-year advance appropriation, in place since 1976, serves as a firewall that protects public media's independence from political influence. While serving this purpose well for more than 40 years, and helping public media achieve its consistent status as the most trustworthy media outlet in America, the two-year advance has also made possible the long-term planning required to ensure public media's educational programming meets the highest academic standards. This serious and comprehensive approach to educational programming has helped narrow the achievement gap between children from low-income families and their more affluent peers. The two-year advance allows us to consistently invest in the most recent research and data required to ensure public media's content continues to have this positive learning impact.

Over the past decade, CPB and the public media system have acted with fiscal restraint and responsibility operating under level funding. However, ten years of level funding have seriously eroded the purchasing power of \$445 million, and the inflation-adjusted funding level would today exceed \$530 million.

(\$ millions)	FY2016	FY2017	FY2018	FY2019	FY 2020	FY 2021	FY 2022
General Fund	\$445	\$445	\$445	\$445	\$445	\$445	\$495 Requested
Interconnection	\$40	\$50	\$20	\$20	\$20 Request	\$20 Tentative Request	\$20 Tentative Request

FY 2020 Public Broadcasting Interconnection Funding

CPB requests \$20 million to continue the replacement of the public television and public radio interconnection systems, referred to in our request as the "public broadcasting interconnection system," and other technologies and services that create infrastructure and efficiencies within the public media system. Interconnection is the backbone of our nation's public broadcasting service. CPB requests Congress' continued support in replacing and upgrading the public broadcasting interconnection system and further investing in systemwide infrastructure and services that benefit the American people.

Congressional support of the interconnection system originates in the 1967 Public Broadcasting Act which authorized the "establishment and development of one or more interconnection systems to be used for the distribution of public telecommunications services so that all public telecommunications entities may disseminate such services at times chosen by those entities." [47 USC 396 (g)(1)(B)]. Since 1988, Congress has supported a separate appropriation for public

media's interconnection needs. Beginning in FY 2018, Congress endorsed an annual appropriation, administered by CPB, to facilitate dynamic upgrading of the interconnection system, rather than providing an appropriation of \$200 million or more approximately every ten years.

Audit and Inspector General Reports

The Corporation continues to receive clean financial statement audits by an independent certified public accountant. The most recent <u>audit</u>, dated March 5, 2019, states that "the combined financial statements referred to above present fairly, in all material respects, the financial position of the Corporation for Public Broadcasting and Affiliate as of September 30, 2018 and 2017, and the changes in their net assets and their cash flows for the years then ended in accordance with accounting principles generally accepted in the United States."

In 1988, Congress established the Office of Inspector General (OIG), which is an independent office within CPB. The IG is hired by and reports to the CPB Board of Directors. OIG's mission is to promote the efficiency, effectiveness, and integrity of CPB initiatives and operations by conducting independent and objective audits, investigations, and other reviews. Public Law No.115-414 requires CPB to report on public recommendations from OIG that are more than one year old and for which no final action was taken. CPB's IG has confirmed that there are no "open" or "closed, unimplemented" recommendations.

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¹ Public Telecommunications Act of 1988 (P.L., 100-626)

NARRATIVE SUMMARY OF THE CORPORATION FOR PUBLIC BROADCASTING'S (CPB) BUDGET REQUESTS FOR FISCAL YEAR 2020/2022

The Corporation for Public Broadcasting is the steward of our nation's investment in a public media system that serves all Americans every day with free public media content that informs, educates and enriches. CPB supports a healthy and vibrant network of public media stations that play an essential role in education, public safety and civic leadership in communities across America. Through key initiatives such as Veterans Coming Home; American Graduate: Getting to Work; local and regional journalism collaborations; Ready To Learn; and public safety, CPB encourages local public media stations throughout the United States to serve their diverse urban and rural communities and strengthen our civil society, locally and nationally.

CPB's education mission encompasses early childhood, elementary and secondary school, and lifelong learning. Beginning with Ready To Learn, a program proven to help preschoolers prepare to succeed in school, hundreds of millions of young children have benefited from this enrichment during public broadcasting's decades-long commitment.

The PBS LearningMedia initiative, funded in part by CPB, provides elementary and secondary school education resources to almost 1.8 million educators and users serving an estimated 40 million students, including more than 30,000 homeschoolers. PBS LearningMedia content includes standards-based, curriculum-aligned, interactive digital learning objects drawn from the best of public television programming (*NOVA*, *Nature*, *American Experience*, and more), as well as excellent source material from the Library of Congress, the National Archives, the Smithsonian Institution, NASA, the National Science Foundation, and other leading educational and cultural institutions.

CPB's American Graduate initiative is public media's long-term commitment to supporting community-based solutions to help young people succeed in school and in the workplace. Public television and radio stations have engaged with more than 1,700 partners, businesses, educators, faith-based organizations, and others across the country to tell the stories of youth at risk and the supportive adults and communities that help them succeed. Through American Graduate, public media, with its unique position as a trusted resource and important partner in local communities, provides an informational conduit identifying pathways to graduation, job readiness and career success. All of these efforts, in combination with those of our partners, have helped reduce the high-school drop-out rate to 15.35 percent—the lowest on record.

Last year, American Graduate began raising awareness and understanding about the skills gap, and the essential education and training needed for the high-demand careers of today and the future. Public media stations are working with partners in their local communities to assess workforce challenges and opportunities and are producing local content focused on these essential skills.

Further, CPB funding makes it possible for public television to operate the largest not-for-profit Graduate Equivalency Diploma (GED) program in the country, serving hundreds of thousands of second-chance learners and adult students. CPB grants to public media stations encourage successful new initiatives in workforce development and veterans training among adults, in

addition to the lifetime enrichment of hundreds of millions of Americans through historical, cultural and public affairs programming.

Public safety is another core mission. Public television stations are the backbone of the nationwide Warning, Alert and Response Network (WARN). Together with public radio stations, they ensure delivery of lifesaving alerts in times of national emergency. Stations are increasingly effective partners in the Emergency Alert System, working with the U.S. Department of Homeland Security, state and local public safety, law enforcement, and first responder organizations to connect these agencies with one another, with the public, and with vital datacasting and meta-pub capabilities in times of crisis.

Civic leadership is the third pillar of public service for public media. Our civic commitment comprises highly-trusted news programming, forums for candidate debates at every level of the election ballot, ongoing coverage of state legislatures, production of documentaries preserving local history andcelebrating local culture, as well as public affairs programming that explores local, state and national issues with political leaders and policy experts who represent a broad range of perspectives.

Public media stations have added more than 700 journalists to local staffs over the past six years so that they can deliver value to the American people in the form of content that gives them the information they need to understand our changing world, raise their families, teach their children, improve their communities, spark intellectual curiosity and enhance daily life. Public radio has more than 2,200 journalists working at NPR and local public radio stations across the country.

High-quality, free, educational and informative programming is the hallmark of public media. Nearly thirty years after *The Civil War* was first broadcast on public television, this landmark documentary series is still viewed in classrooms throughout the country. *NOVA* has introduced and taught scientific concepts to countless Americans since its debut in 1974. *Great Performances* brings a wide range of culture to the most remote areas of our country, giving everyone a front-row seat at the Metropolitan Opera and the Broadway stage. And NPR's *Morning Edition* and *All Things Considered* provide important civic information to millions of Americans every day.

Public media's programming continues to earn the nation's most prestigious awards—in 2018, receiving more than 100 Emmy nominations, and 35 Peabody and Murrow awards—and it is a forum for civil discourse, cultural enrichment and educational instruction reaching virtually every household in America.

Public media is a public information system that is improving the lives of millions as it embraces innovation in content and technology, nurturing diversity of talent and programming, and inspiring civic responsibility. The public-private partnership represented by the federal appropriation will allow CPB to continue to tell America's changing story in a way that enhances our civil society and connects us to one another. Only through Congress' increased financial support can public broadcasting remain true to its longstanding commitment to serving the rich diversity of Americans, particularly the unserved and underserved, in all 50 states and territories.

Section I

CPB Requests a \$495 Million Advance Appropriation for FY 2022

The Corporation for Public Broadcasting (CPB) requests a \$495 million advance appropriation for Fiscal Year 2022. This request is a \$50 million increase as compared to the amount provided by Congress for CPB in FY 2021. The two-year advance is the most important part of the congressionally constructed firewall that protects public media's independence from external interference and control.

The public broadcasting community is aware of the fiscal and budgetary challenges facing the federal government. CPB's FY 2022 request provides the support for CPB to carry out its statutory mandate to provide a valuable and trusted service to all Americans. Federal funding remains an irreplaceable part of the fabric of the national-local, public-private partnership that is the foundation of public media's success. Numerous studies, including an investigation and report by the Government Accountability Office, have shown that there is no alternative to the federal investment to accomplish the public service mission that Congress assigned to public broadcasters and that the American people overwhelmingly support. For the 16th consecutive year, PBS continues to be one of the most trusted institutions and is considered the best value for the American tax dollar.²

Overview of the Corporation for Public Broadcasting

The federal appropriation supports more than 1,500 locally owned and operated public television and radio stations serving nearly 99 percent of the American population living in rural, small town and urban communities in all 50 states, the District of Columbia, and four commonwealths and territories. Public media is a trusted source of information, education and culture for millions of Americans, including, in disproportionately large numbers, underserved populations such as rural Americans, minorities, older Americans, lower-income families and individuals with disabilities.

CPB's funding flows through a statutory formula, which apportions approximately 71 percent of funding directly to stations. CPB's administrative expenses are capped at 5 percent. Therefore, 95 percent of the appropriation, managed by CPB, provides essential services and programming to local communities; addresses current issues in an objective, fair and balanced fashion; expands and strengthens the "American Graduate" initiative to help young people stay on the path to a high school diploma and continue to college and career readiness; goes to stations' infrastructure needs to enhance their local emergency alert services; and funds diverse informational, educational and cultural content and services.

The federal investment through CPB is the foundation on which the entire public media system is built; undermining this foundation would put the entire structure in jeopardy. Local stations leverage CPB funding to secure vital support from other sources, with nonfederal funding representing five of every six dollars invested annually in public media. Although private

² Marketing & Research Resources Inc. (M&RR) January 2018. http://valuepbs.org/assets/docs/2019_Trust_Booklet.pdf

donations and existing sources help defray considerable costs for the much-honored public television and radio programming and services, the federal investment is essential to sustain the operations and public service mission of local public broadcasting stations, community-based accountability and the commitment to fulfilling the universal service goal to reach every American to which the Public Broadcasting Act aspires.

Further, smaller stations, especially those serving rural, minority and other underserved communities, do not have the donor base to raise as much money. In rural areas, local public broadcasting stations may be the only local source of news, weather, emergency alerts and other critical community services. The federal investment in public media keeps these services commercial free and available to all Americans free of charge.

CPB's values are guided by our commitment to innovation, diversity and engagement. The "Three Ds" — Digital, Diversity and Dialogue. This means we are always investing in innovation to deliver public media programming over multiple media platforms. We continue to seek ways to expand inclusion and diversity—age, ethnicity, race, gender, socio-economic background, geography, differing abilities/disabilities and points of view—at all levels of public media, and we are committed to helping public media stations engage with their local communities. The Three Ds are at the heart of CPB's leadership role within the public media system. They provide the framework for CPB's grant-making, and help CPB, as the steward of the federal appropriation, articulate public media's mission.

Public Media in the Larger Media Landscape

This request comes at a time of media fragmentation and technological transitions, making the role of public media even more essential as we focus on connecting content and services to local communities, delivering the highest quality educational multimedia content, and innovating for greater efficiency and responsiveness. While there are more media outlets today than there were 50 years ago, Americans are seeking more in-depth, context-driven and fact-based information. Public media's commitment to serving as a trusted source for all Americans, free of charge and commercial free, and as a safe, civil place for discussion is an important and relevant priority in people's lives. As we look forward, CPB will continue to serve as a trusted steward of these precious taxpayer dollars in ways that ensure the American people continue to receive value from public media. Over the past 50 years we have been early adaptors anticipating and responding to the changing ways Americans choose to receive media, but what has not changed is our commitment to high-quality content and services that improve the lives of all citizens, that honor the stories of our country, educate our youngest citizens and deliver lifelong learning to all Americans.

Public media has always been a "best case" example of television channels being used efficiently and effectively, implementing multicast capabilities and relying on unimpeded coverage areas to reach diverse communities with content and services that address the challenges we face locally and nationally. Public media stations are actively deploying mobile DTV, HD, multicasting and educational and public safety datacasting. CPB's appropriation will help the public media system respond to the quickening pace of technological change and the changing ways in which Americans are consuming and engaging with media.

ATSC 3.0 ("Next Gen TV")

The next major transition on the horizon is from the current broadcast standard Advanced Television Systems Committee (ATSC) 1.0 to ATSC 3.0, or the Next Generation ("Next Gen") television standard. In February 2018, the Federal Communications Commission (FCC) published the standard for voluntary adoption by both public and commercial television broadcasters, and it is expected that the new standard will be widely adopted by the industry and by viewers over the next several years. Testing has commenced in several markets around the country with participation by public television stations in Raleigh, NC, Phoenix, AZ, and East Lansing, MI.

There are four principal public service benefits of Next Gen TV— interactive educational children's programming, public safety, accessibility, and visual enhancements— along with various other benefits that will broadly enhance the reach of public broadcasting and access to its noncommercial services. By creating the opportunity for interactive broadcast programming, Next Gen TV creates the possibility for children's television programming to incorporate educational activities that reinforce the learning objectives of that content.

The features and functionality of the new standard are particularly well-suited to advancing the public safety work of public television stations. For example, the Next Gen TV standard will enable geo-targeting alerts and could provide comprehensive auxiliary data, such as evacuation routes and weather maps. The standard also allows broadcasters to "wake up" receiver devices when an emergency alert is transmitted, which will facilitate the dissemination of critical information, particularly at night, when severe weather or other emergencies may occur.

The FCC's Communications, Security, Reliability and Interoperability Council's (CSRIC) Working Group 2 June 2018 final report on "Comprehensive Re-imaging of Emergency Alerting" identifies three ways Next Gen TV, and specifically public television, can support and improve emergency alerting. Section 6.4 of the Report provides an example of how a public television station can use the new broadcast standard to improve emergency alerting:

"Next Gen TV: Saving Lives One Alert at a Time, UNC-TV (North Carolina) won first place in the National Association of Broadcasters (NAB) Pilot Innovation Challenge for a proposal that uses datacasting technology in broadcast television to update outdated first responder emergency pagers. Initial stages show potential to decrease a fire station's time to respond to a given alert by nearly one minute for each notification. The project currently uses ATSC 1.0 to reach fire stations across the state. Once ATSC 3.0 broadcasting is implemented, updated receivers connected to mobile devices will allow mobile paging for first responders, even in areas where LTE service does not reliably reach."

The Report further states, "we believe that PBS stations and first responders can find even more ways to identify and utilize opportunities presented by ATSC 3.0."

³CSRIC Final Report on "Comprehensive Re-imaging of Emergency Alerting." June 2018 https://www.fcc.gov/files/csric6wg29junereportcomppdf

One of the opportunities this new technology could allow is for public broadcasters to better serve those who are hearing and visually impaired. For the first time, stations could transmit closed caption sign language alongside their broadcasts to better serve hearing impaired viewers. In addition, the system would be able to provide greater dialogue intelligibility by allowing users to independently adjust the non-dialogue elements of a program's audio track. Closed captions and subtitles could also be offered in multiple languages and could transmit through either broadcast or broadband.

For public television to provide these expanded public services, stay relevant, competitive and viable, stations will have to undertake this costly technology transition. A January 2018 report prepared for CPB by Meintel, Sgrignoli and Wallace, states, "As with any new technology migration, there will be a need to acquire new equipment and integrate that new equipment into an existing operational TV broadcast plan." There are a variety of new technologies being adopted in ATSC 3.0 that are not "backward-compatible" with existing infrastructure at a "typical" TV station. One study suggests that it will cost a station between \$300,000 and \$600,000 to transition to the new broadcast standard. These costs only account for the basic station equipment, which means that stations are likely to incur much higher transition costs than identified in the study, as well as potentially higher operational costs.

Public media worked closely with the FCC to align the spectrum auction repack with the newly recommended standard so that public television stations that are forced to move as part of the spectrum repack will be able to use the Relocation Fund to purchase equipment that is ATSC 3.0 compatible for when the station is ready to transition. The Relocation Fund will not cover all of the equipment to make a station Next Gen TV "ready," and not every public television station is eligible for Relocation Fund reimbursement. However, the Fund will alleviate some of the stations' financial stress and ensure that Relocation Funds are not wasted on already outdated technology that will have to be replaced with ATSC 3.0 equipment.

Public radio is also working with the FCC to help identify "bystander" radio stations co-located on or near a TV tower and affected by TV repack work, and to determine eligibility requirements and logistics for requesting reimbursement for facilities necessary to keep these stations on the air. NPR is purchasing emergency portable transmitter equipment to help local stations establish temporary auxiliary facilities needed to minimize disruption of service for listeners who rely on their critical local news, unique local programming, emergency alerting and public safety information.

Providing resources to foster technical innovations is a critical part of CPB's leadership role in the system. Public media stations and national organizations are constantly innovating, using new platforms and technologies to ensure our high-quality content is reaching all Americans in the ways they choose to access media. At the same time, CPB has a responsibility to serve Americans who do not have access to or cannot afford broadband service, and to those who cannot afford the latest technology or a cable or satellite subscription. This is especially true as the technology gap between urban and rural communities continues to grow. As media and

⁵ Radio+Television Business Report. TV's Future May Depend on ATSC 3.0 Transition. Gregg Skall. January 9, 2016. http://rbr.com/tvs-future-may-depend-on-atsc-3-0-transition/#eejAqCWRA6GkdZmD.99

⁴ ATSC 3 Digital Television Implementation for Public Television. Dennis Wallace, MEINTEL, SGRIGNOLI, & WALLACE, LLC. January 31, 2018.

technology evolve, CPB must strategically invest so that public media's high-quality content is available to all Americans free of charge and free of commercial influence, wherever and however they choose to consume it.

Public media stations will continue to meet the challenges of the rapidly changing media environment and the needs of the American people, but success will not be achieved independently. Increased financial support from the federal government is critical in maintaining a vibrant public media system.

System Infrastructure/Technology Needs

In 2017, CPB commissioned a comprehensive System Technology Assessment to better understand public television and radio stations' technology challenges and needs. The station response rate was unprecedented (73 percent of radio and 92 percent of television licensees), cataloging more than 60,000 pieces of equipment throughout the system. The assessment found that if equipment needs and available funds progress as forecasted, the system will face more than a cumulative \$300 million shortfall by 2020. ⁶ As the public media system postpones equipment replacements beyond their optimal end-of-life, it is accruing technological and operational risk.

With additional funding, CPB could help stations better understand technology and business trends and guide them on a path to technological maturity that reflects opportunities for improvement while respecting existing variation in stations' maturity and their technological needs. Through CPB's leadership, the system can now leverage shared buying power, and embrace lower-cost joint operation initiatives and build on existing knowledge and personnel collaborations.

An Educational Treasure

With a mandate to provide content and resources that educate and inform, public television and radio stations have a proven 40-year track record of improving educational outcomes for all children, especially those from high-need communities. Education is the heart of public media, and our contribution to education—from early childhood through adult learning—is well-documented. Public media's content is regarded consistently as "most trusted" by parents, caregivers and teachers. As classrooms become more connected, our content becomes an even more valuable teaching tool.

We are America's largest classroom. Built on the success of programs like *Sesame Street*, *Reading Rainbow*, and *Mister Rogers' Neighborhood*, PBS is the number one source of media content for preschool teachers and a leading place parents turn to for preschool video online, with content proven to improve critical literacy and math skills in young children.

CPB's appropriation makes this high-quality, researched-based, educational content possible, both on-air and online and available for free, to every child in the nation. Over the past several years, CPB has supported award-winning shows such as *Daniel Tiger's Neighborhood*, which focuses on the social-emotional development of the youngest viewers (ages 2-5); *Nature Cat*, a

⁶ CPB System Technology Assessment Final Report. Eagle Hill Consulting. May 21, 2017. http://www.cpb.org/files/reports/Final_Report-CPB_System_Technology_Assessment_2017.pdf

STEM program that encourages children ages 3 to 8 to explore nature and develop lifelong connections with the natural world; and *Molly of Denali* (premiering July 2019) will teach kids ages 4 to 8 about informational text through video content and interactive games.

Recognizing the importance of a strong foundation of science knowledge to a child's future success, CPB supported the launch of two science-focused series for children ages 4 to 7. *Ready Jet Go!* is focused on earth and space science, technology, and scientific exploration. Common Sense Media gave the series five stars, calling it "exceptional," with high scores for educational value, positive messages and positive role models. The *Ready Jet Go! Space Explorer* free app uses augmented reality to facilitate viewing of planets and constellations and was downloaded more than a half-million times in its first three months. *Splash and Bubbles*, an ocean science series produced by The Jim Henson Company, introduces young children to the ocean and the creatures and life forms that live in it. As part of CPB's grant to The Jim Henson Company, they created The Open Door Program, an internship for five entry-level production staff from underserved backgrounds. Two of the interns who participated in Season 1 have been hired on to other productions.

PBS and public television stations complement on-air broadcast services by making educational and other noncommercial content and services available on IP-based platforms such as PBS.org and PBSKIDS.org, as well as station websites, streaming video services, social media, blogs, and interactive educational games. Traffic across PBS KIDS digital platforms averages 10.9 million users per month⁷ and PBSKIDS.org accounts for over 35% of time spent streaming Kids content videos across desktop, mobile, and over-the-top (OTT) devices. The collection of 72 mobile apps has been downloaded 60.5 million times. An evaluation of the PBS KIDS' digital content found that the games and at-home activities had positive impacts on children's math skills, as well as increased parent engagement in their children's learning.

Two years ago, local public television stations throughout the country partnered with PBS to bring a new, first-of-its-kind, free PBS KIDS 24/7 channel and live stream to their communities – providing kids throughout the country with the highest level of educational programming, available through local stations any time, day or night, over-the-air and streaming. Later this year, the live stream will introduce a unique integrated games feature, enabling children to toggle between a PBS KIDS show and an activity that extends learning – all in one seamless digital experience.

PBS KIDS is a valued partner for parents. A survey confirmed that parents of young children rank PBS KIDS as the most trusted and relied upon media brand for school readiness ¹¹ and that PBS KIDS is the most trusted children's media brand. ¹² To that end, to boost learning at home – and everywhere – PBS KIDS provides free resources for parents, including the PBS Parents Play

⁷ Google Analytics December '17 – November '18

⁸ comScore, Video Metrix®, Family & Youth - Kids, Total Audience, July 2018, U.S., Note: Mobile and OTT video streaming only included for competitors in the category who tag. This does not include YouTube or YouTube Kids. ⁹App downloads (AppFigures March 2011 – November 2018)

¹⁰ McCarthy, B., Li, L., Schneider, S., Sexton, U., & Tiu, M. (2013). PBS KIDS Mathematics Transmedia Suites in Preschool Homes and Communities. A Report to the CPB-PBS Ready to Learn Initiative. Redwood City, CA: WestEd.

¹¹ Understanding School Preparedness," Smarty Pants, 2014.

¹² Source: Survey Sampling International (SSI), January 2016.

& Learn App, which provides more than a dozen math and literacy-based games parents can play with their child. Additionally, PBS offers the free PBS KIDS Super Vision App, a first-of-its-kind tool that parents can access from their mobile phones to see what their child is watching, playing and learning on PBSKIDS.org, and to help them make the most of their PBS KIDS screen time.

Ready To Learn

Since Ready To Learn's (RTL) inception, public media has produced and disseminated a collection of high-quality, evidence-based content to advance the school readiness skills of children, particularly those in low-income communities. In addition to creating content for broadcast, internet, and mobile platforms, local stations work with community partners to extend learning and target resources where they are needed most. Each year, CPB and PBS collaborate with hundreds of local stations and their partners to implement literacy, math and science resources with children, families and educators. The demand for Ready To Learn funding exceeds the program's current financial resources. In FY 2018, CPB received 34 funding proposals totaling almost \$6 million, but only 14 could be funded (\$2.45 million).

In recent years, RTL has been agile and innovative in response to dramatic changes in the media landscape with the advent of mobile technology. As more American families have gained access to mobile devices, this new technology environment has redefined how adults and children in RTL's target audience access and use content. For public media and RTL policy leaders, the strategy has been to build upon a strong foundation of educational broadcast television, a nationwide network of local PBS stations, and the beloved PBS KIDS characters that comprise public media's early childhood line-up so that families and community organizations can excel in using RTL's educationally-sound videos, games and other interactive resources via television, web, smartphone, tablet, and offline experiences.

Local public television stations uniquely play an essential role in leading RTL's engagement effort. By working with partners such as early learning providers, daycare facilities, housing authorities, public libraries, faith-based organizations and others, local stations and their collaborators provide anytime, anywhere learning opportunities. No other media organizations have this national reach combined with proven effective outreach and local service to low-income communities most at-risk. CPB-PBS and the U.S. Department of Education's RTL program also invest in extensive research that demonstrates the effectiveness of its content in formal and informal educational settings.

For example, a 2014 study of the preschool math property Peg + Cat found that children who used this content showed strong improvement in math areas such as ordinal numbers, spatial relationships and 3-D shapes. ¹³ A subsequent 2015 study of Peg + Cat showed that parents and caregivers reported increased confidence in helping their children learn math. ¹⁴ Similar positive findings resulted from a study of the elementary math property Odd Squad which found that children using this media had significantly higher scores in post-tests than in pre-tests (e.g., 25 percent higher in skip counting, 12 percent higher in addition and subtraction, and 7 percent

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¹³ Peg + Cat Small Content Study: A Report to the CPB-PBS Ready To Learn Initiative (EDC-SRI, 2014)

¹⁴ Supporting Parent-Child Experiences with Peg + Cat Early Math Concepts (EDC-SRI, 2015)

higher in pattern recognition). ¹⁵ Finally, in an eight-week RTL study that aggregated content from *Curious George*, *The Cat in the Hat Knows a Lot About That!* and *Sid the Science Kid*, mathematics knowledge increased significantly in the RTL treatment group from both low-income and higher-income families. In this study, post-test scores of children from low-income families rose to the level of pre-test scores of children from higher-income families, and parents' awareness and involvement in their children's math development increased significantly. ¹⁶

Local Education Services

In partnership with local schools, public broadcasters provide a wide array of resources and services to thousands of schools and homeschoolers across the country. Many stations have developed online services to provide customizable video clips aligned to state educational standards for teachers to use in classrooms. This locally driven approach to creating standards-aligned digital content for classroom use has served as a best practice for states wishing to tailor content to the unique learning needs of their students.

"Providing teachers with quality, educational content is a vital part of our mission at Alabama Public Television." – Dr. Cindy Kirk, vice president of Educational Services at Alabama Public Television

PBS LearningMedia is an example of multimedia content that is leveraged for pre-K and K-12 formal education purposes by building "just in time" resources for teachers and parents to use to supplement their instruction. PBS LearningMedia offers high-quality, innovative digital resources for teachers and parents, helping them engage students in exploring curriculum concepts that align with state standards. The service brings together the best of public media, delivering tens of thousands of research-based, classroom-ready learning resources—videos, interactive materials, lesson plans and images—to supplement and enrich classroom instruction for nearly 40 million students. Nearly 1.8 million teachers and users have registered to access PBS LearningMedia's critically acclaimed programs such as *NOVA* and *FRONTLINE*, and research-based educational PBS KIDS programs such as *Curious George* and *Peg+Cat*, as well as content from organizations including The National Archives, National Science Foundation and NASA.

"PBS LearningMedia empowers students to explore independently, at their own pace, which helps build their confidence and desire to succeed. – Mallory Mbalia, a Kindergarten teacher in Wake County, NC

"I am a high school biology teacher at Ocean City High School. The programs and lesson plans provided to us through PBS LearningMedia are invaluable to my science curriculum. My students are thoroughly engaged by the short videos and accompanying discussion questions. As a public school teacher, this public service is not a want, but a need." Catherine Georges, Ocean City High School, Ocean City, NJ

A 2015 study that assessed the impact of PBS LearningMedia content on student learning and teachers' classroom practices showed that students made sizeable gains in content knowledge

¹⁵ Odd Squad: Learning Math with PBS KIDS Transmedia Content at School and at Home (WestEd, 2015)

¹⁶ Learning with PBS KIDS: A Study of Family Engagement and Early Mathematics Achievement (WestEd, 2015)

across four subjects—science, math, English Language Arts, and social studies. Students who engage with PBS LearningMedia content outperformed state assessment norms by 11 percentage points, and 56 percent of students showed a gain in critical thinking skills. ¹⁷ Further, teachers using PBS LearningMedia materials spent less time relying on didactic lecturing and reported that the digital resources helped make student learning more active, collaborative, and engaging. This leads to improved critical thinking in the classroom, increased classroom resources, and provides more ways to use technology and individualize instruction.

"As a homeschool parent, PBS educational materials have been a wonderful treasure, breathing life into nearly every topic. Thank you!" – Jane Wells

"I want to thank PBS for their continued support for teachers and their classrooms. Because of your support and offering cutting edge professional development, I have gone on and completed my masters." – Brenda Eve, Jupiter Christian School, Jupiter, FL

PBS LearningMedia also includes more than 4,000 science, technology, engineering and mathematics (STEM) resources, funded by CPB through grants to local public television stations. This resource helps educators engage students in more complex subjects.

"PBS STEM resources on LearningMedia such as the design projects on Design Squad have provided our classroom with many activities which encourage my students to Make, Create, and Learn about the world around them." – Shelly Fryer, a 3rd and 4th Grade Teacher from Oklahoma City, OK

Today, more than 150 local public television stations in the 50 states and territories provide a highly-localized PBS LearningMedia experience in their communities, reaffirming their important role as community builders and local leaders in education. In addition to stations' commitment to providing local educational content through LearningMedia, local member stations use PBS LearningMedia to provide professional development for educators statewide. By providing educators with the tools and training they need to effectively integrate educational media into classroom instruction, public television stations have a direct impact on teacher effectiveness and student academic achievement.

"As teachers, we are constantly bombarded with new tools, new devices, and new apps. Finding trustworthy resources can be daunting so having a resource like PBS LearningMedia is very valuable." – Don Goble an Instructor at Ladue Horton Watkins High School in St. Louis, MO

In addition to PBS LearningMedia, local stations provide unique educational resources to students and teachers across the country. CPB's funding to stations helps support their educational mission. With the requested increase in CPB's FY 2020/2022 funding, stations could increase educational resources as well as expand their services to more rural communities. Current examples of educational station services include:

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¹⁷ https://bento.cdn.pbs.org/hostedbento-prod/filer_public/value-pbs/Infographics/PBS-Education-Infographic.pdf

- Mobile learning labs in rural Tennessee and Idaho bring educational resources, tablets, computers and other devices plus Wi-Fi hotspots to children and families in rural locations that are unserved or underserved by broadband.
- Georgia Public Television's Georgia studies digital textbook teaches Georgia history, culture and geography in the context of American history and government. Information is presented digitally with interactive capabilities and multimedia enhancements. The book is updated regularly to make sure the content is relevant and aligned to the most recent Georgia Performance Standards. To complement the book, Georgia Public Television offers virtual field trips and created "Race Through Time" a new online history adventure game aligned to Georgia Standards of Excellence for 8th grade social studies.
- Wisconsin Public Broadcasting's free K-12 multimedia educational content that connects
 to Wisconsin's academic standards spans all curricular areas and are vetted by Wisconsin
 educators. "Into the Map" is an online interactive resource that explores Wisconsin's
 geography. "Wisconsin Biographies" connects children in grades 3-8 with figures from
 Wisconsin's past.
- Iowa Public Television's educational services staff actively promote the use of educational media resources to support STEM learning at more than a dozen events reaching thousands of participants. The Governor's STEM Advisory Council supports these events.
- Rocky Mountain PBS in Colorado continues its educational outreach programs, such as "Homework Hotline," and a Jeopardy-like program for high schoolers called "Matchwits," which for the first time is now open to high schools statewide.
- Around the country, public television and its community partners are working together to explore financial literacy concepts and basic math skills through PBS resources and activities appropriate for children ages 3-5 and their families.
- Arkansas Educational Television Network (AETN) has provided over 10,000 activity books, 1,000 reading books, educational materials and activities to many areas of the state through local agencies, schools and events. More than 600 parents attended the parent night events. In addition, AETN has provided more than 50 hours of professional development training for 600 teachers statewide.
- Montana PBS covers 95 percent of the state's population and airs educational children's content 24/7. With no state funding for early childhood education resources, Montana PBS serves as the best available resource for parents and caregivers.
- KUOW-FM in Washington State offers a year-round program called RadioActive Youth Media that introduces young people to public media and supports their growth as journalists by sharing access to public radio's knowledge, skills and institutions. Participants gain hands-on skills in broadcast journalism and digital audio technology, while building a sense of community in a safe and supportive environment. Each

Beginning Producer creates a story on the topic of their choice that is featured on KUOW-FM, and together the group produces a regular podcast.

Electronic Field Trips

Taking advantage of today's technology allows students to go on field trips without having to leave their desks. Electronic field trips began as over-the-air broadcasts, and today, they are distributed solely through the internet. Each field trip has specific content partners who provide access to their resources, historical sites, archives and experts, and help ensure the accuracy of the information shared in the production. Field trips also include pre-produced videos with live interactive segments, allowing students and teachers to ask guests questions. Across America, public media stations are taking students to places that they may never get to experience in person:

- Alabama Public Television has created more than a dozen electronic field trips, with more than 3.6 million participants. More than half a million were from the state of Alabama and 120,000 were international students who were able to have a front row seat in experiencing America's treasures. Field trip destinations and historical events have included: Mount Vernon, the U.S. Capitol, the U.S. Holocaust Memorial Museum, the Folger Shakespeare Library, Monticello, the Dauphin Island Sea Lab, and the American Civil Rights Movement. In the 2018-2019 school year, APT is providing students the opportunity to learn about Alabama's cultural traditions through its "Artistic Roots: Alabama's Creative Culture" field trip to the Birmingham Museum of Art; "Mission Control: Human Spaceflight" and other Alabama's historical archaeological sites including Moundville, The Poarch Band of Creek Indians Archives, Old Mobile and Old Cahawba.
- On November 14, 2018, WYES-TV in New Orleans, in collaboration with the Center for Global Environmental Education at Hamline University in St. Paul, Minnesota, taught 5th through 8th graders about one of the world's major river systems through the field trip called, "The Mighty Mississippi." The 45-minute interactive lesson featured a live discussion with an expert panel, historians, dramatic video and fun facts.
- In West Virginia, Wisconsin, Oklahoma, Alaska, South Carolina, Colorado, Montana, and several other states, students were transported to Colonial Williamsburg via on-air and online field trips to learn about the American Revolution and the War of 1812.
 Students also had an opportunity to call toll-free and speak directly to historians and character interpreters.

CPB's American Graduate Initiative

Building on a reputation as a trusted media provider and community convener, public media's American Graduate initiative, made possible by CPB, is focused on helping young people succeed in school, career and life. CPB is working with Civic Enterprises, and the Everyone Graduates Center at Johns Hopkins University on America's Promise Alliance's *Building a Grad Nation* campaign to achieve a 90 percent graduation rate by 2020. Today, stations have convened

more than 1,800 partnerships with businesses, schools, faith-based and other nonprofit organizations working together to improve outcomes for all our nation's youth.

The American Graduate initiative was designed to connect the mission, depth, commitment and capacities of public media—its local stations and national organizations—to increase awareness, understanding and access to solutions. With a mandate to provide content and resources that educate and inform, public television and radio stations have a proven 40-year track record of improving educational outcomes for all children, especially those from high-need communities.

Through the American Graduate initiative, CPB supports national programming such as:

- Personal Statement (America ReFramed). The film follows three Brooklyn high school seniors who are navigating what to do after high school, but like so many public school students throughout the country, their schools don't have enough guidance support.
 Refusing to give up, they decide to work as peer counselors in their schools by providing guidance on applying to colleges.
- *The Pushouts*. The film profiles the story of professor Victor Rios, a former dropout and gang member, who works to keep impoverished students of color away from the school-to-prison pipeline. The film explores themes of race, poverty and the importance of mentors. It features archival footage of Rios as a teen gang member filmed for a 1994 FRONTLINE documentary. The program will premiere on public television in Fall 2019.
- WORLD Channel/NALIP Beyond Graduation digital shorts. World Channel/NALIP
 (National Association of Latino Independent Producers) created five digital-first, shortform videos exploring stories of young people navigating life after high school
 graduation. Both WORLD and NALIP are providing mentoring and assistance to the
 selected project teams through an incubator program designed to provide hands-on
 professional development experience. WORLD Channel is distributing the programs on air and streaming online.
- FRONTLINE AI. This grant supports a two-hour FRONTLINE special investigation into the rapid developments in artificial intelligence and the race between the United States and China to gain domination in a technology field that is changing the nature of work and how economies function. The broadcast will be supported by additional original reporting and exclusive digital content, including a podcast. Customized video clips and educational assets will be made available through PBS LearningMedia.
- NOVA: SCHOOL OF THE FUTURE: This two-hour American Graduate NOVA special
 helps viewers understand how young brains grow, and how children stay motivated and
 engaged by examining the new field of learning science, an interdisciplinary field that
 encompasses the neuroscience, physiology and psychology of children. The film includes
 supplemental classroom, professional development and community engagement
 resources.
- *PBS NewsHour* features original stories focused on the state of education. The annual "Rethinking College" series takes a critical look at how higher education is evolving to

provide a better post-secondary learning experience, especially for people in underserved communities with underrepresented populations. The segments range from a closer look at the low college graduation rates among Latino males on campus and possible solutions, to second-chance Pell grants for prisoners and how coding boot camps are challenging the traditional college degree model.

• PBS NewsHour Student Reporting Labs (SRL) connects youth with public media in meaningful and substantive ways. The program's video journalism curriculum, teacher professional development and mentorships produce unique video stories that explore how national issues affect local communities. By amplifying youth voices in national and local dialogues, SRL embodies the education, journalism and service missions of the public broadcasting system. SRL works with schools, stations and students in 42 states to create content for national broadcast and online platforms, with a top priority to recruit and maintain diversity. SRL operates local Labs at 130 sites across the country, over 70 of which are at Title 1 schools.

More than 125 local stations have participated in American Graduate, extending the reach of national broadcast content in their local public affairs programs. Through hundreds of local station screenings and panel discussions, in partnership with local organizations, public media is connecting national programming to local interests. Over the past six years, public media stations have broadcast more than 20,000 hours of inspiring stories, providing context to the statistics, to increase understanding and highlight solutions. Further, they have convened more than 2,000 teachers nationwide to discuss how teachers and communities can address the dropout crisis and have told the stories of more than 9,000 stories of local American Graduate champions.

- DROPPING BACK IN is a series of half-hour documentary-style programs that outlines
 the enormous personal and societal costs of dropping out. The project includes profiles of
 former dropouts, whose stories help to understand the issues they faced and how the
 people and institutions helped them drop back in and move on with their educations and
 lives. This program is part of Kentucky Educational Television's (KET) Fast Forward
 learning system.
- Colorado Public Television (CPT) produced a local American Graduate documentary,
 <u>Powered by Story</u>, which collected the stories of vulnerable students as they attended
 creative workshops, from poetry and music engineering, to photojournalism and digital
 storytelling.
- St. Louis' Nine Network and award-winning filmmaker Frank Popper produced <u>Works in Progress</u>, a 30-minute American Graduate film that follows the lives of five students struggling to succeed in high school and the workplace. The students' stories address issues of economic and educational disparity that are often tied to race and class.
- Utah Education Network (UEN) created a mobile app, American Graduate Reality Check.
 The mobile app is designed to help teens and young adults understand how lifestyle, occupation and education can come together for a great future. American Graduate Reality

Check is ideally suited for education and career planning activities in Career and Technical Education courses, Financial Literacy workshops, and college bridge programs.

American Graduate Closing the Workforce Skills Gap

In 2018, CPB expanded American Graduate to focus on the high school diploma as a launching point to pathways for college and career success by addressing our nation's workforce skills gap. In 2017, the Bureau of Labor Statistics reported that there are nearly 6 million open jobs in critical, high-demand fields due in large part to an imbalance between workers' skills and open jobs. Further, Anthony Carnevale of the Georgetown University Center on Education and the Workforce states, "educational pathways are largely disconnected from the job market, which inhibits students' ability to see their future career pathways."

Public media can help address our nation's workforce challenge by partnering with businesses, education and workforce-related organizations; convening gatherings with partner organizations; creating content about the state of the workforce; highlighting career pathways; and telling stories of job opportunities and skills required to meet local industry needs.

- Connecticut Public Television is seeking out and telling stories of up-and-coming young talent in their new video series, "Making the Future." Complementing the videos are online resources for parents, educators and students to help identify new career options in advanced manufacturing and the pathways to those jobs.
- Kentucky Educational Television (KET) will produce programming, including a Town Hall Forum: Work Matters- Kentucky's Skills Gap and Opportunities and KET's Education Matters. KET will convene state and national workforce experts and partner organizations for broadcast content. Local partners include: Workforce Investment Boards, Department of Labor, Department of Corrections and reentry organizations, State adult education partners, National Center for Families Learning, veterans' organizations focused on reentry and community colleges.
- Idaho Public Television will produce a "Journey to Education" digital series to raise awareness of different paths young adults can take to further their education and find success in their chosen career. Partners include the State Board of Education, Idaho Career and Technical Education, Idaho Businesses for Education, Strategies 360 and the State Department of Education through the College Access Challenge Grant Program.
- Georgia Public Broadcasting partners with the Governor's Office and the Georgia
 Department of Education to create videos that promote student achievement in STEM
 and highlight STEM career pathways in the state. The <u>Fast Forward</u> initiative also
 provides state-aligned resources for teachers to help explain specific STEM concepts to
 students.
- WXXI-TV in Rochester, NY, will help audiences explore career options by raising awareness of successful career pathway opportunities offered in the region. A sampling of local partners includes: the NY State Education Department, Adult Literacy agencies,

Finger Lakes STEM Hub, Finger Lakes Advanced Manufacturing Enterprise, Monroe Community College's Economic and Workforce Development Center, Rochester Mini Makers Faire, the MAGIC Center at RIT and Workforce Development Boards.

- KUEN-TV in Salt Lake City, UT, aims to improve capacity for Utah learners to make well-informed decisions by reducing the stigma of technical education and working with local partners to address the skills gap. KUEN will produce online courses in partnership with Vegas PBS and WHRO in Norfolk, VA, produce career focused interstitials and update its UtahFutures portal with job comparison capabilities. Local partners include the Governor's Office of Economic Development, the State Department of Heritage and Arts, the Department of Workforce Services, the State Board of Education and the GEAR UP program.
- Alaska Public Media (KAKM) will bring awareness to the state of the workforce through
 a multiplatform promotion of the state's unique culture and infrastructure by highlighting
 change-makers and solutions, and host community events focused on problem solving,
 innovation and skills gap training. Local partners include the Anchorage Economic
 Development Corporation, the University of Alaska Workforce Programs, Cook Inlet
 Tribal Council and Best Beginnings.
- Alabama Public Television will produce local content, and partner with business, education and workforce related organizations to highlight the state of the workforce and career pathways. It will also connect job seekers with public media resources and those of trusted partners through a needs assessment, provide information on job opportunities and skills required to meet local industry needs, and collect data for local and national impact measurement and reporting. Local partners include Alabama Community Colleges, the State Department of Labor, Alabama Technology in Motion, the Alabama Technology Network and the David Matthews Center for Civic Life.

While stations strive to meet the needs of their communities, goals on how to serve a community are being pared back due to the lack of funding. In FY 2018 alone, CPB received 39 proposals from stations—requesting a total of nearly \$7.6 million—advancing ways in which stations can educate young Americans about career pathways and the skills needed for those jobs. Unfortunately, CPB could fund only 19 of the proposals, totaling \$3.7 million.

Lifelong Learning

Public media remains committed to lifelong learning, available to all citizens, to help strengthen our civil society and our democracy. Every day, stations provide people with opportunities to better their situation through GED support materials, teacher professional development, partnerships with colleges and universities to recruit minorities and first-generation college students, reading services for the blind, and workforce training and certification.

 Alabama Public Television partners with The Literacy Council and the Economic Security Work Group of the Children's Policy Council to support Birmingham's GED Network. The Network helps parents of at-risk students access GED training and testing so that they may improve their personal educational levels, ideally leading to enhanced resources available to their children.

- Arkansas Educational Television Network (AETN) provided more than 50 hours of professional development training for 600 teachers statewide last year.
- Educators in Pennsylvania, Delaware and New Jersey can receive state approved
 continuing education credits by participating in public television station WHYY's
 professional development courses on how to implement 21st Century Learning Skills in
 classrooms. Educators learn how to help their students create digital media and receive
 tips for integrating those skills into existing curricula and project-based learning
 approaches.
- KQED in San Francisco created KQED Teach, an online learning platform to support
 educators' growing media literacy needs by helping them develop the media skills
 necessary to bring media production to their learning environments. These courses are
 free and self-paced.
- Kentucky public radio provides its content, staff and technical support free of charge to the Central Kentucky Radio Eye, a non-profit reading service that serves more than 1,000 blind and physically handicapped listeners in the region.
- Vegas PBS (Las Vegas) hosts and maintains the Described and Captioned Media Program, which is a statewide collection of media programs and services for deaf, hardof-hearing, blind, or visually impaired students beyond the closed captioned and audio described programs broadcast on public media channels.
- Indiana public radio partners with local art museums and children's science museums, resulting in weekly on-air modules.
- East Tennessee PBS broadcasts weekly shows aimed at helping adults prepare for their GED exam and provides participants with a set of companion study books at no cost.
- Vegas PBS offers a program called "GOAL: Global Online Advanced Learning," and hosts a community computer lab of 21 free-to-use workstations designed to offer job training, GED testing, and food- and alcohol-handling certifications. The station offers 450 online, instructor-led certification courses ranging from Cisco IT certifications to veterinary assistant to medical records technician to home energy audit inspector to paralegal assistant to pharmacy technician to supply chain warehouse manager to food service manager to alcoholic beverage server. Last year 126,000 people completed one of the courses. All require less education than a 2-year AA or AS degree, with the goal of putting unemployed people to work very quickly. An independent economic impact evaluator, Applied Analytics, estimated that the station's local annual wage impact was over \$3.6 billion—disproportionately centered in low-income zip codes where educational access was a barrier to success. Vegas PBS is the single largest career instructor in the state of Nevada.

Emergency Alerting and Public Safety Communications

Locally owned and operated public media stations are innovators and peerless partners with public safety officials, working with law enforcement, schools, businesses and others to provide real-time support in times of crisis. Since September 11, 2001, CPB has invested in building local station capacity to assist emergency service providers. Currently in many states and local communities, public media stations' digital and broadcast infrastructure provide the backbone for emergency alert, public safety, first responder and homeland security services. Additionally, the public broadcasting interconnection system serves as a distribution point for the federal emergency alert messaging capability system overseen by the Federal Emergency Management Agency (FEMA), which sends messages from the President of the United States in the event of an emergency.

Through unique partnerships, public media stations customize the use of their infrastructures to support public safety in a variety of critical ways. Examples include equipping police cars with school blueprints when a crisis arises, providing access to 24/7 camera feeds for public safety challenges, connecting public safety agencies in real time and much more. Many stations serve as their states' primary Emergency Alert Service ("EAS") hub for weather and AMBER alerts. Local public television and radio stations also send emergency alert text messages through broadcast equipment to cell phone subscribers, reaching citizens wherever they are, even when the power is out.

"How do you communicate with people once they got on the road [in a hurricane evacuation]? Public radio became the answer. Have you ever noticed the evacuation signs on the interstate or highways, do you always notice what's at the base of that? It's a radio station, right? Every one of them is a public radio station. Florida public radio network got together and said, 'we'll be that voice when people evacuate' to give them updated information about what's going on, but more importantly where they are going ... The only signal that can get through in a disaster is a radio signal ... that radio may save your life."

Craig Fugate, Former Administrator of the Federal Emergency Management Administration

Local public television stations have partnered with the U.S. Department of Homeland Security to offer local first responders datacasting services that use the broadcast spectrum to securely transmit essential encrypted information to first responders in the field in real time and without the capacity constraints of traditional mobile or broadband delivery. The Department of Homeland Security has conducted several datacasting pilot projects that have demonstrated the benefits first responders receive by partnering with public television. Local public television stations throughout the country have pledged to reserve up to 1mpbs of their spectrum to expand these datacasting services on a national basis to support the FirstNet first responder communications network. In addition, local public radio and television stations participated in the Great California ShakeOut earthquake drill and have been exploring new ways for stations to help provide the fastest and most effective earthquake warnings.

"These pilots have proven that datacasting can be a reliable vehicle to get first

responders the situational awareness and information they need quickly and without disruptions. Through this partnership [with public television and public radio], we aim to further its mission of providing first responders with innovative tools and technologies to strengthen their ability to respond to the most pressing challenges faced during day-to-day and large-scale emergencies to better protect the nation."

Department of Homeland Security Science and Technology Department Press Release, October 5, 2016

Further, the FCC's Communications, Security, Reliability and Interoperability Council's (CSRIC) Working Group 2, June 2018 final report on "Comprehensive Re-imagining of Emergency Alerting" referenced earlier identifies three ways Next Gen TV, and specifically public television, can support and improve emergency alerting. Section 6.4 of the Report states:

"PBS and local public television stations play a crucial role in protecting communities by using datacasting to deliver essential information to individuals and first responders. These benefits are all made possible by public broadcasting stations' unique reach, reliability, and role across American, and are especially vital in rural and underserved areas."

Supporting CPB's appropriations request of \$495 million would allow stations to become more reliable and provide up-to-the-minute, around-the-clock information during emergencies. In addition, as America becomes home to more people who speak English as a second language, continued funding could help more stations translate their emergency alert information into a broader range of languages, helping stations better serve their local communities. A sample of the life-saving services that stations offer includes:

- WHUT-TV in Washington, DC partners with the U.S. Park Police to distribute helicopter and other video services during large-scale events in the city. This work has been critical during Presidential inaugurations, the Fourth of July and other events.
- Leveraging the TV broadcast "one-to-many" multicast delivery, Houston Public Media (KUHT) can support an unlimited number of public safety users with very limited bandwidth concerns. The station can deliver secure, encrypted IP data to targeted, multiple users while continuing its television broadcast service. With this targeted, encrypted data delivery system, for example, police can watch a helicopter aerial feed, firemen can watch a dashboard camera, another entity can send building blueprints and television viewers can watch a program all at the same time. Houston Public Media has provided these resources to several local and national public safety officials during numerous events in the last several years including the Republican Primary Presidential debate in Houston, the Final Four and Super Bowl sporting events, Hurricane Harvey and the flooding of 2016.

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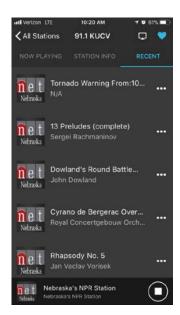
¹⁸CSRIC Final Report on "Comprehensive Re-imagining of Emergency Alerting." June 2018 https://www.fcc.gov/files/csric6wg29junereportcomppdf

- The Florida Public Radio Emergency Network (FPREN), a collaboration of 13 public radio stations headquartered at the University of Florida's WUFT-FM/TV in Gainesville, provides statewide multimedia updates during hurricanes or other emergencies to stations across the state, their websites, social media channels and on mobile devices via the Florida Storms app. The free app, which has been downloaded more than 100,000 times, provides geotargeted information such as live hurricane forecasts, evacuation routes and shelter details in addition to live streaming the closest Florida public radio station a particularly valuable feature for those evacuating from one part of the state to another. In September 2017, FPREN provided more than 81 hours of live, continuous coverage as Hurricane Irma moved across the Florida Keys and up the Gulf Coast.
- South Carolina Educational Television (SCETV) entered into a partnership with FPREN and launched a new emergency preparedness/weather tracking initiative called the S.C. Emergency Information Network (SCEIN). During Hurricane Florence, the public media stations provided live updates, recorded content, Facebook live events and on-air live reporting. SCETV serves as the liaison with the South Carolina Emergency Management Division, producing and coordinating the Governor's live briefings on all its channels. SCETV is the media of record for the state's Emergency Management Division.
- Ohio Educational Television Stations, Inc., in partnership with the Ohio Emergency Management Agency and the state's Broadcast Educational Media Commission (BEMC), began an initiative to strengthen the state's emergency messaging infrastructure. They created Ohio Digital EAS (OEAS), an alternative, secure IP-based delivery system for the dissemination of emergency information to the public and first responders utilizing all 12 of Ohio's public television stations that reach virtually all 11.5-million Ohioans. The focus of the project is to provide an alternative pathway to deliver all existing EAS, IPAWS (Integrated Public Alert & Warning System) and National Weather Service emergency messages for distribution to the public. It aggregates all emergency messaging that originates from the Federal Government or inside the state of Ohio, originating from the state EMA headquarters in Columbus.
- Alabama Public Television's (APT) microwave system carries much more than television signals, but also serves as the backbone of Alabama's Emergency Alert System, distributing national, state and local emergency broadcast signals to all radio and television broadcasters throughout the state. APT is also the hub for Alabama's Amber Alert system to track missing children.
- Vegas PBS provides a full range of public safety infrastructure, connectivity and services
 to local and statewide public safety agencies. In addition to providing datacasting services
 for Las Vegas metro police and Clark County School District police, Vegas PBS
 maintains a resilient alternate emergency operations center with equipment and media
 resources for use by state and local officials in times of emergency. Vegas PBS also
 provides training for state certified emergency response broadcasters.
- Through two CPB grants to NPR, more than 30 local public radio stations can provide text alerts and graphic alerts to listeners and viewers before, during, and in the aftermath

of emergencies. These emergency messages can be heard and seen on mobile phones, HD radios, "connected car" devices, Radio Data System displays, and online audio streaming. Six California public radio stations (Capitol Public Radio, KCBX, KCRW, KQED, KPCC and KPBS) have tested the use of the MetaPub emergency metadata alerting developed by the NPR-managed Public Radio Satellite System (PRSS) during the state-run Great California ShakeOut earthquake drill in 2016. Another 27 public radio stations across 10 Midwest states vulnerable to tornadoes received the hardware, software and training to connect with PRSS MetaPub. These alerts can bring better immediate emergency communications to audiences synchronized across radio and personal devices. Stations are beginning to use the alerts for a range of natural and manmade disasters and related public safety information, including weather forecasts, flooding, shelter information, and Silver and Amber alerts.



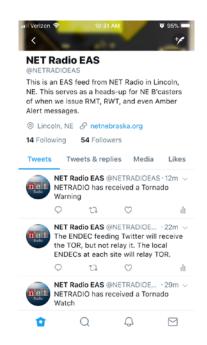
Above: Actual live text tornado alert broadcast by KGOU in Norman, OK, to targeted audiences on a car radio.



Above: Live tornado text warning broadcast by Nebraska's KUCV on a mobile phone. The text alert was synchronized with audio broadcasts and texts that also appeared on car radio dashboards and other mobile devices.



Above: Live tornado alert broadcast by Iowa Public Radio's WOI on a car radio.



Above: NET Radio in Nebraska is also able to tweet text alerts. This one was viewed on a mobile phone.

- A grant from CPB to NPR is enabling the PRSS to assemble three portable transmitter
 kits and two portable studio kits that can be shipped quickly in emergencies to public
 radio stations that have suffered damage to their facilities or who are unable to use their
 facilities. This loaner equipment will assist stations in continuing or restarting broadcast
 operations in the event of natural or other disasters, such as tornadoes, hurricanes, floods
 or wildfires.
- Maine Public Broadcasting Network makes its statewide system available to federal and state authorities in the event of an emergency requiring rapid notification of the state's population.
- South Dakota Public Broadcasting serves as the emergency alert service hub for the state as well as the primary outlet for AMBER Alerts and weather warnings.
- MontanaPBS is working with the Montana Governor's office in Helena, the offices of the
 Montana National Guard and Department of Emergency Services at Fort Harrison, and
 the Montana Broadcasters Association to create a public safety information and
 communication partnership. Once established, MontanaPBS would leverage its role as
 the state's widest-reaching state network, covering over 95 percent of the Montana
 population with over-the-air service, to distribute important public safety messages and
 information during an emergency.
- In early 2019, Tennessee public television stations WKNO, Memphis; WLJT, Lexington; WNPT, Nashville; WCTE, Cookeville; East Tennessee PBS, Knoxville; and WTCI, Chattanooga; started using part of their broadcast spectrum to deliver encrypted videos, files, alerts and other data (datacasting) to officials during emergencies and natural disasters.

Developing Civic Leadership through Journalism

Today, the challenges we face require new levels of thinking, innovation and collaboration. Community organizations often work in isolation, shouldering the burden of solving societal problems. Public media is an essential link, uniquely poised to add real value, especially for rural America. In many communities throughout the country, public media stations are the last locally operated and controlled media outlets. National news organizations often overlook heartland America except in times of natural disaster or human tragedy, but local public media stations devote themselves to telling the stories of hometown America every day.

CPB funding is a driving force in the growth of public media journalism. CPB supports many of the major public media news producers including *PBS NewsHour*, *FRONTLINE*, *Washington Week*, *In Principle*, *Native National News* and NPR.

The exceptional journalism that public media provides, including local news and documentaries, requires financial support. Stations face a trade-off – the more high-quality, local journalism they produce, the less they have available to spend on other services such as educational outreach and infrastructure maintenance. CPB's FY 2022 request will help stations continue their production

of local news and information on community issues, thereby developing the best possible, sustainable outcomes. Examples of such efforts include:

- Lakeland Public Television in Bemidji, MN, provides the only locally produced television news program originating in the rural area of North Central Minnesota.
- Georgia Public Broadcasting airs *Primetime Lawmakers*, a nightly television program covering the annual Georgia Legislative session. Interested Georgians can also watch live streams of the House and Senate sessions at the website www.gpb.org/lawmakers.
- Public radio in Arizona supports a variety of programs and initiatives to reach the many diverse, local cultures around the state. They broadcast in different languages and service the following reservations: Navajo, Hopi, White Mountain Apache, Hualapai, Havasupai, Yavapai, and Paiute as well as urban Native Americans.
- Boston's 89.7 WGBH Radio strives to make local connections with its news and talk programming that examines public policy, cultural changes and civic engagement. Each week, WGBH Radio broadcasts 15 hours of original programming that brings a wide range of local voices and opinions to their listeners.
- KET (Kentucky), with support from the Foundation for a Healthy Kentucky, produces *Health Three60* and KET special reports examining the unique factors affecting teen health today, including bullying, testing pressure, substance abuse and more.
- Connecticut's WNPR Capitol Region Reporting Initiative, Health Equity Report, Environmental Regional Reporting and Small Business Project have informed and engaged listeners across the state on a wide range of community issues and challenges.
- Colorado Public Television airs *Colorado Decides*, a series of candidate and issue forums as well as debates, creating an informed electorate which is vitally important for a thriving democracy.
- After the August 2016 floods in Louisiana, KRVS-FM Lafayette, WRKF-FM Baton Rouge, WWNO-FM New Orleans, and public television state network Louisiana Public Broadcasting produced broadcast and digital content to inform both those in the affected areas and audiences across the country of the recovery efforts. The news team produced feature stories, conducted interviews with key stakeholders and decision makers at the local, state and federal level, and created informational interstitials and digital content.

Local and Regional Journalism Collaborations

Public media's mission is to deliver value to the American people in the form of content that gives them the information they need to understand our changing world, raise their families, teach their children, improve their communities, spark intellectual curiosity and enhance daily life. With the reduced capacity of local newspapers and the diminished footprint of commercial

broadcast journalism, there is a widely recognized gap in local reporting. Meanwhile, public media stations have added over 700 journalists to local staffs over the past six years.

CPB seeks to increase the capacity of public radio and television stations to create high-quality original and enterprise journalism by supporting collaborations between public media stations. The purposes of these collaborations are twofold: to marshal resources of small and remote stations in ways that improve coverage and strengthen relationships between public media stations; and to create a new focus on under-reported news topics. CPB believes that connecting stations to produce news coverage collaboratively strengthens public media's position as a trusted source of fact-based journalism. When news organizations are pooling resources, sharing lessons learned, and working together on in-depth and time intensive projects, the result is stronger than the sum of its parts.

A February 2019 Knight Commission Report on Trust, Media and Democracy recognizes public media's successful role in national-local journalism. It states, "These regional collaborations among news entities in the public broadcasting field are valuable. It is now time to bring the learning from the current regional-local initiatives to an alliance for national-local collaborations. By partnering national and local public broadcasters, this initiative would enhance the public broadcasting model by further expanding local news coverage and by giving national organizations greater ability to cover local aspects of larger stories." ¹⁹

In the last three years, CPB has helped launch 13 regional collaborations, creating 90 newsroom positions including 16 editors. These collaborations increase local journalism capacity by allowing public media radio and television stations to better coordinate and share their reporting expertise and resources to undertake ambitious journalism projects in multimedia formats. The collaborations also contribute stories to national public media programs such as *PBS NewsHour* and NPR's *Morning Edition* and *All Things Considered*.

The on-going collaborations are:

- <u>Ohio Valley ReSource</u> seven public media stations in Kentucky, Ohio and West Virginia cover economy, energy, environment, agriculture, infrastructure, the opioid epidemic and health in the Ohio Valley region. Lead station is Louisville Public Media.
- <u>Illinois Newsroom</u> seven public media stations in downstate Illinois focus on political issues, education, agriculture, health and the environment. Lead station is Illinois Public Media (WILL-Urbana).
- <u>Alaska's Energy Desk</u> three Alaska public media organizations focus on statewide energy issues and rural coverage. Lead station is KTOO Public Media, Juneau.
- <u>Elemental: Covering Sustainability</u> five stations in Arizona, California and Colorado create a news service covering emerging solutions to water resources, renewable energy, and urban challenges. Lead station is Arizona PBS at Cronkite School of Journalism, Phoenix.

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¹⁹ Knight Commission on Trust, Media and Democracy, Crisis in Democracy: Renewing Trust in America, Washington, D.C.: The Aspen Institute, February 2019.

- <u>California Dream</u> four stations and non-profit newsroom CALMatters.org create a statewide, multiplatform news service with a focus on statehouse coverage, the economy, and quality of life. Lead station is Southern California Public Radio/KPCC.
- <u>Kansas News Service</u> four stations provide a statewide news service with a focus on statehouse politics, health, education, natural resources, rural life and agriculture. Lead station is KCUR, Kansas City.
- Mountain West News Bureau six stations in Idaho, Colorado, Montana, Wyoming and Utah focus on natural resource management, Indian Country, public lands, small towns and the rural West, and expanding growth in cities. Lead station is Boise State Public Radio.
- <u>StateImpact Pennsylvania</u> four stations provide a statewide news service on the energy industry and environmental impact of production. Lead station is WITF, Harrisburg.
- <u>Indiana Public Broadcasting News</u> nine public media stations in Indiana form a statewide news network to cover government and politics; economics and business; environment and energy; health, science and technology; and education. Lead station is WFYI-Indianapolis.
- New England News Collaborative eight public media stations in Massachusetts, Maine, New Hampshire, Connecticut, Vermont and Rhode Island focus on energy, climate, transportation, infrastructure and immigration in the six-state region. Lead station is Connecticut Public Broadcasting Network (CPBN).
- <u>Texas Station Collaborative</u>- four major public radio stations (Dallas-Fort Worth, Austin, San Antonio, and Houston) coordinate and edit multi-station and statewide reporting projects and establish the infrastructure to organize editorial resources from public broadcasting newsrooms across Texas.

Through years of strategic investments, CPB has laid the groundwork for a network of local and regional public media news organizations that, in partnership with national producers, strengthens public media's role as a trusted news source. Leveraging public media stations' local ownership as a foundation for nationwide collaboration, CPB has invested more than \$33.5 million since 2009 to help launch 34 local, regional and single-topic collaborations as well as joint regional newsroom operations. These partnerships connect 139 public media stations in 42 states, providing the basis for a vibrant multimedia network of high-quality journalism.

As journalism capacity expands, public media needs to attract new editorial leaders from outside the system and better develop potential leaders inside the system to uphold high editorial standards and engender ongoing communication among local/regional/national editorial leadership. As stations bring in new editorial leaders, they must also ensure that editors reflect the great diversity of the American people. The federal appropriation will allow CPB to continue to support stations in diversifying their news coverage, audience and newsroom staff.

Content that Matters and Engagement that Counts

Public media is distinguished by content that matters and engagement that counts. CPB funding allows stations to provide content of consequence and to partner locally with educational, business, philanthropic and community leaders who see public broadcasting's ability to strengthen our nation.

During the winter of 2018/2019, Firelight Films, the award-winning production company committed to making films about pivotal events, movements and people in American history, is partnering with public media stations to present the latest film from Stanley Nelson and WNET, "Boss: The Black Experience in Business." The CPB-supported film illuminates the story of the African American achievements that shaped this country and is now woven into the fabric of our history. The documentary introduces viewers to stories of black business in the United States from the days of slave labor to free blacks to billionaires. The two-hour broadcast will be complemented by a digital presence via website, social media support, and educational resources for PBS LearningMedia. In addition, Firelight Media will present, "Creating A New World: The Transatlantic Slave Trade," a four-part television series on the transatlantic slave trade. The series will explore aspects of an enterprise that peopled continents, transformed economies, and shaped the modern world. The project will be supported by a robust educational and community engagement plan.

In 2019, Latino Public Broadcasting and WNET, with support from CPB, will examine the life and career of Raúl Juliá in its production, "*Raul Julia: The World's A Stage.*" From his early days on local stages in Puerto Rico to stardom on Broadway and in Hollywood, the film uses Julia's interviews, home movies, and more to lead viewers into each phase of his story. His life as an artist is illuminated by commentary from those who knew and worked with him: Meryl Streep, Anjelica Huston, William Hurt, Edward James Olmos, Esai Morales, and family members of Juliá.

"Stories have the power to remind one another of our shared humanity, to strengthen and build the connections between people, to teach the value of listening, and to weave into the fabric of our culture the understanding that everyone's story matters." - Dave Isay, Founder and President of StoryCorps

Since its inception in 2003, StoryCorps has given nearly 500,000 Americans the opportunity to record interviews about their lives. The recordings, archived at the Library of Congress, make up the largest single collection of human voices ever gathered. Many of the recordings have been made in CPB-funded mobile booths that travel across the country, in studios at public radio and TV stations, and in the homes of participants. Selected stories are shared through StoryCorps' weekly podcast, NPR broadcasts, animated shorts and digital platforms. The latest StoryCorps initiative, launched in January 2018, is "One Small Step." It is designed to help bring together a politically divided United States by recording conversations between people with different political viewpoints, empowering participants and the people who hear these conversations to cross partisan divides and better understand each other.

Localore, an award-winning multimedia project produced by AIR in partnership with local stations, is committed to discovering stories from rural, urban, and high-poverty communities. A

catalyst for digital innovation and community engagement, *Localore* helps stations create and share content across platforms and connect local communities with each other. Twenty-five local radio and television stations have participated to date including KOSU (Stillwater, OK), KUT (Austin, TX), KVNF (Paonia, CO), Prairie Public Broadcasting (Fargo, ND), WEAA (Baltimore, MD) and WUWM (Milwaukee, WI).

In the past several years, public media has documented the opioid crisis on national programs like *PBS's FRONTLINE*, *NewsHour* and NPR newsmagazines, as well as hundreds of public television documentaries, public radio reports, digital pieces, town-hall meetings, and other events. WNED-TV in Buffalo, NY, produced "*Understanding the Opioid Epidemic*," which premiered on PBS on January 17, 2018. This one-hour program captures the story of the opioid crisis through personal stories of people and communities impacted by opioids and interviews with experts. WNED developed a community engagement toolkit with a family and community discussion guide and curriculum overview as a guide to hold public or targeted screenings and discussions and to educate young people.

In addition to national and local content, public media stations are bringing together health experts, agencies and others for vital community conversations about opioid addiction. A few recent examples include:

- Maine Public Broadcasting's public affairs program "*The Maine Event*" interviewed members of the Maine Opioids Task Force about the problem and possible solutions in Maine.
- In March 2018, seven Pennsylvania public media stations (WHYY, WIFT, WLVT, WPSU, WQED, WQLN, and WVIA) launched a multi-year, multi-platform initiative to combat opioid addiction, focusing on solutions and providing help and resources for anyone suffering from addiction, including family members who are affected by the crisis. In September 2018, the stations aired a series of 14 educational stories around the Commonwealth dealing with stigma, prevention and treatment. In addition to broadcasting national and local content, they directed viewers/listeners to state and local opioid resources, including www.battlingopioids.org.
- ideastream's WVIZ-TV in northeast Ohio aired a half-hour "<u>Be Well"</u> special, which explored a range of issues associated with the opioid crisis and posted a list of community resources and related programs online.
- West Virginia Public Broadcasting's "<u>The Legislature Today</u>" featured a discussion with Elaine McMillion Sheldon, producer and director of the Oscar-nominated documentary film "Heroin(e)," along with Huntington Fire Chief Jan Rader, and Family Court and former-longtime Drug Court Judge Patricia Keller, who were featured in the film about three women in Huntington battling the state's opioid epidemic.

Americans value content from their public media system that enlightens, inspires, educates and entertains – one that presents ideas and information in a balanced, trustworthy way. In 2018, public media programs won 10 of the 30 Peabody Awards, and CPB-supported public media organizations won 31 National Edward R. Murrow Awards, including the lion's share of awards

presented in the radio categories by the Radio Television Digital News Association. In addition, PBS once again led all networks with 44 nominations for News & Documentary Emmy Awards.

In 2018, PBS KIDS was ranked, again, Number One as the most educational media brand compared to a range of other broadcast and cable networks. With over 80 percent of all U.S. households watching PBS every year and with more than 36 million public radio listeners a week, public media is clearly delivering on its mission.

Veterans Initiative

Over the past several years, CPB, working with public television and radio stations, launched Veterans Coming Home, a content and community engagement project that highlights veteran success stories as they reintegrate into civilian communities. Stations partner with national organizations such as Points of Light, Leave No Veteran Behind, Veterans Crisis Line, Team Read, White & Blue, and the Armed Forces Foundation to help connect transitioning veterans with information and resources that can help them thrive.

Public media recognizes the contribution and sacrifices of the men and women serving in our Armed Forces through content such as "Military Medicine: Beyond the Battlefield," which tells the personal stories of physicians, military personnel, wounded warriors and their families in terms of how medical advances are changing lives; as well as StoryCorps' Military Voices initiative and the annual Memorial Day and Fourth of July concerts broadcast and streamed by PBS to millions. Much of this content is supported by local community engagement efforts to increase awareness and understanding about our nation's veterans. Additional CPB-funded veterans coverage includes:

- AMERICAN HOMEFRONT is an award-winning public media collaboration focused on the lives of military personnel, veterans and their families. American Homefront chronicles the challenges and successes of the American military, emphasizing the changing nature of military service and the transition of recent veterans into civilian life. Station partners include WUNC (Chapel Hill, NC), KPCC (Pasadena, CA), KPBS TV/FM (San Diego, CA), WUSF FM (Tampa, FL), Texas Public Radio (San Antonio, TX) and North Country Public Radio (Canton, NY).
- TED TALKS WAR AND PEACE- Presented by ITVS, this TED-style one-hour special examines issues related to war and peace, focusing especially on how post-9/11 veterans are affected by both as they transition out of the military. From the latest PTSD research findings and state-of-the-science prosthetics, to the travails and triumphs of veteran caregivers, the special will feature contributions from experts in the field and high-profile speakers.
- THE VIETNAM WAR (2017), a film by Ken Burns and Lynn Novick, is a multi-part documentary film series that sheds new light on the military, political, cultural, social and human dimensions of a tragedy of epic proportions. The Vietnam War took the lives of 58,000 Americans and as many as three million Vietnamese; polarized American society as nothing has since the Civil War, fundamentally challenged

Americans' faith in our leaders, our government, and many of our most respected institutions; and called into question the belief in our own exceptionalism.

• The Great War (2017), by American Experience coincided with the 100th anniversary of America's entrance into World War I. The project highlighted important themes, including the emergence of American power in world affairs; women's changing roles during wartime; and the heroism of African American soldiers on the battlefield despite deep-seated discrimination at home and abroad. The program has multiple components including digital and PBS LearningMedia assets.

At the local level, CPB provides stations grants to produce multimedia content, work with community-based partners, inspire greater dialogue around issues and solutions, and facilitate veterans' transition to civilian life. Forty-one stations applied for CPB veterans' funding, requesting \$1.25 million. CPB was only able to fund 14 stations totaling \$410,000. With an increased appropriation, CPB could help fund more of the following types of station services:

- Nashville Public Television, the Tennessee State Museum, National Women Veterans of America, The Mission Continues and VA Mobile Vets Center partnered to host a screening of *Makers: Women in War* at the Tennessee State Museum, followed by a panel discussion. The VA Mobile Vet Center responded on the site to veterans seeking help on claims status, benefits and other services.
- WVAS-FM in Alabama links veterans with local support organizations such as HUD, the VA, 2-1-1, the National Association of Black Veterans, and CivilianJobs.com.
- At a quarterly held Vegas PBS Veteran's Job Fair, 100 pre-registered veterans, active military or military spouses met with 34 employers who were offering 700 jobs at \$17 an hour or more.
- Connecticut Public Broadcasting Network created a state-of-the-art teaching facility right inside its own building to serve local veterans through its Veterans Vocational Training Program.
- KPBS (San Diego, CA) partners with the non-profit literary arts organization, So Say We All, part of whose mission is to provide a platform for America's military veterans to tell their stories in their own words. The group has published "*Incoming*," an anthology of true stories by veterans about their experiences returning home from deployment and transitioning back to civilian life. KPBS has adapted "*Incoming*" into an ongoing public radio series.
- Kansas City's KCPT co-produced and broadcast a live, outdoor Memorial Day Concert honoring veterans and those currently serving. The event was attended by 50,000 people and was viewed by thousands more. In June 2017, KCPT held a Veteran Playlist joint event with their Triple A format radio station "The Bridge 90.9." The project invited post-9/11 veterans, their families and the community to share stories through social media about their service experiences.

- WUCF-TV in Orlando presented a special preview of the Academy Award nominated documentary "Last Days in Vietnam." Prior to the screening, WUCF showed interviews with local veterans that were produced by the station as a part of the Stories of Service project (http://www.wucftv.org/veterans/stories-of-service/). Following the screening, panelists from diverse backgrounds provided insights on their experiences in Vietnam. More than 200 people attended the event including local Vietnam War veterans and many Vietnamese Americans.
- Wisconsin Public Television and Wisconsin Public Radio partnered with the Wisconsin Veterans Museum to preview Veterans Coming Home content and share "Wisconsin Remembers: A Face for Every Name" - a traveling exhibit that features a photo for each of the 1,161 Wisconsinites officially listed on the Vietnam Veterans Memorial in Washington, D.C.

Serving Diverse and Minority Communities

In the words of the Public Broadcasting Act, one of public broadcasting's greatest priorities is to address "the needs of unserved and underserved audiences, particularly children and minorities." CPB is committed to maintaining a public service media system that draws on the widest possible range of cultural and social perspectives of the individuals who make up our nation. One key way CPB meets the needs of diverse communities is by providing funds to five entities that make up the National Minority Consortia (NMC): Center for Asian American Media (CAAM), Latino Public Broadcasting (LPB), Black Public Media (formerly National Black Programming Consortium (NBPC)), Pacific Islanders in Communications (PIC) and Vision Maker Media (VMM, formerly Native American Public Telecommunications), as well as other producers providing unique programming for radio listeners. These organizations provide much needed content about diverse communities to the public television system.

Further, CPB provides Community Service Grants to 78 minority public radio stations and provides additional support to minority radio stations with funding to Native Public Media, the Latino Public Radio Consortium, UnderCurrents and other organizations to provide stations with additional capacity. These organizations assist stations with fundraising, programming, and other efforts to enhance public service to diverse communities. Funding minority radio station services affords stations operating in unique and challenging environments additional capacity. For example, in Native American communities, CPB provides community service grants to 36 local public radio stations that transmit culture, tribal languages, health and economic news, electoral information, and serve as emergency lifelines. Tribal lands are among the most remote and least connected areas in the nation, with a broadband penetration rate of less than 10 percent, intermittent cell phone service, and with only one in three Native families having access to analog (landline) telephone service. Without CPB's grants to minority stations such as these, many Americans would lack access to information and basic educational services.

To foster a diverse workforce and on-air talent, CPB-funded projects include:

 WGBH's Next Generation Leadership Program, the Firelight Documentary Lab for diverse media makers, and the Jacquie Jones Memorial Scholarship Fund to support media projects created by diverse filmmakers.

- WNYC's "Werk It" podcast festival to increase the number of women hosts in public radio, and Talent Quest, which discovered Glynn Washington, host of "Snap Judgment" that airs on over 250 public media stations.
- AIR's mentorships, fellowships, seminars and New Voices scholarships connect early-career and professional content creators to professional development opportunities.
- Public media participation in industry conferences such as the National Association of Latino Independent Producers (NALIP) Media Summit and AFI Docs, which bring together diverse content creators and industry leaders to explore trends in media and filmmaking.

To attract diverse audiences to public media, CPB supports the development of innovative content and formats including:

- Chicago Public Radio, which introduced Vocalo Radio in 2007 to reach a more diverse audience by emphasizing listener-contributed content. Today, Vocalo offers a contemporary music mix of hip-hop, R&B, indie rock and dance complemented by community engagement and community-based programming. With support from CPB, Vocalo and Chicago Public Radio are further developing this "Urban Alternative" format based on insights from market research and focus groups with listeners. Other public media stations are applying the findings as they implement the format in their markets.
- Southern California Public Radio, which develops English-language, multimedia news coverage for a diverse and diversifying Southern California community, including the daily two-hour public affairs program "*Take Two*."

CPB's television programming funds also support the work of an independent television service as provided for in the Public Telecommunications Act of 1988. With this funding, the Independent Television Service (ITVS) provides independent producers with financial, production, and promotional support for their projects which, in turn, provides high-quality, nonfiction broadcast and digital programming to the public media system. ITVS curates the primetime broadcast series, *Independent Lens*, public television's largest showcase of original documentary films, and expands the impact of the documentaries through targeted engagement strategies.

Collaboration and Capacity Building

The Corporation for Public Broadcasting continually seeks to promote collaboration and capacity building within the public media system to help stations achieve efficiencies while increasing services to local communities. Our collaboration grants seek to strengthen investments in direct audience services, including local content creation, and more cost-effective infrastructure; to maximize efficient use of technology; reduce costs; and increase long-term sustainability. In this challenging fiscal environment, these best business practices are more essential than ever.

CPB makes strategic systemwide investments, helping public media organizations connect people to content whenever and wherever they choose. The appropriation provides CPB a leadership role in helping fund and foster a culture of innovation at local stations, which directly

benefits the American public and advances a civil society. Building on our work, in 2018, CPB continued its assessment of the system's digital infrastructure, developed content creation capacity, supported buildouts of different digital services, provided station managers with expertise on how to lead their stations in the digital era, and supported them in super-serving local and national audiences across digital platforms. To date, CPB supported stations and projects include:

- More than 200 stations participated in a digital capacity and maturity assessment. The project identified and analyzed infrastructure needs and evaluated public media's readiness to serve the American public, whose media consumption patterns have changed significantly over the past few years. Based on the findings and recommendations from this project, stations and national organizations are working collaboratively to build out a shared technical infrastructure as the foundation for public media's digital future that will meet anticipated service needs with data-driven decision making and strategies.
- Staff at 25 stations participated in a six-month immersive professional development initiative. Through in-person and virtual sessions, participants gained expertise in digital audience development, platform strategies, and data analytics and metrics. In 2018, 50 more public television stations participated in this professional development program.
- Eight stations including WFYI in Indianapolis, IN; KEUD in Salt Lake City, UT; KLRU in Austin, TX; WCVE in Richmond, VA; WPT in Madison, WI; GPB in Atlanta, GA; Cascade Public Media in Seattle, WA and WMHT in Albany, NY, hosted training workshops for their staff and nearby public media stations to learn directly from digital and social organizations on how to create content in formats that work best across digital platforms. There was tremendous interest in the workshops, with more than 320 public media employees across the country participating.
- In 2018, three stations revamped their organizational structure and allocated significant funds for digital staff, initiatives and productions to serve local audiences with digital-first content across multiple platforms:
 - At ideastream in Cleveland, Ohio, digital thinking and culture are cascading to all parts of the organization — improving efficiency and effectiveness of their broadcast and digital strategies to best serve the residents of Ohio.
 - WBHM-FM in Birmingham, Alabama, piloted new digital fundraising strategies that increased their spring fund drive by 33 percent. Additionally, the station developed and produced its first-ever podcast series, a series that focuses on regional public affairs.
- The General Manager at UNC-TV in North Carolina believes that the station has been "transformed from a television station to a multiplatform publishing company" because of the leadership training and the new understanding of how to create workflows in digital content production and revenue generation through digital underwriting. Next year

this effort will expand from 3 stations to 20 stations across the public television and radio system.

- With input from stations and media and technology experts, a digital strategies manual (playbook) was developed that provides repeatable and scalable frameworks, strategies and educational materials to help stations across the system implement digital strategies and initiatives.
- Stations in Pennsylvania, Minnesota, Washington, Oregon, Louisiana, Tennessee and Virginia are creating YouTube specific series about their communities to tell authentic stories and engage younger audiences with their local communities.

The digital age has drastically changed the American media environment. With more choices for news and information than ever before, audiences now decide when, on what platform, and from whom they will get their news and information. As technology evolves, the needs and expectations of audiences will continue to change.

Rising to that challenge requires public media to invest in shared technology that reduces redundant costs and labor across the system, while also enabling stations to engage more effectively with audiences across the rapidly growing range of digital channels—from websites to apps, new video platforms to smart speakers.

CPB is investing in new technologies and organizational change to ensure that the public media system remains relevant in the 21st-century media landscape; however, an increased appropriation is needed to improve the system's digital resources. With additional funding, CPB can invest in new technologies and infrastructure that benefit the entire system, so that stations can then strategically focus their limited resources on creating additional local content and services. This investment combination will enhance our ability to meet audiences where they choose and will enrich their public media experience.

Conclusion

Fifty years after passage of the Public Broadcasting Act, this uniquely American public-private partnership is keeping its promise to the American people by providing a safe place on-air and online where children can learn; providing high-quality educational content for teachers in the classroom, learners at home and on the go; and providing reliable and trusted news and information. Public media is clearly making a difference in the lives of individuals and communities across the United States as a trusted provider every day, including in emergency situations.

Private donations and existing funding sources can and do help defray costs for the much-honored programs of public television and radio—nonfederal funding represents five of every six dollars invested annually in public broadcasting. However, the federal investment is indispensable to sustaining the operations of public broadcasting stations, capitalizing on the benefits of an integrated system, fostering stations' public service mission and community-based accountability, and ensuring universal access to which the Public Broadcasting Act aspires.

We ask this Congress to signal a strong sense of purpose, momentum and commitment for noncommercial media content that only public broadcasters are motivated and prepared to provide on a variety of emerging digital platforms. Ensuring access for all Americans to high-quality educational programs, diverse and representative content, life-saving public safety services and reliable and comprehensive journalism is an irreplaceable investment in local communities, the education of our youth, the engagement of our citizens, and the health of our democratic system.

FY 2022 PROPOSED APPROPRIATIONS LANGUAGE

Federal Funds

CORPORATION FOR PUBLIC BROADCASTING

For payment to the Corporation for Public Broadcasting ("CPB"), as authorized by the Communications Act of 1934, an amount which shall be available within limitations specified by that Act, for the fiscal year [2020] 2022, \$495,000,000: Provided, That none of the funds made available to CPB by this Act shall be used to pay for receptions, parties, or similar forms of entertainment for Government officials or employees: Provided further, That none of the funds made available to CPB by this Act shall be available or used to aid or support any program or activity from which any person is excluded, or is denied benefits, or is discriminated against, on the basis of race, color, national origin, religion, or sex: Provided further, That none of the funds made available to CPB by this Act shall be used to apply any political test or qualification in selecting, appointing, promoting, or taking any other personnel action with respect to officers, agents, and employees of CPB: Provided further, That none of the funds made available to CPB by this Act shall be used to support the Television Future Fund or any similar purpose.

Report Language

The Committee proposes an advance appropriation of \$495 million for the Corporation for Public Broadcasting (CPB) for fiscal year 2022. In 1975, Congress first agreed to begin providing CPB with a two-year advance appropriation to support long-range financing planning and to insulate programming decisions. This commitment of future federal dollars helps leverage investments from other sources and gives producers essential lead time to plan, design, create, and support programming and services.

CPB uses funding to provide grants to qualified public television and radio stations to be used at their discretion for purposes related to program production or acquisition, as well as for general operations. CPB also supports the production and acquisition of radio and television programs for national distribution. In addition, CPB assists in the financing of several system-wide activities, including national satellite and terrestrial interconnection services and the payment of music royalty fees, and provides limited technical assistance, research, and planning services to improve system-wide capacity and performance.

SECTION II--Interconnection Funding Request

CPB appreciates the \$20 million provided for interconnection in FY 2019 as it continues to contract for upgrades and replacement of the public broadcasting interconnection system. For FY 2020, CPB requests a \$20 million appropriation for the further costs associated with replacing the public broadcasting interconnection system, both television and radio, and for other technologies and services that create infrastructure and efficiencies within the public media system. Congress has regularly funded multi-year interconnection projects since it created the Corporation for Public Broadcasting. Since 1988, Congress has supported a separate appropriation for public media's interconnection needs.

In the Consolidated Appropriations Act of FY 2016, Congress broadened the funding language from public television to include public radio by providing CPB with \$40 million to begin the upgrade and replacement of the "public broadcasting interconnection system." While technical and financial details for television and radio interconnection are included separately in this budget request, CPB is requesting one interconnection appropriation to support both interconnection systems.

Further, in response to OMB and Congress' request for smaller, more regular appropriations for interconnection, CPB has moved to an annual, smaller, separate appropriation for interconnection. CPB worked closely with PBS and NPR on project cash-flow modeling to determine the minimum amount needed annually to support the interconnection systems. Our FY 2020 request reflects these annual expenses and allows for CPB to invest in technologies and services that advance the public media system and benefit the American people. Non-interconnection related investments in the system will be done in consultation with the national organizations and system representatives.

Interconnection Background

Interconnection is the backbone of the public broadcasting system. Congress recognized the need for an interconnection system in 1967 when it passed the Public Broadcasting Act and authorized the "establishment and development of one or more interconnection systems to be used for the distribution of public telecommunications services so that all public telecommunications entities may disseminate such services at times chosen by those entities." [47 USC 396 (g)(1)(B)].

The public television interconnection system is operated by the Public Broadcasting Service (PBS), and serves other national public television distributors, state and regional public television networks, individual public television stations, and individual producers to distribute television programming and related materials to 168 non-commercial, educational television licensees in all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, and American Samoa. These licensees that hold approximately 20 percent of the Federal Communications Commission's television licenses reach nearly 100 percent of the U.S. population, from large cities to rural and tribal areas, with quality educational and cultural programming.

In addition, the public television interconnection system connects to the NPR Network Operations Center (NOC) and five television joint master control facilities (two of which were funded by CPB to encourage system efficiency and consolidation of services) and enables

distribution of programming to American servicemen and women overseas via the Armed Forces Radio and Television Service and for audiences around the globe via the Voice of America.

The public radio interconnection system, known as the Public Radio Satellite System (PRSS), and managed by NPR, interconnects nearly 400 stations via satellite downlinks, internet and local connections, which provide content for nearly 1,300 stations. The system provides a common, shared platform for reliable, high quality, cost-effective distribution for all types of program providers in public radio, including NPR, Public Radio International, and American Public Media, as well as more than 100 registered independent producers and distributors. PRSS station broadcasts reach 95 percent of the U.S. population; listeners served by the PRSS are located throughout the U.S. and its territories. As part of its mission to distribute high-quality, educational programming to the country's increasingly diverse population, PRSS provides satellite transmission services free of charge to distribute programming that targets unserved or under-served audiences. Specifically, the PRSS currently extends nearly \$1 million annually in full-time in-kind support to Native Voice One, a program service targeting Native American listeners, the African American Public Radio Consortium, and to Satélite Radio Bilingüe, a Spanish-language program service. The network also serves the American population as a national emergency-communications resource, providing Presidential-level alerts from FEMA.

Replacement of the public television and radio interconnection systems has been necessary several times, with each being funded by the federal government (see Interconnection Funding History, Appendix E). Since 1988, Congress has supported a separate appropriation for public media's interconnection needs. The most recent replacement of the television interconnection system was between fiscal years 2004 and 2007 at a cost of \$120 million for a 10-year (2006-2016) facility that was predominantly satellite-based and consisted of the most up-to-date technology at that time. The public radio interconnection system was last replaced between fiscal years 2008 and 2010 at a cost of \$78 million. CPB, in turn, awarded grants to PBS and NPR, respectively, to design and build the interconnection systems and lease satellite transponder space.

As the steward of the federal appropriation, CPB seeks to ensure that federal appropriations for public broadcasting are spent in the most cost-effective and technologically efficient manner possible on behalf of the public media system and the American people. Accordingly, in June 2015, CPB engaged an independent consultant, Cognizant Technology Solutions (Cognizant), to analyze options for replacement of the television interconnection system and to recommend solutions that will serve public television in view of the changing media and technology landscape.

Cognizant's public television report, which was completed in December 2015, helped CPB and the public television system understand the strategic technology opportunities and challenges it faces in building an interconnection system, and provided a blueprint for how to practically and flexibly build an interconnection system suited to the system's needs and tailored for its future. Over the last several years, CPB, PBS, and public television station leadership have taken steps to deploy the most cost-effective, technologically efficient interconnection solution.

In January 2016, CPB engaged Cognizant to review the interconnection needs of the public radio system and work with NPR to review its plans and processes, as it did with PBS. In June 2016, Cognizant endorsed NPR's interconnection proposal stating, "No other alternative discussed or examined – including commercially available options – is more cost effective or likely to result in success than the one analyzed in the request." Cognizant further stated in its Report that it "agrees with PRSS' proposed selections of technologies, which will allow a transition from the current satellite-based platform with some terrestrial distribution to a fully terrestrial-based platform at an appropriate future time." This architecture design will help enable collaboration between the public radio and public television interconnection systems during the next five to ten years.

Public Television Interconnection

The PBS replacement for television interconnection is broken into two parts: Stage 1, which includes transitioning the non-linear, non-real time (NRT) file delivery portion of the interconnection system to a terrestrial, cloud-based system; and Stage 2, which considers future options for the delivery of linear and live content.

Stage 1 deployment of the full NRT file delivery system is underway and on track. At present, the first 75 sites are nearing completion with the expectation that they will all be in production with the new system in Q4 2018. This will allow the current/old file delivery system to be decommissioned. In practical terms, this will enable termination of some satellite capacity and existing support contracts for the old system, realizing some of the previously anticipated cost savings. Additional Stage 1 work through 2020 will bring additional, new users onto the new file delivery system and introduce incremental software upgrades to reach the full service-based functionality for the system.

Working with CPB, PBS will begin Stage 2 research and planning in Q1 2019 – Q2 2019 to determine how best to expand the Stage 1 terrestrial delivery functionality to include linear and live content, further integration with digital delivery infrastructure, enhanced station submission capabilities and upgrades to the system. PBS and other public television stakeholders will work through the technical details. This staged approach proposed by PBS was one of Cognizant's recommendations and represents the expected evolution of the use of the infrastructure deployed in Stage 1.

As this work is undertaken, PBS is also mindful that significant technological developments will require infrastructure changes on the part of PBS, licensees and distributors. The broadcaster transition to the Advanced Television Systems Committee (ATSC) 3.0 digital transmission standard, approved by the FCC in November 2017, will require the interconnection system to support and deliver supplemental content and functionality, such as multicast channels and access to related information, enhanced public safety alerting, expanded accessibility for the hearing impaired, and higher quality audio and video. As part of this, an upgrade to signal processing and related technical modifications will be necessary to accommodate the distribution of media in the emerging format of 4K Ultra HD.

Public Television Interconnection Finances

Cognizant's report on the public television interconnection system provided recommendations on how to deploy the most cost-effective, technologically efficient interconnection solution. In response to the Cognizant Report and subsequent RFP process, in February 2017, PBS resubmitted an interconnection proposal to CPB that totals \$150 million over ten years. The new proposal is substantially less expensive than the original proposal of \$197 million and is less than Cognizant's cost estimate of \$170 million. In March 2017, the CPB Board of Directors authorized CPB management to enter into an agreement with PBS to provide up to \$56.7 million to build out the initial stage of the public television interconnection system. Following completion of PBS's research and planning for Stage 2 by the end of 2019, CPB and PBS will discuss the detailed scope of work and corresponding grant request for allocation of appropriated funds, which will need approval by the CPB Board of Directors.

Public Radio Interconnection

The projected cost of deploying the next public radio interconnection system is \$53.5 million. The federal appropriation would enable the current satellite-and-internet delivery system to be refreshed, rehabilitated and maintained with next-generation equipment and software. Rapid changes in technology, together with the current equipment reaching the end of its useful life and the inability of acquiring replacement parts, are the critical reasons the system needs replacement or refreshing.

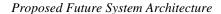
The current PRSS infrastructure distributes most content to local stations using broadcast transmission capability pursuant to a lease agreement with Intelsat for four transponders on Intelsat's Galaxy 16 satellite. The term of the lease agreement has been extended until June 2020. This lease agreement also gives PRSS the option to renew the lease term on an annual basis for the life of the satellite. Intelsat has informed the PRSS that Galaxy 16 is healthy and is projected to remain operational until 2029.

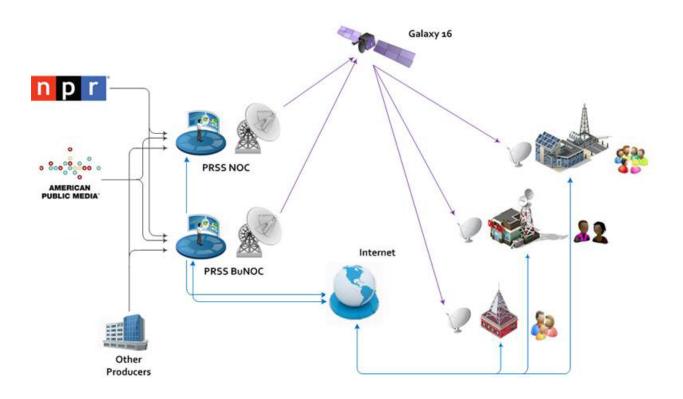
NPR plans to continue to lease satellite transmission capability from Intelsat. Satellite pricing by an outside vendor also found that PRSS' current Galaxy 16 satellite lease is preferred to alternatives from other carriers because of transponder availability, minimum disruption to PRSS and NPR operations, protection and pricing. Further, the current contract extension terms, which allow annual renewals, are less than the currently quoted market price for a single C-Band transponder lease on the same satellite. The new leases will give NPR the flexibility to adapt the interconnection system to new technology solutions. The number of C-band satellite transponders has been reduced from four to one, resulting in significant cost savings. Improvements in compression technology allow one transponder to serve all individual PRSS public radio stations as well as station and regional public radio networks. NPR also plans to continue leasing some Ku-Band satellite transmission capability from Intelsat for regional networks that require it.

Each local interconnected station will receive new satellite receivers. Having more than one receiver is critical so that a receiver can act as a backup in the event of a failure. While the exact features and configuration of the receivers has not been decided, NPR recently completed an analysis of proposals from vendors, tested vendor equipment and is currently negotiating with a vendor to provide receivers. Potential new features include technologies that allow more efficient

use of bandwidth and automation to enhance operations at local stations. It is expected that the per-unit cost of these receivers will be lower than those in current use, again, because of advances in technology. In addition, each local station's satellite antenna and related ground system equipment will be surveyed and evaluated for its capabilities. The age and condition of the antenna will be noted and taken into consideration. After a complete survey, decisions will be made about which stations will require complete replacement or partial refurbishment.

Equipment at the system's Network Operations Center (NOC) in Washington, DC, and Backup Network Operations Center (BuNOC) in St. Paul, Minnesota, will be replaced because it will have reached its end of life. Equipment purchases will occur in the first four years and be followed by a refresh in the last years of the decade. Examples of the equipment that will be replaced include audio encoders, amplifiers, and encapsulators. Similar equipment at the BuNOC will also be replaced because it is reaching the end of its lifespan as well.





New Public Radio Interconnection System Architecture

Public Radio Interconnection Finances

The projected cost of the future system will be \$53.5 million over ten years. The budget comprises \$11.6 million for satellite and insurance costs; \$20.4 million for network project support, and \$21.4 million for ground system refurbishment. For perspective, compared to the

costs of the current system, which totaled \$78 million, NPR has reduced \$24.5 million – or 31 percent – from the total cost.

The most significant savings result from downsizing the satellite capacity; reducing the number of transponders will save 70 percent in that cost category. Network Project Support is increasing slightly due to salaries and cost-of-living increases and is forecast to be about 2.5 percent. Ground System Refurbishment is increasing slightly for two reasons: First, based on experience in the current project, there will need to be a second refresh of some equipment during later years of the project; and second, the budget accounts for refreshing four software environments – live broadcast, staging, development and business recovery (BuNOC). Only two environments were budgeted in the current system, but staff realized later that two additional environments – development and business recovery - were needed to reduce risk of broadcast failure.

In October 2017, the CPB Board of Directors authorized CPB management to enter into an agreement with NPR to provide up to \$53.5 million to build out the public radio interconnection system.

TOTAL PROJECT COSTS, BY CATEGORY			
Category	Cost		
Satellite & Insurance	\$11.6 million		
Satellite	\$11,092,108		
Insurance	\$540,000		
Network Project Support	\$20.4 million		
Staff	\$20,124,979		
Professional Services	\$320,000		
Ground System Refurbishment	\$21.4 million		
Satellite Receivers for Local Stations	\$3,101,000		
Ground System Equipment & Build for Local Stations			
Staff	\$2,729,209		
Professional Services	\$1,796,738		
Shipping	\$11,450		
Travel	\$7,000		
Network Operations Center (NOC) Upgrade			
NOC Equipment	\$12,131,527		
Staff	\$1,605,473		
TOTAL COST	\$53.5 million		

FY 2020 PROPOSED APPROPRIATIONS LANGUAGE

Federal Funds

CORPORATION FOR PUBLIC BROADCASTING

In addition, for the costs associated with replacing and upgrading the public broadcasting interconnection system and other technologies and services that create infrastructure and efficiencies within the public media system, \$20,000,000. (Departments of Labor, Health and Human Services, and Education, and Related Agencies Appropriations Act, 2018.)

Budget Language

Interconnection.— Technology and distribution systems have greatly evolved since Congress established the practice of funding public broadcasting interconnection. Recognizing technology's power in creating further cost efficiencies across the public media system, the Committee recommendation includes \$20,000,000 for continued support of CPB in replacing and upgrading the public broadcasting interconnection system and further investing in systemwide infrastructure and services that benefit the American people.

SECTION III-- Ready To Learn Funding Request

CPB Supports a \$30 million request for Ready To Learn in FY 2020

CPB joins with the public broadcasting community in supporting a \$30 million appropriation for Ready To Learn (RTL) Programming awards within the U.S. Department of Education. This is a \$2.259 million increase over FY 2019 funding.

This increased funding will enable public media to expand its work in:

- Supporting a new generation of children and their early learning needs through the production of new multiplatform content for early STEM, literacy, and beyond.
- Scaling development of personalized and adaptive learning content through Playful Learning Experiences that include videos, games, real-world activities, and parent reporting features. This content is supported by learning analytics that enable games to adapt to an individual child's unique learning interests and needs.
- Creating dual-generation engagement resources that help children and their parents and caregivers learn together through media in diverse community settings.
- Scaling an innovative network of Community Collaboratives so that increased numbers
 of cities and towns may reach and serve children and families from low-income
 backgrounds.
- Investing in local content development and related engagement supports so that more public media stations can produce original television, radio, web, YouTube, and mobile content in response to local community needs of children and families.
- Rigorous and scaled research studies of children, families, and partners that actively participate with RTL content and community-based learning experiences.

Ready To Learn--An Innovative School Readiness Solution

Across America parents and education and community leaders recognize that high-quality preschool experiences play a vital role in improving school readiness prospects for our nation's children, especially those children with the highest needs who often stand to make the greatest gains. However, 54 percent of American children ages 3 to 4 are left out of formal preschool programs, a factor that influences socioeconomic differences in educational achievement (Annie E. Casey Foundation, 2017). Combine this situation with the fact that about 15 million American children currently live in families with incomes below the federal poverty level—a known factor that can impede a child's ability to learn and grow in healthy ways—and it becomes clear that fresh and innovative approaches are needed to reach and enrich children wherever they live, play and spend time in the community (National Center for Children in Poverty, 2016).

In response to these significant early learning needs, leading partners from Congress, the U.S. Department of Education, the Corporation for Public Broadcasting (CPB), and PBS have joined forces on Ready To Learn, an innovative public media initiative that supports the math, literacy,

and early science and engineering skills of our nation's youngest learners, ages 2-8 years, especially those who come from low-income backgrounds. This work is carried out both nationally and locally in collaboration with leading children's producers, educational technologists, researchers, local public television stations and community partners, who each play an essential role in creating, evaluating and distributing high-quality content that helps to narrow the achievement gap by educating young children both inside and outside the classroom. This content is freely available to all U.S. households across the country.

We are proud that Ready To Learn has maintained strong bipartisan support throughout its history, including during the reauthorization of the Elementary and Secondary Education Act in 2015.

A Track Record of Success

Ready To Learn builds upon a 20-year track record of success. Ready To Learn content reaches nearly 99 percent of U.S. households through the broadcast of local public television stations. About 14 million children ages 2 to 11 view Ready To Learn television content designed to improve their early STEM skills, and more than 8 million children experience related interactive content and games via media platforms such as the Internet, mobile smartphones, tablets and interactive whiteboards. This content and related resources for educators and families comprise intentionally designed collections of high-quality preschool content that align to literacy, math and science learning frameworks based on state standards and other early learning goals designed to help advance children's foundation level skills.

Throughout the long and proven history of this program, Ready To Learn has evolved to successfully address some of the nation's most pressing educational needs concerning children's growth and development in a constantly evolving media landscape. For example, during the 2005-2010 round of Ready To Learn, public media and its partners tackled the subject of early reading and literacy through creation and wide-scale delivery of award-winning television series such as *Super WHY!*, *Martha Speaks*, *The Electric Company* and *Word World*, along with development and deployment of related educator and family resources.

Further, a recent independent, non-commissioned meta-analysis of the educational effectiveness of Ready To Learn literacy content (Hurwitz, 2018) found that children who consumed Ready To Learn-funded media gained one fifth of a standard deviation on literacy assessments, which is the equivalent of 8 percentiles or 1.5 months of literacy development beyond typical growth. ²⁰ These effects were comparable for both television and new media. Additionally, Ready To Learn literacy materials were particularly effective at promoting children's vocabulary and language sound knowledge. Significant positive effects were also found for alphabet knowledge.

In the 2010-2015 round, Ready To Learn took on the subject of early math and produced major new media properties including Peg + Cat for preschoolers and $Odd\ Squad$ for elementary-age students. As Ready To Learn continues with its 2015-2020 cycle, emphasis is being placed on

²⁰ "Getting a Read on Ready To Learn Media: A Meta-analytic Review of Effects on Literacy," by Lisa B. Hurtwitz, 2018. She was a Ph.D. student at the *Center on Media and Human Development, Northwestern University* when she conducted this research. The study article can be found at: https://onlinelibrary.wiley.com/doi/full/10.1111/cdev.13043.

developing science and literacy content to support school readiness through community collaboration, family engagement, and personalized learning experiences for users. This work provides meaningful real-time data to parents, caregivers, and educators about children's learning gains, as well as customized guidance on other skill-boosting media to use with individual children.

Through the 2015-2020 grant, which focuses on early science and literacy, public media is learning a great deal about what parents need to be more confident and successful in supporting their children's STEM learning through media. In March 2018, the Education Development Center and SRI International released findings from a national phone survey and in-depth interviews with more than 1,400 parents of young children ages 3 to 6, many from low-income households, in a new report entitled "What Parents Talk About When They Talk About Learning: A National Survey About Young Children and Science." Among the survey highlights:

- A majority of parents have high levels of confidence in their ability to support school readiness related to reading and writing, mathematics, and social and behavioral skills, but just 54 percent feel "very confident" when it comes to supporting their children's science learning.
- Half of all parents say other skills, such as reading and social skills, are more important than science for children to learn at home.
- While almost all parents do daily learning activities with their children, only half do daily science-related activities such as exploring outdoors or cooking together.
- Although parents say they regularly encourage their child's science-related digital media use, they are less likely to help children make connections between a TV show, app, or game and daily life.
- Most parents say having access to ideas for doing science with everyday materials would help them "do more science" at home.

Additionally, findings from a 2017 Implementation Study of Ready To Learn's first multigenerational Family Creative Learning workshop based on the PBS KIDS ScratchJr app found that:

- 80% of parents interviewed reported their child learned technical skills such as sequencing and coding from the workshop
- 96% of parents said that the workshops led them to try new activities at home with their children
- 33% of parents reported that their child's interest in computer coding or programming increased after participating in the workshop

The backbone of the success for Ready To Learn lies in its national-local nature. Through this foundation upon which public television is uniquely positioned, the Ready To Learn initiative ensures broad distribution and use of the content through public media's free broadcast and digital pathways to every community and household nationwide, as well as through strategic partnerships that provide on-the-ground outreach and family engagement activities targeted to where the resources are most needed, particularly in low-income communities. This last-mile

school readiness effort is conducted by local public media stations and local partners to better support families, teachers and community providers who work with children in home, school and out-of-school settings.

A Strong Evidence Base

Through every phase of development and implementation, Ready To Learn's math, literacy, and science and engineering content is rigorously tested and evaluated by experts to assess its impact on children's learning. A body of more than 100 research and evaluation studies completed since 2005, along with the above-mentioned independent meta-analysis of Ready To Learn literacy content, demonstrates that public media's content engages children and enhances their early learning skills, and that children can make significant academic gains when taught through a combination of media. See Appendix F for highlights of *Ready To Learn Research and Evaluation Studies*.

Measurement of Ready To Learn's success is based upon three primary government performance indicators: wide reach of content to children, quality of the content, and high-quality research that demonstrates the impact of this content on children's learning. In the case of reach, Ready To Learn's influence is significant.

Evidence of Reach for Content

(Performance Measures, May 2018)

14 million	Children ages 2 to 11 who viewed RTL science television content
8 million	Children who played RTL science web-based and mobile games
4 million	RTL mobile applications downloaded
,	Number of children, educators, and families that participated in on- engagement activities implemented by stations and partners

Evidence of Impact on Learning

Ready To Learn has a significant impact on children's learning, as reported in a number of major studies conducted during both current and past rounds of the initiative. For example, a meta-analysis that synthesized data from 45 evaluations (N = 24,624 child participants) found positive effects of RTL media exposure on young children's literacy skills (Hurtwitz, 2018). Between 2010-2015, researchers found that children made significant gains in early math skills through Ready To Learn's math content and games. Researchers are also seeing evidence of children's literacy, math, science and engineering skill growth with media across diverse learning settings, including homes, preschools and summer programs. Further, research teams have found that the interactive content and technology resources have resulted in improved parent understanding of their children's math development, increased family involvement in math activities at home and other informal settings, and increased parent confidence in their ability to help their children – findings that RTL is using to boost literacy, science, and engineering learning in its new content and engagement resources. Additionally, educators from preschool, school, and out-of-school settings have reported that using Ready To Learn's content has led to increased math knowledge and greater confidence in using digital media and technology as part of their teaching toolbox.

Similarly, in the 2005-2010 round of Ready To Learn, researchers found that when project video, online and print materials were combined with teacher training, lesson planning, and classroom instruction, children from low-income backgrounds were able to make such rapid and significant growth in early literacy skills that they narrowed the achievement gap with their middle-class peers on targeted content.

Priorities for Ready To Learn, 2015–2020

Knowing that children perform better when families and communities support their learning, public media's leaders and advisors envisioned a groundbreaking and comprehensive media initiative that continues to help narrow the achievement gap for young learners from low-income households. This new work is also contributing meaningful practice and research to the early learning field. To accomplish this goal, Ready To Learn 2015-2020 emphasizes the importance of *content*, *community*, and *collaboration*. These guiding principles allow us to harness the power of adaptive learning experiences, the amplifying effects of family engagement, and the critical role of local partnerships to move the needle for children from America's highest need communities. Activities include:

- Production of engaging, multi-platform content for new and legacy PBS KIDS series, including two all-new properties to improve science and literacy learning outcomes for young children. Specifically:
 - o 1 new preschool science series will be produced
 - o 40 episodes of the all-new *Molly of Denali* literacy series will be produced
 - o 20 new episodes of Cat in the Hat Knows A Lot About That!
 - o 23 new episodes plus a 1-hour special for Ready Jet Go!
 - o 20 digital shorts of *The Ruff Ruffman Show*
 - New digital games, apps, and on-the-ground family resources as part of the above content

The new science series emphasize science inquiry skills which are considered central to cultivating early scientific thinking about the natural world. The new literacy series will feature an integrated approach to science and literacy learning by contextualizing reading and informational text in real-world settings. These strategies are considered even more important to academic achievement in today's learning landscape.

- Design of a pioneering technology to create and organize personalized digital and off-line learning experiences for children and families. This technology serves as the foundation of innovative, multi-media content that adapts to the interests and needs of individual children.
- Ensuring that all content is expertly informed, leading curriculum advisors, early learning practitioners and educational researchers are partners in shaping content. Additional advisors with expertise in technology and community engagement also support CPB and PBS in identifying children and family needs, providing guidance on content implementation and engagement methods, and determining how to incorporate Universal

Design for Learning features into content to accommodate the needs of individual learners, including children with disabilities and English Language Learners.

- Production of Parent-Child Activity Videos that model fun and meaningful co-play ideas for families and children to do together. Leading public television stations are assessing best approaches to engaging low-income children and families across the multi-year RTL effort through Family and Community Learning Workshops, Camps, and Grassroots Family Engagement Models.
- Establishment of an influential network of engagement partnerships, comprised of local public media stations, early childhood educators and providers, public libraries, science centers, health clinics, and housing agencies, that are working together to increase the capacity of communities to support early learning. This network meets children where they live and play and supports families, caregivers, and educators in their vital efforts. Communities also conduct local need assessments and join CPB, PBS and national advisors in developing a national-local master plan for contextualizing content and engagement practices in diverse settings to get more low-income children ready for school.
- Enlisting the Education Development Center and a consortium of highly-regarded researchers from SRI International, Rockman et al, and UCLA-CRESST to engage in Ready To Learn's multi-year research agenda for evaluation. Extensive formative research informs the iterative design and production process for new content, including early concept reviews, media feature analysis, and producer boot camps. Rigorous efficacy studies include a range of pilot and impact evaluations designed to measure the impact of new content and engagement methods on target audience children and families.

FY 2020 PROPOSED APPROPRIATIONS LANGUAGE

Federal Funds

DEPARTMENT OF EDUCATION- INNOVATION AND IMPROVEMENT Of the amounts made available to the Department of Education Office of Innovation and Improvement for fiscal year 2020, not to exceed \$30,000,000 is available for Ready-To-Learn Television awards.

Budget Language

Ready-To-Learn Television

Provided for in Fiscal Year 2020, \$30,000,000 for Ready-To-Learn Television awards. This program is intended to use the power and reach of public media to help prepare children, especially disadvantaged children, have a strong start and successful future. Academic studies have shown that Ready To Learn leverages the power and reach of public media to help prepare children, especially disadvantaged children, to enter and succeed in school as Congress intended. Current law requires that all programming and digital content created under Ready To Learn Programming be specifically designed for nationwide distribution over public television stations' digital broadcasting channels and the Internet.

Appendix A

CPB Office of Inspector General FY 2020 Budget

Congress established the Office of Inspector General (OIG) in the 1988 amendments to the Inspector General Act of 1978. OIG is an independent office within CPB, and the IG is hired by and reports to the CPB Board of Directors. OIG's mission is to promote the efficiency, effectiveness, and integrity of CPB initiatives and operations by conducting independent and objective audits, investigations, and other reviews. OIG is authorized 8.5 FTEs.

OIG is funded from CPB's administrative budget, which by statute is limited to no more than 5 percent of CPB's overall appropriation. In compliance with the IG Reform Act of 2008, P. L. 110-409, following is the detailed breakout of OIG's FY 2019 and FY 2020 budgets, based on CPB's projected advance appropriations for those years.

CPB Office of the Inspector General

•			FY2020
	FY2019	FY2020	Budget
_	Annual Budget	Annual Budget	Increase
Employee salaries & benefits	1,576,350	1,576,350	0
Consultant fees	21,000	21,000	0
Staff travel	70,000	70,000	0
Conference & registration fees	16,000	16,000	0
Telecommunications	6,500	6,500	0
Reproduction external	2,000	2,000	0
Supplies & materials	1,000	1,000	0
Furniture & equipment purchases	1,000	1,000	0
Delivery services	1,000	1,000	0
Membership fees	9,500	9,500	0
Subscriptions/publications	1,000	1,000	0
Total	1,705,350	1,705,350	0

I certify that the amounts requested satisfy all training requirements for OIG and the funds necessary to support the Council of the Inspectors General on Integrity and Efficiency in each FY 2019 and 2020.

Mary Mitchelson, Inspector General

Appendix B: CPB Appropriations History

(\$ in millions)

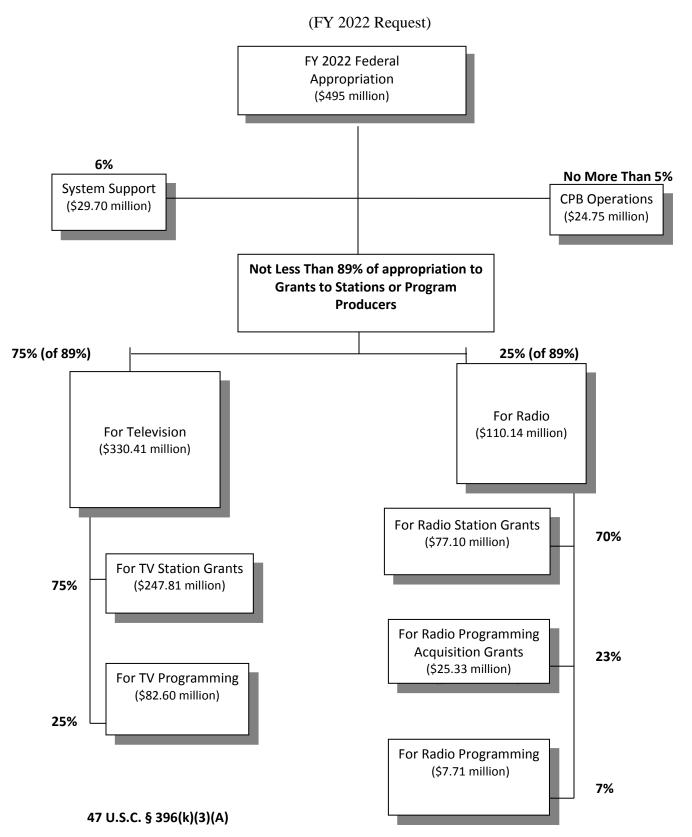
Fiscal Year	Administration	Appropriation	Interconnection
	Request (a)	Received	
2021	\$0.00	\$445.00 (in law)	N/A
2020	\$0.00	\$445.00 (in law)	\$20.00 request
2019	\$15.00	\$445.00	\$20.00
2018	\$15.00	\$445.00	\$20.00
2017	\$445.00	\$445.00	\$50.00
2016	\$445.00	\$445.00	\$40.00
2015	\$445.00	\$444.75	
2014	\$451.00	\$445.00	
2013	\$460.00	\$421.86	
2012	\$440.00	\$444.16	
2011	\$0.00	\$429.14	
2010	\$0.00	\$420.00	\$25.00
2009	\$0.00	\$400.00	\$26.64
2008	\$0.00	\$393.01	\$26.28
2007	\$0.00	\$400.00	\$34.65
2006	\$0.00	\$396.00	\$34.65
2005	\$0.00	\$386.88	\$39.68
2004	\$0.00	\$377.76	\$9.94
2003	\$365.00	\$362.81	
2002	\$350.00	\$350.00	
2001	\$340.00	\$340.00	
2000	\$325.00	\$300.00	
1999	\$275.00	\$250.00	\$48.00
1998	\$296.40	\$250.00	
1997	\$292.60	\$260.00	
1996	\$292.60	\$275.00	
1995	\$275.00	\$285.60	
1994	\$260.00	\$275.00	
1993	\$259.60	\$259.60	\$65.00
1992	\$242.10	\$251.10	\$76.00
1991	\$214.00	\$245.00	\$58.00
1990	\$214.00	\$229.40	
1989	\$214.00	\$228.00	
1988	\$214.00	\$214.00	

Fiscal Year	Administration Request (a)	Appropriation Received	Interconnection
1987	\$186.00	\$200.00	
1986	\$75.00	\$159.50	
1985	\$85.00	\$150.50	
1984	\$110.00	\$137.50	
1983	\$172.00	\$137.00	
1982	\$172.00	\$172.00	
1981	\$162.00	\$162.00	
1980	\$120.00	\$152.00	
1979	\$90.00	\$120.20	
1978	\$80.00	\$119.20	
1977	\$70.00	\$103.00	
TQ (b)	\$17.00	\$17.50	
1976	\$70.00	\$78.50	
1975	\$60.00	\$62.00	
1974	\$45.00	\$50.00	
1973	\$45.00	\$35.00	
1972	\$35.00	\$35.00	
1971	\$22.00	\$23.00	
1970	\$15.00	\$15.00	
1969	\$9.00	\$5.00	

⁽a) Values reflect the Administration's request for two-year advanced funding, i.e.: FY 2019 funding was requested in FY 2017.

⁽b) Transition Quarter funding, during which federal budget year changed from July to September.

Appendix C – Formula for Allocating CPB's Federal Appropriation



Appendix D Legislative History of CPB's Advance Appropriation

An advance appropriation becomes law one fiscal year or more before the fiscal year for which the appropriation is to be dispersed. For more than 40 years, decisions on the amount of federal support for public broadcasting have been made two years ahead of the fiscal year in which the funding is allocated. In other words, Congress approved the FY 2021 funding level for CPB during the FY 2019 appropriations process.

From public broadcasting's inception, the establishment of a long-range financing mechanism has been critical to the nature of the institution.

In that spirit, in 1975, Congress agreed to a two-year advance appropriation as a bipartisan, bicameral compromise to legislation proposed by the Ford administration that would have appropriated funds to CPB for five years automatically upon approval of the reauthorization bill. House and Senate appropriators objected to appropriating on an authorization bill, but they did not object to the need for advance appropriations for CPB. An agreement was reached between appropriators and authorizers to remove the appropriations language from the authorization bill in exchange for a commitment by appropriators to provide two-year advance funding for CPB. The development of this compromise is documented extensively below.

Important Benefits

First Amendment Considerations. For more than 40 years, Congress has supported advance appropriations for CPB to help insulate the Corporation from politically motivated interference with programming. As the House Commerce Committee report accompanying the 1975 bill stated, advance funding "would go a long way toward eliminating both the risk of and the appearance of undue interference with and control of public broadcasting ... and will minimize the possibility of any government scrutiny of or influence on programming that might occur in the course of the usual annual budgetary, authorization, and appropriation process." With a two-year buffer in place, such an influence is less likely because funding for the next two years is already secured.

Leverage for Other Funds. A two-year advance appropriation is the keystone for the successful public-private partnership that allows local public television and radio stations to include projected federal support in their budget-planning processes two years before budgets are implemented and leverage this funding for critical investments from state and local governments, universities, businesses, foundations—and most importantly, viewers and listeners of local stations. Federal investment is thus multiplied: More than six nonfederal dollars are raised for each dollar appropriated to public broadcasting.

Lead Time. An advance appropriation also provides lengthy lead time for production of major programming. Signature series such as *The Civil War, Prohibition*, and the Ken Burns film on the Roosevelt family, *The Roosevelts: An Intimate History*, typically require several years to produce. Advance appropriations allow producers to have essential lead time to plan, research, design, create, and support the content—programming and services—that CPB is mandated to provide to viewers and listeners nationwide.

CPB believes the advance funding maximizes the federal investment in public broadcasting by allowing stations to better raise nonfederal dollars. It also shields programming decisions so that stations may provide high-quality educational, cultural, and instructional programs to viewers and listeners nationwide, just as previous administrations and Congresses envisioned.

Appendix E – Public Broadcasting's Interconnection Funding History

The interconnection systems for public broadcasting have gone through several incarnations. The original public television and radio interconnection systems involved "bicycling tapes" to stations—literally using delivery services to move audio or videotapes from station to station through a service called the National Educational Radio Network.

The bicycle service was followed by a national landline service via AT&T's telephone communication network. This service was developed in the 1970s with capital costs covered by the Corporation for Public Broadcasting from its annual appropriation and was used initially to distribute lower quality programs. Higher-quality programming (music, documentaries, etc.) continued to be distributed on tape. NPR was the first radio entity to use satellite distribution for the creation of a national radio network.

Then in 1978, PBS built its second interconnection system to distribute the National Program Service content via Western Union Telecommunications Westar I/IV satellite. This move from a terrestrial to a satellite-based system represented a significant technological advancement in program distribution. Public radio started to use a satellite-based interconnection system in the summer of 1979. PBS was the first broadcast network to distribute television programming via satellite technology, in 1988. The satellite-based program distribution system resulted in drastically increased reliability, efficiency and cost-effectiveness and until recently has remained the industry standard today. Like its landline predecessor, the Westar I/IV interconnect system was funded through CPB's annual appropriation.

Congress included language in the Public Telecommunications Act of 1988 (P.L. 100-626) authorizing a separate appropriation to CPB for public broadcasting interconnection needs. In addition, the Act established and authorized appropriations for the Public Broadcasting Satellite Interconnection Fund to be used "for the capital costs of the replacement, refurbishment, or upgrade of their national satellite interconnection systems and associated maintenance of such systems..."

House and Senate Commerce Committees reports reiterated the importance of funding for the interconnection systems for public television and public radio:

"The Committee recognizes that replacement of the satellite interconnection system used by public television and public radio is essential to ensure that public broadcasting can continue to provide the quality and quantity of services now offered, including cultural, informational and educational programming of national, regional and local interest..." (House Report 100-825)

"The Committee strongly believes that funding for replacement of the satellite interconnection system is essential to ensure continued high-quality service and must be authorized this fiscal year. Not only is it important to provide for continued service, but replacement interconnection facilities also could potentially support increases in program offerings and related services, more specialized programming, and expansion of service areas." (Senate Report 100-444)

In 1988, Congress appropriated \$198.4 million for the Public Broadcasting Interconnection Service — \$150 million for public television for the replacement of its interconnection system, and \$48.4 million for public radio's interconnection needs. In FY 1991, 1992 and 1993, the disbursement of the Public Broadcasting Satellite Interconnection Fund monies occurred in three roughly equivalent amounts of approximately \$58 million, \$76 million, and \$65 million, respectively.

NPR oversaw the development of public radio's interconnection service in 1993, contracting with PanAmSat Corporation's Galaxy IV satellite to carry two transponders dedicated to the Public Radio

Satellite Interconnection System (PRSS). In 1999, when the Galaxy IV satellite failed, Congress made an emergency appropriation of \$48 million to secure replacement transponder capacity and address related ground equipment needs. NPR, as manager of the PRSS and on behalf of the stations, entered into long-term leases with PanAmSat to secure replacement satellite transponder capacity beginning in 2000.

As the satellite contracts for both the radio and television interconnection systems again began to wind down, CPB, working with PBS and NPR, developed a plan for another overhaul of those systems. Numerous options were analyzed before CPB began requesting interconnection replacement funding in FY04 for public television's Next Generation Interconnection System (NGIS) and in FY08 for the PRSS. Congress provided a total of \$119 million (FY04 - \$9.94, FY05 - \$39.7, FY06 - \$34.6 and FY07 - \$34.7) for the NGIS, and \$78 million (FY08 - \$26.3, FY09 – 26.6, FY10 - \$25) for the PRSS.

Meanwhile, NPR utilized the appropriated funds to create a live streaming (real-time) and file (non-real time) IP (Internet Protocol) over satellite digital distribution system called ContentDepot[®]. This system permits public radio stations to receive national distribution of radio content as digital data files. To integrate this technology with local stations, NPR updated and installed new receiving equipment at stations; created a Network Operations Center; created a disaster recovery center; and completed several software upgrades to the Content Depot system. NPR also leased satellite time that was scheduled to expire in 2018, but which was extended to 2020.

PBS similarly used appropriated funds to create a non-real time IP over satellite digital distribution system for public television. PBS' work included: purchasing and delivery of non-real-time (NRT) file delivery system equipment for 169 stations; creation of a disaster recovery site; development of software to support PBS broadcast operations and training of staff; and interconnection services for stations on American Samoa and Guam.

Both NPR and PBS achieved efficiencies by acquiring satellite distribution capacities via long-term contracts that offered discounts for volume use and pre-payment options and through volume discounts for equipment purchases that went to stations.

In September 2016 and June 2018, the 10-year satellite leases for public television and radio, respectively, expired and the ground equipment at stations reached the end of life. Working with PBS and the Administration, the FY 2016 Presidential Budget provided the following: \$40 million in FY 2016, \$50 million in FY 2017, \$55 million in FY 2018, and \$52 million in FY 2019. In FY 2016, CPB requested \$40 million to replace the public television interconnection system. Knowing that public radio had future interconnection needs and that technology will one day allow for a single interconnection system for television and radio, Congress provided CPB \$40 million in FY 2016 to "replace and upgrade the public broadcasting interconnection system." This allows CPB to spend the appropriation on both public television and public radio interconnection needs. In FY 2017, CPB requested and received \$50 million for the public broadcasting interconnection system. In FY 2018 and FY 2019, CPB requested and received \$20 million for public broadcasting interconnection and "and other technologies and services that create infrastructure and efficiencies within the public media system."

APPENDIX F

Ready To Learn Research and Evaluation Studies

August 2018

Below are key findings from CPB-funded studies testing the effectiveness of Ready To Learn assets on the science, numeracy and literacy skills of young children from low-income families, as well as findings related to improved family involvement and understanding of their children's math learning and educators' increased math knowledge and confidence in using digital media in math instruction. These include early findings from three consecutive five-year Ready To Learn grant rounds: the 2015 – 2020 round that focused on science and literacy, the 2010-2015 round that includes impact and efficacy studies on early math content, and the 2005-2010 round's literacy findings.

<u>READY TO LEARN – 2015 – 2020</u>

Family Engagement (Science and Computer Coding) – Implementation Studies

Ready to Learn Research: PBS KIDS ScratchJr Family Creative Learning Workshop Implementation Study, (EDC/SRI, 2017)

- 80% of parents interviewed reported that their child learned technical skills such as sequencing and coding from the workshop
- 96% of parents said that the workshops led them to try new activities at home with their children
- 33% of parents reported that their child's interest in computer coding or programming increased after participating in the workshop

READY TO LEARN – 2010 – 2015

Children's Learning (Math) – Large Scale Studies

PEG+CAT Home Study (EDC/SRI, 2015)

- Children in the PBS KIDS PEG + CAT treatment group who engaged with PEG + CAT content over a 12-week period exhibited greater improvement in the mathematics skill areas of ordinal numbers, spatial relationships, and 3D shapes compared with children in the Business as Usual condition.
- There was a significant increase in the number of parents in the PBS KIDS group who reported making connections between Peg + Cat media and daily life with their children.
- At the end of the study period, parents in the PBS KIDS PEG + CAT treatment group reported helping their children more frequently with less common mathematics skills (drawing shapes, subtraction, measurement) than parents in the Business as Usual condition.

Engaging Families in Early Mathematics Learning: A Study of a Preschool Family Engagement Model (WestEd, 2014)

- Mathematics knowledge increased significantly for children in the PBS KIDS treatment group from both low-income and higher-income families, with test scores of children from low-income families approaching the pre-test scores of children from higher-income families.
- PBS KIDS children showed statistically significant increases in their overall mathematics knowledge.
- The number of PBS KIDS children who could correctly recognize basic and advanced shapes (such as circles, triangles, and pentagons) increased.
- PBS KIDS Parents' awareness of their children's mathematics learning increased, as did their use of activities and strategies to support their children's learning. Parents were also motivated to set aside time each day to do math activities with their children.

Preschool Teachers Can Use PBS KIDS Transmedia Curriculum Supplement to Support Young Children's Mathematics Learning: Results of a Randomized Controlled Trial (EDC/SRI, 2013)

- Low-income children in the treatment group exhibited higher math skills on the Supplement Based Assessment (SBA) than children in the comparison group. The effect is the equivalent of moving a child from the 50th to the 59th percentile on the SBA.
- The RTL Mathematics Transmedia Curriculum Supplement has a greater benefit on those children who have more math to learn, i.e., on children with the lower pretest scores.

PBS KIDS Mathematics Transmedia Suites in Preschool in Preschool Families and Communities (McCarthy, Li, Atienza, Sexton, & Tiu, 2013)

- The 10-week intervention in the homes of low-income preschool children was positively associated with gains in children's knowledge and skills in mathematics.
- Three-year-old children in the intervention group significantly outscored their comparison group peers.
- Parents in the intervention group significantly increased their awareness and support of their children's mathematics learning compared with comparison group parents.

PBS KIDS Mathematics Transmedia Suites in Preschool Homes (McCarthy, Li, & Tiu, 2012)

- Low-income children in the treatment groups who used PBS KIDS mathematics transmedia suites in their homes for eight weeks showed significant improvement in number sense.
- Parents in the treatment group who participated in weekly workshops:
 - o showed improved understanding of children's math development;
 - o promoted math activities at home
 - o applied PBS KIDS online games to support their children's math learning

Evaluation of The Electric Company *Summer Learning Program* (McCarthy, Michel, Atienza, Rice, Nakamoto, & Tafoya, 2011)

- Percentage of students who participated in the five-to-six week summer learning program who made statistically significant gains in their:
 - o knowledge of mathematics vocabulary (41 percent)
 - o numeracy skills (20 percent)
 - o phonics skills (17 percent)

Children's Learning (Math) - Content Studies

PEG+CAT Small Content Study (EDC/SRI, 2014)

- Children who watched PEG + CAT episodes and played PEG + CAT games with minimal adult intervention over a five-week time period experienced gains with identifying 3-D objects, greatly improving on identifying a specific concept (i.e. a cylinder).
- More than half of the participants' parents reported that interacting with PEG + CAT materials positively influenced their children's behavior at home. This included improved vocabulary, counting, talking about shapes, patterns and colors.

ODD SQUAD Small Content Study (WestEd, 2015)

- Children who participated in the Odd Squad study exhibited significant increases in their overall knowledge of mathematics in the domains of Number and Operations and Algebraic Thinking, with significant gains in the sub-categories of skip counting, pattern recognition, and simple addition and subtraction.
- Teachers reported that Odd Squad content supported learning in the mathematics topics of skip counting, patterns, fact families, addition and subtraction.
- Over 80 percent of parents in the study used Odd Squad home intervention activities and many reported learning new strategies to support their children's mathematics learning.

Learning Math with Curious George: PBS KIDS Transmedia and Digital Learning Games in the Preschool Classroom (WestEd, 2014)

- Children with lower pre-test scores who independently interacted with *Curious George* content at hands-on learning stations in their preschool classroom and watched *Curious George* videos at home gained on skills relating to numbering; whereas children with higher pre-test scores improved on number comparison and informal concepts.
- The self-directed use of the *Curious George* games led to increased collaborative learning and discussion around math within the classroom.
- Children developed social emotional skills such as listening, respecting others and sharing.
- Teachers' knowledge of each student's learning and mathematical development increased.

Parent Engagement²¹ and Teacher Professional Development

Evaluation of Chicago Public Schools' Virtual Pre-K Ready for Math Program that Integrates PBS KIDS Lab Digital Math Content (McCarthy, Winston, Li, Michel, Salguero, & Atienza, 2012)

- Participating in the Virtual Pre-K (VPK) Math program increased parents' awareness of their child's math learning and how they could support this learning:
 - o 98 percent of parents reported that the VPK Math packets and workshops helped them better understand the math their children were learning in preschool.
 - 97 percent of parents reported that the VPK Math packets and workshops helped them gain more confidence about what they can do to help their children learn math.
 - o Parents used technology with their children for educational purposes more often.
 - o Parents' involvement with their children's schools increased, as did their engagement with their children's educational activities at home.
- Participating preschool teachers' attitudes toward teaching math and integrating technology into instruction improved.

Evaluation of Boston University's Teaching Tips Modules for Using PBS KIDS Transmedia Suites in Kindergarten Classrooms (McCarthy, Atienza, & Tiu, 2012)

- Teachers' comfort level and use of technology and digital content in their classroom instruction increased.
- Teachers felt that the modules were useful for increasing student engagement in lessons, helping students learn mathematics and literacy content as well as important teamwork skills.

2012 Preschool Pilot Study of PBS KIDS Transmedia Content (EDC/SRI, 2012)

- After implementing a PBS KIDS transmedia curriculum supplement in their classrooms, more preschool teachers in the treatment condition than the comparison condition reported:
 - o They felt like a "mathematics person."
 - o The felt like they taught mathematics as well as they taught other subjects.

²¹ Most of the children's math studies included a parent engagement component, as noted in previous sections.

<u>READY TO LEARN – 2005 - 2010</u>

Summative Evaluation (Literacy)

Summative Evaluation of the Ready To Learn Initiative: Preschool Teachers Can Use a Media-Rich Curriculum to Prepare Low-Income Children for School Success: Results of a Randomized Control Trial (Penuel, Pasnik, Bates, Townsend, Gallagher, Llorente, & Hupert, 2009)

- Children who participated in the literacy curriculum outscored children in the comparison curriculum on all fives measures of early literacy use in the study; four of the five differences were statistically significant
 - Letter naming—20.8 percent more; knowledge of the sounds of letters—37.0 percent more; knowing concepts of story and print—12.0 percent more; recognizing letters in child's own name—7.4 percent more.

Super WHY! (Literacy)

Summative Evaluation of Super WHY!: Outcomes Dose, and Appeal (Linebarger, McMenamin, Wainwright, 2009)

- Treatment group outperformed control group on all indices of program-specific learning as well as the majority of normative outcomes:
 - o Learning was most pronounced for letter knowledge—15.4 percent more treatment than control children knew lower case letters.
 - o Phonological and phonemic awareness skills—treatment children scored 14.0 percent higher than control children on speech-to-print matching and 9.9 percent higher on blending phonemes or syllables.

Television's Impact on Children's Reading Skills: A Longitudinal Study (Linebarger, 2010)

- Children in the Viewing Only group outperformed their peers in the Viewing & Internet and control groups on letter sounds (Viewing Only scored 6.4 percent higher than Controls)
- Children in the Viewing & Internet group outperformed their peers in the Viewing Only and Control group on tasks measuring lower case letter knowledge and rhyme awareness (Viewing & Internet scored 3.7 percent higher than Controls)

Super WHY! Summer Reading Camp (Literacy)

Super Why Summer Camp Assessment Findings (Phillips, 2008)

• Across both younger and older age groups, scores on six different literacy tasks demonstrated evidence of reliable growth from pretest to post-test. For example, *Super WHY!* viewers' pretest to post-test gain on tasks that measured phonological and phonemic awareness averaged 29 percent compared with an average gain of 13 percent for children in the control group.

Super WHY! Summer Camp: An Analysis of Participant Learning in 2008 and 2009 Summer Camps (Marshall, Lapp, Cavoto, 2010)

• Participants showed an 11.7 percentage point gain in literacy skills as a result of the four-day, 12-hour intervention; 4-year-old participants achieved the greatest gains (13.9 percentage points).

Martha Speaks (Literacy)

Martha Speaks: Indicators of Appeal and Parasocial Interaction and Relations Among These Indicators and Child Outcomes (Linebarger, McMenamin, Jennings, & Moses, 2010)

• Twenty percent of the children who reported they learned new things reported that those "new things" were words, often commenting that those words were new, big, hard or words that "I didn't know."

Vocabulary Learning from Educational Television: Can Children Learn New Words From Martha Speaks? (Linebarger, Moses, McMenamin, 2010)

• Martha Speaks, as an early intervention targeting vocabulary knowledge provides strong support for word learning compared with the average educational television program, resulting in vocabulary knowledge scores that were between 1.39 and 2.22 times higher.

The Electric Company (Literacy)

A Summative Evaluation of The Electric Company (Garrity, Piotrowski, McMenamin, Linebarger, 2010)

- Exposure to TEC TV program was associated with growth in knowledge of episode-specific receptive vocabulary, particularly for nouns, moderately challenging words, and words repeated 1 to 15 times.
- Exposure to TEC was associated with growth in knowledge of three of eight phonetic structures.

PBS Kids Island (Literacy)

Summative Evaluation of PBS Kids Island: Usability, Outcomes, and Appeal (Schmitt, Sheridan, McMenamin, & Linebarger, 2010)

• After using PBS Kids Island, treatment group children showed more learning gains than control group children in several areas, especially phonological and phonemic awareness—PBS Kids Island viewers scored 23.4 percent higher than controls and grew 24.1 percent from pretest to post-test while controls grew just 18.7 percent.

Public Broadcasting in

ALABAMA		FY 2018	
Employment & Earnings	Public Broadcasting Employees in State Total Wages Average Annual Salary	132 \$7,854,871 \$59,394	
Public TV Stations	Alabama Public Television (Birmingham) WBIQ (Birmingham) WCIQ (Mount Cheaha) WDIQ (Dozier) WEIQ (Mobile) WFIQ (Florence) WGIQ (Louisville) WHIQ (Huntsville) WIIQ (Demopolis)	\$2,044,412	
Public Radio Stations	Alabama Public Radio WUAL-FM/91.5 (Tuscaloosa) WQPR-FM/88.7 (Muscle Shoals) WAPR-FM/88.3 (Selma)	\$146,880	
	WVAS-FM (Montgomery) WJAB-FM (Normal) WTSU-FM (Troy) WBHM-FM (Birmingham) WLRH-FM (Huntsville)	\$137,152 \$139,934 \$108,081 \$155,317 \$110,376	
FY2018 Alabama Statewide Total \$2,842,152			
Public Broadcasting in ALASKA		FY 2018	
Employment & Earnings	Public Broadcasting Employees in State Total Wages Average Annual Salary	211 \$12,959,823 \$61,348	
CPB Station Grants (FY2018 Figures)			
Public TV Stations	KAKM-TV (Anchorage) KTOO-TV (Juneau) KUAC-TV (Fairbanks) KYUK-TV (Bethel)	\$1,019,621 \$819,201 \$848,071 \$769,439	

Public	KBBI-AM (Homer)	\$124,619
Radio Stations	KBRW-AM (Barrow)	\$193,600
	KCAW-FM (Sitka)	\$133,981
	KNBA-FM (Anchorage)	\$1,387,157
	KCHU-AM (Valdez)	\$114,758
	KCUK-FM (Chevak)	\$185,358
	KDLG-AM (Dillingham)	\$182,517
	KDLL-FM (Homer)	\$95,393
	KFSK-FM (Petersburg)	\$121,882
	KHNS-FM (Haines)	\$119,977
	KUCB-FM (Unalaska)	\$185,358
	KIYU-AM (Galena)	\$185,358
	KMXT-FM (Kodiak)	\$123,778
	KNSA-AM (Unalakleet)	\$185,358
	KOTZ-AM (Kotzebue)	\$188,035
	KRBD-FM (Ketchikan)	\$125,495
	KSDP-AM (Sand Point)	\$185,358
	KSKA-FM (Anchorage)	\$244,844
	KSKO-AM (McGrath)	\$185,358
	KSTK-FM (Wrangell)	\$87,214
	KTNA-FM (Talkeetna	\$123,572
	KTOO-FM (Juneau)	\$154,818
	KUAC-FM (Fairbanks	\$200,340
	KUHB-FM (St. Paul Island)	\$185,358
	KYUK-AM (Bethel)	\$176,656
	KZPA-AM (Fort Yukon)	\$185,358
	KRFF-FM (Fairbanks)	\$143,089
	Coast Alaska Inc.	\$45,546

FY2018 Alaska Statewide Total \$9,026,467

Public Broadcasting in

American Samoa FY 2018

EmploymentPublic Broadcasting Employees50& EarningsTotal Wages\$999,000Average Annual Salary\$19,980

CPB Station Grants (FY2018 Figures)

Public KVZK-TV (Pago Pago) \$857,430

TV Stations

FY2018 American Samoa Total \$857,430

Public Broadcasting in

ARIZONA FY 2018

Employment Public Broadcasting Employees in State 295

& Earnings Total Wages \$18,559,860

Average Annual Salary \$62,915

CPB Station Grants (FY2018 Figures)

PublicKAET-TV/Channel 8 (Phoenix)\$2,048,456TV StationsKUAT-TV/Arizona Public Media (Tucson)\$1,228,347

PublicKNAU-FM (Flagstaff)\$234,312Radio StationsKUYI-FM (Kykotsmovi)\$143,089

KOHN-FM (Sells) \$221,212 KBAQ-FM (Tempe) \$214,361 KJZZ-FM (Tempe) \$575,535 KGHR-FM (Tuba City) \$143,089 KUAZ-FM (Tucson) \$286,668 KXCI-FM (Tucson) \$93,729 KAWC-AM (Yuma) \$152,303 KNNB-FM (Whiteriver) \$143,089

Native Public Media (Flagstaff) \$300,000

Other

DS Griffen & Associates (Scottsdale) \$29,000

FY2018 Arizona Statewide Total \$5,813,190

Public Broadcasting in

ARKANSAS FY 2018

Employment Public Broadcasting Employees in State 130

& Earnings Total Wages \$6,570,439

Average Annual Salary \$50,639

CPB Station Grants (FY2018 Figures)

Public AETN (Conway) \$2,110,212

TV Stations KAFT (Fayetteville)

KEMV (Mountain View) KETG (Arkadelphia) KETS (Little Rock) KTEJ (Jonesboro) KETZ (El Dorado)

PublicKUAF-FM (Fayetteville)\$121,969Radio StationsKUAR-FM (Little Rock)\$120,073KASU-FM (State University)\$138,453

FY2018 Arkansas Statewide Total \$2,490,707

Public Broadcasting in

CALIFORNIA FY 2018

Employment Station Employees in State 1,210 & Earnings Annual Wages \$91,511

Average Annual Salary \$110,727,727

CPB Station Grants (FY2018 Figures)

PublicKCET-TV (Burbank)\$1,832,083TV StationsKEET-TV (Eureka)\$693,384

KIXE-TV (Redding) \$728,570 KLCS-TV (Los Angeles) \$768,020 KOCE-TV (Costa Mesa) \$1,885,820 KPBS-TV (San Diego) \$2,729,224 KQED-TV (San Francisco) \$ 4,234,885 KRCB-TV (Rohnert Park) \$449,968 KVCR-TV (San Bernardino) \$761,414 KVIE-TV (Sacramento) \$1,584,009 KVPT-TV (Fresno) \$952,347

Public KHSU-FM (Arcata) \$177,639

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Radio Stations	KCHO-FM (Chico)	\$200,168
	KZFR-FM (Chico)	\$71,821
	KSJV-FM (Fresno)	\$215,794
	KVPR-FM (Fresno)	\$193,666
	KIDE-FM (Hoopa)	\$143,089
	KUFW-FM (Keene)	\$330,007
	KKJZ-FM (Long Beach)	\$108,553
	KUSC-FM (Los Angeles)	\$745,298
	KVMR-FM (Nevada City)	\$175,680
	KPCC-FM (Pasadena)	\$1,400,767
	KZYX-FM (Philo)	\$122,563
	KWMR-FM (Point Reyes Station)	\$111,499
	KMUD-FM (Redway)	\$125,919
	KRCB-FM (Rohnert Park)	\$71,821
	KXJZ-FM (Sacramento)	\$475,974
	KXPR-FM (Sacramento)	\$250,949
	KPBS-FM (San Diego)	\$596,548
	KSDS-FM (San Diego)	\$131,679
	KALW-FM (San Francisco)	\$191,233
	KQED-FM (San Francisco)	\$2,238,422
	KCBX-FM (San Luis Obispo)	\$162,486
	KCSM-FM (San Mateo)	\$160,233
	KCRW-FM (Santa Monica)	\$1,399,638
	KAZU-FM (Seaside)	\$148,104
	KCLU-FM (Thousand Oaks)	\$193,271
	KXRN (Laguna Beach)	\$71,821
	,	
Other		* 4 = 2.000
	American Film Institute (Los Angeles)	\$150,000
	NALIP (Los Angeles)	\$25,000
	Ctr. for Asian American Media	\$1,358,591
	ITVS (San Francisco)	\$17,366,667
	Latino Public Broadcasting (Burbank)	\$1,758,591
	Jet Propulsion, LLC (Hollywood)	\$450,000
	National Hispanic Media Coalition	\$5,000
	International Documentary Association	\$80,000
	Ozy Media, Inc. (Mountain View)	\$ 500,000
California FY2018 Statewide Total		\$48,528,215

COLORADO FY 2018

Employment & Earnings	Public Broadcasting Employees in State Total Wages Average Annual Salary	348 \$22,607,388 \$64,964
	CPB Station Grants (FY2018 Figures)	
Public TV Stations	KBDI-TV (Denver) Rocky Mountain PBS KRMA-TV (Denver) KTSC-TV (Pueblo) KRMJ-TV (Grand Junction) KRMU-TV (Durango) KRMZ-TV (Steamboat Springs)	\$547,190 \$1,124,553
Public Radio Stations	KRZA-FM (Alamosa) KAJX-FM (Aspen) KGNU-FM (Boulder) KDNK-FM (Carbondale) KVOD-FM (Centennial) KCME-FM (Colorado Springs) KRCC-FM (Colorado Springs) KSJD-FM (Cortez) KBUT-FM (Crested Butte) KUVO-FM (Denver) KDUR-FM (Durango) KRFC-FM (Fort Collins) KAFM-FM (Grand Junction) KUNC-FM (Greeley) KSUT-FM (Ignacio) KVNF-FM (Paonia) KOTO-FM (Telluride)	\$143,089 \$160,077 \$95,974 \$116,003 \$902,940 \$97,530 \$145,395 \$122,845 \$116,228 \$102,223 \$114,154 \$71,821 \$71,821 \$226,639 \$216,941 \$116,468 \$110,644
Other FY2018 Colorado Sta	VuHaus Corp. (Boulder) NFCB, Inc. (Crawford) Pacey Economics, Inc. (Boulder)	\$250,000 \$314,106 \$489,460 \$6,016,101
1 12016 Colorado Sta	alewine Iulai	Φυ,υτο,τυΙ

Public Broadcasting in

CONNECTICUT FY 2018 Employment Public Broadcasting Employees in State 125

& Earnings Total Wages \$11,624,010

Average Annual Salary \$93,366

CPB Station Grants (FY2018 Figures)

Public Connecticut Public Broadcasting \$1,536,175

TV Stations WEDH (Hartford)

WEDW (Bridgeport) WEDN (Norwich) WEDY (New Haven)

Public Connecticut Public Radio \$400,328

Radio Stations WPKT Meriden/Hartford/New Haven (90.5)

WNPR Norwich/New London (89.1) WEDW-FM Stamford/Greenwich (88.5) WRLI-FM Southampton, New York (91.3)

 WMNR-FM (Monroe)
 \$86,350

 WSHU-FM (Fairfield)
 \$341,046

 WHDD-FM (Sharon)
 \$127,324

FY2018 Connecticut Statewide Total \$2,491,223

Public Broadcasting in

Delaware FY 2018

Employment Public Broadcasting Employees in State 7

& Earnings Total Wages \$286,542

Average Annual Salary \$44,083

CPB Station Grants (FY2018 Figures)

Public WDDE-FM (Dover) \$84,951

Radio Stations

FY2018 Delaware Statewide Total \$84,951

Public Broadcasting in

Washington, DC FY 2018

Employment & Earnings	Station Employees in District Annual Wages	113 \$10,695,470
	Average Annual Salary	\$94,650
	CPB Station Grants (FY2018 Figures)	
Public TV Stations	WHUT	\$1,216,049
Public	WAMU	\$1,901,707
Radio Stations	NPR	\$27,295,862
Ruuto Stuttons	INI K	\$27,293,002
Other Programs	Capital Concerts, Inc.	\$1,675,000
	Civic Enterprises, LLC	\$60,000
	Milton Coleman	\$52,605
	National Hispanic Foundation for the Arts	\$10,000
	Meridian International Center	\$2,500
	The state of the s	\$ =)000
FY2018 District of Columbia Total		\$32,213,723
Public Broadcasting i	n	
FLORIDA		FY 2018
г 1 ,		502
Employment	Public Broadcasting Employees in State	593
& Earnings	Total Wages	\$40,461,556
	Average Annual Salary	\$68,290
CPB Station Grants (FY2018 Figures)		
Public	WEFS-TV (Cocoa)	\$447,881
TV Stations	WEDU-TV (Tampa)	\$1,812,320
	WFSU-TV (Tallahassee)	\$1,886,745
	WGCU-TV (Ft. Myers)	\$1,143,526
	WJCT-TV (Jacksonville)	\$788,600
	WLRN-TV (Miami)	\$842,729
	,	
	WPBT-TV (Miami)	\$1,959,479
	WPBT-TV (Miami) WSRE-TV (Pensacola)	\$1,959,479 \$909,841

WUFT-TV (Gainesville)

WUCF-TV (Orlando)

\$926,641

\$822,753

Public	WGCU-FM (Ft. Myers)	\$167,729
Radio Stations	WQCS-FM (Fort Pierce)	\$128,481
	WUFT-FM (Gainesville)	\$208,798
	WJCT-FM (Jacksonville)	\$179,843
	WFIT-FM (Melbourne)	\$106,656
	WDNA-FM (Miami)	\$139,998
	WLRN-FM (Miami)	\$836,980
	WMFE-FM (Orlando)	\$307,883
	WKGC-FM (Panama City)	\$134,541
	WUWF-FM (Pensacola)	\$146,280
	WFSU-FM (Tallahassee)	\$326,558
	WMNF-FM (Tampa)	\$134,197
	WUSF-FM (Tampa)	\$595,359
	WUCF-FM (Orlando)	\$98,611
Other	University of Central Florida	
	Research Foundation, Inc. (Orlando)	\$10,000
	Florida State University	
	Research Foundation, Inc. (Tallahassee)	\$187,062
FY2018 Florida St	atewide Total	\$15,249,491
Public Broadcasti	ing in	
GEORGIA		FY 2018
Employment	Public Broadcasting Employees in State	266
& Earnings	Total Wages	\$20,813,754
8	Average Annual Salary	\$78,321
	o y	,
	CPB Station Grants (FY2018 Figures)	
Public	Georgia Public Broadcasting (Atlanta)	\$2,999,598
TV Stations	WGTV (Athens)	
	WXGA-TV (Waycross)	
	WVAN-TV (Savannah)	
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WABW-TV (Pelham) WNGH-TV (Chatsworth)

WCES-TV (Wrens) WACS-TV (Dawson) WJSP-TV (Columbus) WMUM-TV (Cochran)

WPBA-TV (Atlanta)

\$806,875

PublicWABE-FM (Atlanta)\$593,173Radio StationsWCLK-FM (Atlanta)\$188,704GPB Radio (Atlanta)\$524,879

WJSP-FM 88.1 Warm Springs/Columbus

WMUM-FM 89.7 Cochran/Macon

WSVH FM 91.1 Savannah
WWIO-FM 88.9 Brunswick
WWIO AM 1190 St. Mary's
WUGA FM 91.7 Athens
WACG-FM 90.7 Augusta
WUNV FM 91.7 Albany
WWET FM 91.7 Valdosta
WUWG FM 90.7 Carrollton
WPPR FM 88.3 Demorest
WNGU FM 89.5 Dahlonega
WJWV FM 90.9 Fort Gaines
WGPB FM 97.7 Rome
WNGH-FM 98.9 Chatsworth

WABR FM 91.1 Tifton WXVS FM 90.1 Waycross WATY FM 91.3 Folkston WBTB FM 90.3 Young Harris

FY2018 Georgia Statewide Total

\$5,113,229

Public Broadcasting in

Guam FY 2018

Employment Public Broadcasting Employees 20

& Earnings Total Wages \$985,245

Average Annual Salary \$49,262

CPB Station Grants (FY2018 Figures)

Public KGTF-TV (Barrigada) \$598,148

TV Stations

Public

Radio Stations KPRG-FM (Mangilao) \$107,731

FY2018 Guam Total \$705,879

Public Broadcasting in

HAWAII FY 2018

Employment Public Broadcasting Employees in State 68

& Earnings Total Wages \$5,153,338

Average Annual Salary \$75,784

CPB Station Grants (FY2018 Figures)

Public PBS Hawaii (Honolulu) \$1,351,953

TV Stations

Public Hawaii Public Radio \$414,603

Radio Stations Honolulu (KHPR & KIPO)

Wailuku (KKUA) Hilo (KANO)

KKCR-FM (Princeville) \$71,821

Other Pacific Islanders in Communications (Honolulu) \$1,358,591

FY2018 Hawaii Statewide Total \$3,196,968

Public Broadcasting in

IDAHO FY 2018

Employment Public Broadcasting Employees in State 142

& Earnings Total Wages \$7,754,275

Average Annual Salary \$54,512

CPB Station Grants (FY2018 Figures)

Public Idaho Public Television (Boise) \$1,722,955

TV Stations KAID-TV (Boise)

KCDT-TV (Coeur d'Alene) KIPT-TV (Twin Falls) KISU-TV (Pocatello) KUID-TV (Moscow)

PublicKBSU-FM (Boise)\$179,736Radio StationsKBSW-FM (Boise)\$246,021

KISU-FM (Pocatello)	\$114,487
KIYE-FM (Lapwai)	\$143,089

FY2018 Idaho Statewide Total \$2,406,288

Public Broadcasting in

ILLINOIS	FY 2018
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Employment	Public Broadcasting Employees in State	527
& Earnings	Total Wages	\$37,639,127
	Average Annual Salary	\$71,421

CPB Station Grants (FY2018 Figures)

Public	WSIU-TV (Carbondale)	\$929,031
TV Stations	WEIU-TV (Charleston)	\$644,786
	WMEC-TV (Springfield)	\$775,976
	WTTW-TV (Chicago)	\$5,052,193
	WQPT-TV (Moline)	\$663,236
	WTVP-TV (Peoria)	\$777,817
	WILL-TV (Urbana)	\$1,058,102

Public	WSIU-FM (Carbondale)	\$208,136
Radio Stations	WBEZ-FM (Chicago)	\$1,292,760
	WNIJ-FM (DeKalb)	\$226,398
	WDCB-FM (Glen Ellyn)	\$159,775
	WIUM-FM (Macomb)	\$179,337
	WGLT-FM (Normal)	\$142,506
	WCBU-FM (Peoria)	\$107,757
	WGVV-FM (Rock Island)	\$107,731

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WGVV-FM (Rock Island)	\$107,731
WVIK-FM (Rock Island)	\$122,384
WILL-FM (Urbana)	\$376,296
WUIS-FM (Springfield)	\$199,409

Other The Kindling Group (Chicago) \$16,696

FY2018 Illinois Statewide Total \$13,040,326

Public Broadcasting in

INDIANA FY 2018

Employment	Public Broadcasting Employees in State	389
& Earnings	Total Wages	\$21,959,565
	Average Annual Salary	\$56,415
	CPB Station Grants (FY2018 Figures)	
Public	WTIU-TV (Bloomington)	\$1,123,867
TV Stations	WNIT-TV (South Bend)	\$811,389
	WNIN-TV (Evansville)	\$688,258
	WFWA-TV (Fort Wayne)	\$784,786
	WFYI-TV (Indianapolis)	\$1,233,646
	WYIN-TV (Merrillville)	\$564,405
	WIPB-TV (Muncie)	\$882,309
	WVUT-TV (Vincennes)	\$729,231
Public	WFHB-FM (Bloomington)	\$71,821
Radio Stations	WFIU-FM (Bloomington)	\$210,146
	WVPE-FM (Elkhart)	\$125,302
	WNIN-FM (Evansville)	\$100,379
	WBNI-FM (Fort Wayne)	\$114,622
	WFYI-FM (Indianapolis)	\$270,194
	WBST-FM (Muncie)	\$131,315
	WVUB-FM (Vincennes)	\$127,299
	WBAA-FM (West Lafayette)	\$147,194
	WLPR-FM (Merrillville)	\$107,731
FY2018 Indiana Stat	ewide Total	\$8,223,894
Public Broadcasting in	ı	
IOWA		FY 2018
Employment	Public Broadcasting Employees in State	180
& Earnings	Total Wages	\$12,074,099
-	Average Annual Salary	\$67,078
	CPB Station Grants (FY2018 Figures)	
Public TV Stations	Iowa Public Television (Johnston) KBIN-TV (Council Bluffs) KDIN-TV (Des Moines) KHIN-TV (Red Oak) KIIN-TV (Iowa City)	\$2,930,900
	KQIN-TV (Davenport)	

KRIN-TV (Waterloo) KSIN-TV (Sioux City) KTIN-TV (Fort Dodge) KYIN-TV (Mason City)

Public	WOI-FM (Ames)	\$238,656
Radio Stations	KUNI-FM (Cedar Falls)	\$183,762
	KCCK-FM (Cedar Rapids)	\$106,999
	KIWR-FM (Council Bluffs)	\$104,086
	KALA-FM (Davenport)	\$25,000
	KSUI-FM (Iowa City)	\$183,584
	KWIT-FM (Sioux City)	\$145,289
	KBBG-FM (Waterloo)	\$107,731

FY2018 Iowa Statewide Total \$4,097,828

Public Broadcasting in

KANSAS FY 2018

Employment	Public Broadcasting Employees in State	134
& Earnings	Total Wages	\$7,285,396
	Average Annual Salary	\$54,572

CPB Station Grants (FY2018 Figures)

Public	KTWU-TV (Topeka)	\$820,919
TV Stations	KOOD-TV (Bunker Hill)	\$779,759
	KPTS-TV (Wichita)	\$755,050

Public

Radio Stations	Kansas Public Radio	\$239,600

KANU-FM (Lawrence) KANV-FM (Junction City) KANH-FM (Emporia)

\ 1 /	
KHCC-FM (Hutchinson)	\$196,999
KRPS-FM (Pittsburg)	\$122,068
KMUW-FM (Wichita)	\$199,727
KANZ-FM (Garden City)	\$172,175

FY2018 Kansas Statewide Total \$3,286,297

Public Broadcasting in

KENTUCKY	FY 2018

Employment	Public Broadcasting Employees in State	299

& Earnings Total Wages \$16,959,736 Average Annual Salary \$56,722

CPB Station Grants (FY2018 Figures)

Public Kentucky Educational Television (Lexington) \$4,545,713

TV Stations WKAS-TV (Ashland)

WKGB-TV (Bowling Green)
WCVN-TV (Covington)
WKZT-TV (Elizabethtown)
WKHA –TV (Hazard)
WKLE-TV (Lexington)
WKPC-TV (Louisville)
WKMA-TV (Madisonville)
WKMR-TV (Morehead)
WKMU-TV (Murray)
WKOH-TV (Owensboro)
WKON-TV (Owenton)

WKPI-TV (Pikeville) WKSO-TV (Somerset)

WKYU-TV (Bowling Green) \$797,130

PublicWFPK Louisville Public Media (Louisville)\$661,121Radio StationsWKYU-FM (Bowling Green)\$197,976WUKY-FM (Lexington)\$120,812WMKY-FM (Morehead)\$140,295WKMS-FM (Murray)\$179,611

WEKU-FM (Richmond) \$204,134 WMMT-FM (Whitesburg) \$115,728

FY2018 Kentucky Statewide Total \$6,962,520

Public Broadcasting in

LOUISIANA FY 2018

Employment Public Broadcasting Employees in State 171

& Earnings	Total Wages Average Annual Salary	\$9,929,387 \$58,067
	CDD Ct. t' C. t. (EV0010 E')	

CPB Station Grants (FY2018 Figures)

Public	Louisiana Public Broadcasting (Baton Rouge)	\$1,863,964
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TV Stations WLPB-TV (Baton Rouge)

KLTM-TV (Monroe) KLTS-TV (Shreveport) KLPB-TV (Lafayette) KLTL-TV (Lake Charles) KLPA-TV (Alexandria)

WLAE-TV (Metairie) \$492,604 WYES-TV (Metairie) \$601,093

PublicWBRH-FM (Baton Rouge)\$71,821Radio StationsWWOZ-FM (New Orleans)\$290,040KSLU-FM (Hammond)\$71,821KRVS-FM (Lafayette)\$135,076KEDM-FM (Monroe)\$119,474

 KEDM-FM (Monroe)
 \$119,474

 WWNO-FM (New Orleans)
 \$167,636

 KDAQ-FM (Shreveport)
 \$163,644

 WRKF-FM (Baton Rouge)
 \$109,020

FY2018 Louisiana Statewide Total \$4,086,193

Public Broadcasting in

MAINE FY 2018

Employment Station Employees in State 98

& Earnings Annual Wages \$7,208,302

Average Annual Salary \$73,742

CPB Station Grants (FY2018 Figures)

Public Maine Public Broadcasting (Lewiston) \$1,149,377

TV Stations WCBB-TV (Augusta)

WMEB-TV (Orono)

WMEM-TV (Presque Isle)

WMED-TV (Calais) WMEA-TV (Biddeford) Public Maine Public Broadcasting (Lewiston) \$608,421

Radio Stations WMEA/90.1 (Portland)

WMEP/90.5 (Camden) WMEW/91.3 (Waterville) WMEH/90.9 (Bangor) WMED/89.7 (Calais)

WMEM/106.1 (Presque Isle) WMEF/106.5 (Fort Kent)

WMPG-FM (Portland) \$71,821 WERU-FM (East Orland) \$119,293

FY2018 Maine Statewide Total \$1,948,912

Public Broadcasting in

MARYLAND FY 2018

Employment Station Employees in State 230

& Earnings Annual Wages \$16,654,887

Average Annual Salary \$72,570

CPB Station Grants (FY2018 Figures)

Public Maryland Public Television (Owings Mills) \$2,651,880

TV Stations WMPB-TV (Baltimore)

WMPT-TV (Annapolis) WCPB-TV (Salisbury) WWPB-TV (Hagerstown) WGPT-TV (Oakland) WFPT-TV (Frederick)

PublicWBJC-FM (Baltimore)\$145,521Radio StationsWEAA-FM (Baltimore)\$209,989

 WESM-FM (Princess Anne)
 \$178,953

 WSCL-FM (Salisbury)
 \$100,208

 WTMD-FM (Towson)
 \$186,583

 WYPR-FM (Baltimore)
 \$332,367

Other Schaffer, Janice (Bethesda) \$37,623

Eastern Region Public Media (Kensington) \$32,643 Public Media Business Association (Rockville) \$25,000 Meintel, Sgrignoli and Wallace, LLC (Waldorf) \$128,500

FY 2018 Maryland Statewide Total

\$4,029,267

Public Broadcasting in

MASSACHUSETTS

FY 2018

Employment Station Employees in State 1073

& Earnings Total Wages \$146,448,412

Average Annual Salary \$136,549

CPB Station Grants (FY2018 Figures)

Public WGBH (Boston) \$14,797,739

TV Stations WGBY-TV (Springfield)

WBGH-TV (Boston) WGBX-TV (Boston)

Public WFCR-FM (Springfield) \$321,526

Radio Stations WBUR-FM (Boston) \$2,454,687

 WICN-FM (Worcester)
 \$71,821

 WOMR-FM (Provincetown)
 \$71,821

 WUMB-FM (Boston)
 \$151,907

 WGBH-FM (Boston)
 \$837,609

 WMVY-FM (Vineyard Haven)
 \$118,563

WERS (Boston) \$132,236

Other

Civic Film, LLC (Cambridge) \$250,000 PRX, Inc. (Cambridge) \$1,500,560 Association of Independents in Radio, Inc. \$850,000

FY2018 Massachusetts Statewide Total \$21,558,469

Public Broadcasting in

MICHIGAN FY 2018

Employment Public Broadcasting Employees in State 394

and Earnings Total Wages \$26,442,300

Average Annual Salary \$67,198

CPB Station Grants (FY2018 Figures)

Public WKAR-TV (East Lansing) \$1,183,718

TV Stations	WGVU-TV (Grand Rapids)	\$1,107,799
	WNMU-TV (Marquette)	\$772,032
	WCMU-TV (Mount Pleasant)	\$985,997
	WDCQ-TV (University Center)	\$735,643
	WTVS-TV/Detroit Public Television (Wixom)	\$1,858,908
Public	WUOM-FM (Ann Arbor)	\$454,994
Radio Stations	WDET-FM (Detroit)	\$237,384
	WKAR-FM (East Lansing)	\$248,903
	WGVU-AM+FM (Grand Rapids)	\$164,666
	WIAA-FM (Interlochen)	\$270,266
	WMUK-FM (Kalamazoo)	\$138,319
	WNMU-FM (Marquette)	\$145,942
	WCMU-FM (Mount Pleasant)	\$266,388
	WBLV-FM (Twin Lake)	\$113,995
	WEMU-FM (Ypsilanti)	\$140,475
	WUVS-LP (Muskegon)	\$107,731
	WRCJ-FM (Detroit)	\$300,543

FY2018 Michigan Statewide Total

\$9,233,703

Public Broadcasting in

MINNESOTA FY 2018

Employment	Station Employees in State	994
& Earnings	Annual Wages	\$84,901,277
	Average Annual Salary	\$85,435

CPB Station Grants (FY2018 Figures)

Public	KSMQ-TV (Austin)	\$707,205
TV Stations	KWCM-TV (Appleton)	\$778,345
	KAWE (Bemidji)	\$813,220
	Twin Cities Public Television (KTCA) (St. Paul)	\$2,823,757
	WDSE-TV (Duluth)	\$861,053
Public	KAXE-FM (Grand Rapids)	\$154,352
Radio Stations	WSCD-FM (St. Paul)	\$264,300
	KKWE-FM (Callaway)	\$110,770
	KOJB-FM (Cass Lake)	\$164,025
	WTIP-FM (Grand Marais)	\$125,454
	KBEM-FM (Minneapolis)	\$111,596

KBPR-FM (St. Paul)	\$167,098
KCCM-FM (St. Paul)	\$199,480
KFAI-FM (Minneapolis)	\$91,843
KLSE-FM (St. Paul)	\$321,598
KSJN-FM (St. Paul)	\$2,707,008
KSJR-FM (St. Paul)	\$238,354
KSRQ-FM (Thief River Falls)	\$95,393
KUMD-FM (Duluth)	\$146,487
KVSC-FM (St. Cloud)	\$91,483
KBFT-FM (Nett lake)	\$171,542
KMOJ-FM (Minneapolis)	\$270,813
-	
Greater Public (Minneapolis)	\$45,000

Other Greater Public (Minneapolis) \$45,000 American Public Media (St. Paul) \$1,500,000

FY2018 Minnesota Statewide Total \$12,960,176

Public Broadcasting in

MISSISSIPPI FY 2018

Employment	Station Employees in State	124
& Earnings	Annual Wages	\$6,441,001
	Average Annual Salary	\$52,048

CPB Station Grants (FY2018 Figures)

Mississippi Public Broadcasting (Jackson)	\$1,925,596
WMPN-TV (Jackson)	
WMAH-TV (Biloxi)	
WMAE-TV (Booneville)	
WMAU-TV (Bude)	
WMAO-TV (Greenwood)	
WMAW-TV (Meridian)	
WMAB-TV (Starkville)	
WMAV-TV (Oxford)	
	WMPN-TV (Jackson) WMAH-TV (Biloxi) WMAE-TV (Booneville) WMAU-TV (Bude) WMAO-TV (Greenwood) WMAW-TV (Meridian) WMAB-TV (Starkville)

Public	WPRL-FM (Lorman)	\$165,050
Radio Stations	WURC-FM (Holly Springs)	\$172,998
	WJSU-FM (Jackson)	\$122,176
	MPB Radio (Jackson)	\$193,710

WMAB 89.9 (Mississippi State) WMAE 89.5 (Booneville) WMAH 90.3 (Biloxi)

WMAO 90.9 (Greenwood)

WMAU 88.9 (Bude) WMAV 90.3 (Oxford) WMAW 88.1 (Meridian) WMPN 91.3 (Jackson)

FY2018 Mississippi Statewide Total

\$2,579,530

Public Broadcasting in

MISSOURI FY 2018

Employment Station Employees in State 332

& Earnings Annual Wages \$21,144,779

Average Annual Salary \$63,785

CPB Station Grants (FY2018 Figures)

Public	KCPT-TV (Kansas City)	\$1,671,729
TV Stations	KETC-TV/Nine Network (St. Louis)	\$2,291,509
	KMOS-TV (Warrensburg)	\$862,403
	KOZK-TV (Springfield)	\$882,208

Public	KRCU-FM (Cape Girardeau)	\$136,844
Radio Stations	KXCV-FM (Maryville)	\$156,740
	KDHX-FM (St. Louis)	\$98,455
	KSMU-FM (Springfield)	\$122,647
	KCUR-FM (Kansas City)	\$331,734
	VII I EM (Infference City)	¢100 660

 KJLU-FM (Jefferson City)
 \$199,669

 KWMU-FM (St. Louis)
 \$719,758

 KOPN-FM (Columbia)
 \$71,821

 KBIA-FM (Columbia)
 \$186,726

 KTBG (Kansas City)
 \$88,554

FY2018 Missouri Statewide Total \$7,820,797

Public Broadcasting in

MONTANA FY 2018

Employment Station Employees in State 80

& Earnings Annual Wages \$4,052,293

Average Annual Salary \$50,972

CPB Station Grants (FY2018 Figures)

Public Montana PBS \$1,208,677

TV Stations KUSM-TV (Bozeman)

KUFM-TV (Missoula) KBGS-TV (Billings) KUGF-TV (Great Falls)

PublicKEMC-FM (Billings)\$186,937Radio StationsKGLT-FM (Bozeman)\$118,823

KGVA-FM (Harlem) \$143,089 Montana Public Radio \$269,161

> KUFM-FM (Missoula) KUKL-FM (Kalispell) KAPC-FM (Butte) KUHM-FM (Helena) KUFN-FM (Hamilton)

FY2018 Montana Statewide Total \$1,926,687

Public Broadcasting in

NEBRASKA FY 2018

Employment Station Employees in State 190

& Earnings Annual Wages \$11,276,278

Average Annual Salary \$59,349

CPB Station Grants (FY2018 Figures)

Public Nebraska Educational Television (Lincoln) \$1,623,470

TV Stations KHNE-TV (Hastings)

KLNE-TV (Lexington)
KMNE-TV (Bassett)
KPNE-TV (North Platte)
KRNE-TV (Merriman)
KTNE-TV (Alliance)
KXNE-TV (Norfolk)

KYNE-TV (Omaha)

KUON-TV (Lincoln) \$1,200,464

 Public
 KZUM-FM (Lincoln)
 \$71,821

 Radio Stations
 KVNO-FM (Omaha)
 \$103,372

 KIOS-FM (Omaha)
 \$126,186

 NET Radio (Lincoln)
 \$221,723

KUCV 91.1 (Lincoln)

KCNE-FM 91.9 (Chadron)

KHNE-FM 89.1 (Hastings) KLNE-FM 88.7 (Lexington) KMNE-FM 90.3 (Bassett) KPNE-FM 91.7 (North Platte) KRNE-FM 91.5 (Merriman) KTNE-FM 91.1 (Alliance)

KXNE-FM 89.3 (Norfolk)

Other Vision Maker Media (Lincoln) \$1,358,591

FY2018 Nebraska Statewide Total \$4,705,627

Public Broadcasting in

NEVADA FY 2018

Employment Station Employees in State 198

& Earnings Annual Wages \$13,314,028

Average Annual Salary \$67,158

CPB Station Grants (FY2018 Figures)

PublicKLVX Vegas PBS (Las Vegas)\$1,690,459TV StationsKNPB-TV (Reno)\$921,182

PublicKCEP-FM (Las Vegas)\$134,339Radio StationsKUNR-FM (Reno)\$192,140KNPR-FM (Las Vegas)\$467,696

FY2018 Nevada Statewide Total \$3,405,816

Public Broadcasting in

NEW HAMPSHIRE FY 2018

Employment Station Employees in State 85

& Earnings Annual Wages \$5,550,038

Average Annual Salary \$65,103

CPB Station Grants (FY2018 Figures)

Public New Hampshire Public Television (Durham) \$932,316

TV Stations WENH-TV (Durham)

WEKW-TV (Keene) WLED-TV (Littleton)

Public New Hampshire Public Radio (Concord) \$458,592

Radio Stations WEVS-FM (Nashua)

WEVO-FM (Concord)
WEVN-FM (Keene)
WEVO-FM (Littleton)
WEVH-FM (Hanover)
WEVO-FM (Plymouth)
WEVJ-FM (Jackson)
WEVO-FM (Portsmout)
WEVO-FM (Dover)
WEVC-FM (Colebrook)
WEVC-FM (Gorham)

FY2018 New Hampshire Statewide Total \$1,390,908

Public Broadcasting in

NEW JERSEY FY 2018

Employment Station Employees in State 101

& Earnings Annual Wages \$8,257,948

Average Annual Salary \$82,169

CPB Station Grants (FY2018 Figures)

Public New Jersey Public Television (Trenton) \$1,380,215

TV Stations WNIT Trenton

WNJS Camden WNJN Montclair

WNJB New Brunswick

PublicWBGO-FM (Newark)\$397,181Radio StationsWBJB-FM (Lincroft)\$88,567

WFMU-FM (Jersey City)	\$136,709
WWFM-FM (West Windsor)	\$124,910

Other BI Solutions Group, LLC (Lincroft) \$270,000

FY2018 New Jersey Statewide Total \$2,397,582

Public Broadcasting in

NEW MEXICO FY 2018

Employment Station Employees in State 169

& Earnings Annual Wages \$8,416,355

Average Annual Salary \$49,949

CPB Station Grants (FY2018 Figures)

Public	KENW-TV (Portales)	\$854,388
TV Stations	KNME-TV (Albuquerque)	\$1,403,245
	KRWG-TV (Las Cruces)	\$723,858

Public	KABR-AM (Alamo)	\$143,089
Radio Stations	KANW-FM (Albuquerque)	\$179,576

KGLP-FM (Gallup) \$143,089 KRWG-FM (Las Cruces) \$145,859 KSFR-FM (Santa Fe) \$161,248 KENW-FM (Portales) \$119,590 KSHI-FM (Zuni) \$143,089 KUNM-FM (Albuquerque) \$237,436 KCIE-FM (Dulce) \$164,898 KSJE-FM (Farmington) \$143,089 KTDB-FM (Pine Hill) \$291,685

Other Digital Velocity Partners LLC (Santa Fe) \$1,770,500

FY2018 New Mexico Statewide Total \$6,624,639

Public Broadcasting in

NEW YORK FY 2018

Employment Station Employees in State 1,306

& Earnings	Annual Wages Average Annual Salary	\$125,231,240 \$95,908
	CPB Station Grants (FY2018 Figures)	
Public	WMHT-TV (Troy)	\$1,166,840
TV Stations	WPBS-TV (Watertown)	\$829,403
	WSKG-TV (Vestal)	\$814,246
	WNED-TV (Buffalo)	\$1,866,441
	WNET-TV (New York)	\$12,262,015
	WCFE-TV (Plattsburgh)	\$794,977
	WXXI-TV (Rochester)	\$1,241,095
	WCNY-TV (Syracuse)	\$1,003,022
	WNYE-TV (New York)	\$1,731,303
Public	WAMC-FM (Albany)	\$394,657
Radio Stations	WSKG-FM (Vestal)	\$214,979
	WFUV-FM (Bronx)	\$442,383
	WNED-FM (Buffalo)	\$179,766
	WSLU-FM (Canton)	\$252,753
	WEOS-FM (Geneva)	\$71,821
	WRFA-FM (Jamestown)	\$71,821
	WJFF-FM (Jeffersonville)	\$95,393
	WNYC-FM (New York)	\$3,583,621
	WRVO-FM (Oswego)	\$152,270
	WXXI-FM (Rochester)	\$259,075
	WPPB-FM (Southampton)	\$90,292
	WCNY-FM (Syracuse)	\$90,068
	WMHT-FM (Troy)	\$128,846
	WAER-FM (Syracuse)	\$142,763
Other	Black Public Media (New York)	\$1,701,341
	Thirteen Productions (New York)	\$1,000,000
	StoryCorps (Brooklyn)	\$1,300,000
	Education Development Center, Inc.	\$2,667,209
	Digital Diaspora Family Reunion, LLC	\$780,000
	American Documentary, Inc. (Brooklyn)	\$553,713

Public Broadcasting in

NORTH CAROLINA

FY2018 New York Statewide Total

FY 2018

\$35,862,113

Employment & Earnings	Station Employees in State Annual Wages	333 \$21,634,522
	Average Annual Salary	\$64,969
	CPB Station Grants (FY2018 Figures)	
Public	WTVI-TV (Charlotte)	\$1,126,962
TV Stations	UNC-TV (Research Triangle Park)	\$3,437,914
	WUNC-TV (Chapel Hill)	
	WUND-TV (Edenton)	
	WUNE-TV (Linville)	
	WUNF-TV (Asheville)	
	WUNG-TV (Concord)	
	WUNJ-TV (Wilmington)	
	WUNK-TV (Greenville)	
	WUNL-TV (Winston-Salem)	
	WUNM-TV (Jacksonville)	
	WUNP-TV (Roanoke Rapids)	
	WUNU-TV (Lumberton)	
	WUNW-TV (Canton)	
Public	WCQS-FM (Asheville)	\$223,959
Radio Stations	WSNC-FM (Winston-Salem)	\$107,731
	North Carolina Public Radio	\$617,832
	WUNC-FM (Chapel Hill)	
	WRQM-FM (Rocky Mount)	
	WUND-FM (Manteo)	
	WFAE-FM (Charlotte)	\$303,816
	WDAV-FM (Davidson)	\$174,055
	WNCU-FM (Durham)	\$123,178
	WRVS-FM (Elizabeth City)	\$143,089
	WTEB-FM (New Bern)	\$121,543
	WNCW-FM (Spindale)	\$128,698
	WHQR-FM (Wilmington)	\$130,685
	WFDD-FM (Winston-Salem)	\$199,521
FY2018 North Carol	ina Statewide Total	\$6,838,983
1 12010 INUITH Calul	ma diatemine i utai	φυισσοίρος

Public Broadcasting in

NORTH DAKOTA FY 2018

Employment Station Employees in State 104

& Earnings Annual Wages \$6,042,376

Average Annual Salary \$58,380

CPB Station Grants (FY2018 Figures)

Public Prairie Public Broadcasting (Fargo) \$1,335,984

TV Stations KFME-TV (Fargo)

KGFE-TV (Grand Forks) KBME-TV (Bismarck) KSRE-TV (Minot) KDSE-TV (Dickinson) KWSE-TV (Williston) KJRE-TV (Ellendale)

KCGE-TV (Crookston, MN) KMDE-TV (Devils Lake)

PublicKEYA-FM (Belcourt)\$169,693Radio StationsKABU-FM (St. Michaels)\$162,193

KMHA-FM (New Town) \$40,919 Prairie Public Radio (Fargo) \$177,030

> KCND-FM (Bismarck) KPPD-FM (Devils Lake) KDPR-FM (Dickinson) KDSU-FM (Fargo)

KUND-FM (Grand Forks) KFJM-FM (Grand Forks) KPRJ-FM (Jamestown) KMPR-FM (Minot) KPPR-FM (Williston)

FY2018 North Dakota Statewide Total \$1,885,819

Public Broadcasting in

OHIO FY 2018

Employment Station Employees in State 530

& Earnings Annual Wages \$36,336,605

Average Annual Salary \$68,592

CPB Station Grants (FY2018 Figures)

Public WOUB-TV (Athens) \$1,185,581

TV Stations	WBGU-TV (Bowling Green)	\$861,343
	WCET-TV (Cincinnati)	\$1,010,390
	Ideastream/WVIZ-TV (Cleveland)	\$2,633,094
	WOSU-TV (Columbus)	\$1,232,409
	WPTD-TV (Dayton)	\$1,057,592
	WNEO-TV (Kent)	\$973,183
	WGTE-TV (Toledo)	\$858,849
Public	WAPS-FM (Akron)	\$93,456
Radio Stations	WOUB-FM (Athens)	\$184,350
	WGUC-FM (Cincinnati)	\$424,357
	WCPN-FM (Cleveland)	\$440,027
	WCBE-FM (Columbus)	\$126,223
	WDPR-FM (Dayton)	\$99,506
	WKSU-FM (Kent)	\$356,961
	WGTE-FM (Toledo)	\$116,719
	WCSU-FM (Wilberforce)	\$133,844
	WYSO-FM (Yellow Springs)	\$164,704
	WYSU-FM (Youngstown)	\$130,459
	WOSU-FM (Columbus)	\$316,721

FY 2018 Ohio Statewide Total

\$12,399,768

Public Broadcasting in

OKLAHOMA FY 2018

Employment	Station Employees in State	123
& Earnings	Annual Wages	\$6,177,374
	Average Annual Salary	\$50,428

CPB Station Grants (FY2018 Figures)

Public	KRSU-TV (Claremore)	\$660,628
TV Stations	Oklahoma Educational Television Authority (OC)	\$1,671,500

KETA-TV (Oklahoma City)

KOED-TV (Tulsa) KOET-TV (Eufaula) KWET-TV (Cheyenne)

Public	KUCO-FM (Edmond)	\$97,219
Radio Stations	KCCU-FM (Lawton)	\$137,302
	KGOU-FM (Norman)	\$144,652

KOSU-FM (Stillwater)	\$141,292
KWGS-FM (Tulsa)	\$134,233

FY2018 Oklahoma Statewide Total

\$2,986,826

\$766,903

Public Broadcasting in

OREGON FY 2018

Employment Station Employees in State 282

& Earnings Annual Wages \$30,981,224 Average Annual Salary \$110,058

CPB Station Grants (FY2018 Figures)

PublicKSYS-TV (Medford)\$795,327TV StationsOregon Public Broadcasting (Portland)\$2,296,650

KOPB-TV (Portland) KOAC-TV (Corvallis) KEPB-TV (Eugene) KOAB-TV (Bend) KTVR-TV (La Grande)

PublicKSOR-FM (Ashland)\$267,422Radio StationsKMUN-FM (Astoria)\$111,812

KBOO (Portland) \$100,147 KNCA-FM (Ashland) \$135,170 KRVM-FM (Eugene) \$129,782 KCUW-FM (Pendleton) \$143,089 KLCC-FM (Eugene) \$243,301 KWAX-FM (Eugene) \$95,393 KQAC (Portland) \$215,987 KWSO (Warm Springs) \$156,789

KETP-FM (Enterprise)

OPB Radio (Portland)

KHRV-FM (Hood River)

KOAB-FM (Bend) KOAC-FM (Corvallis) KOAC-FM (Astoria) KOAP-FM (Lakeview) KOBK-FM (Baker City) KOBN-FM (Burns)

KOGL-FM (Gleneden Beach)

KOPB-FM (Eugene) KOTD-FM (The Dalles) KRBM-FM (Pendleton) KTMK-FM (Tillamook)

Other Navex Global, Inc. (Lake Oswego) \$119,306

FY2018 Oregon Statewide Total \$5,577,078

Public Broadcasting in

PENNSYLVANIA FY 2018

Employment Station Employees in State 619

& Earnings Annual Wages \$49,519,791

Average Annual Salary \$80,064

CPB Station Grants (FY2018 Figures)

WLVT-TV (Bethlehem)	\$899,461
WQLN-TV (Erie)	\$747,318
WITF-TV (Harrisburg)	\$924,583
WHYY-TV (Philadelphia)	\$2,328,479
WQED-TV (Pittsburgh)	\$1,419,106
WVIA-TV (Pittston)	\$868,995
WPSU-TV (University Park)	\$1,593,948
	WQLN-TV (Erie) WITF-TV (Harrisburg) WHYY-TV (Philadelphia) WQED-TV (Pittsburgh) WVIA-TV (Pittston)

Public	WHYY-FM (Philadelphia)	\$566,209
Radio Stations	WDIY-FM (Bethlehem)	\$95,858
	WQLN-FM (Erie)	\$90,295
	WITF-FM (Harrisburg)	\$174,587
	WLCH-FM (Lancaster)	\$71,821
	WXPN-FM (Philadelphia)	\$429,404
	WQED-FM (Pittsburgh)	\$111,716
	TATELA ENGINEER	Φ11 C 1 P C

WVIA-FM (Pittston) \$116,176 WPSU-FM (University Park) \$163,929 WRTI-FM (Philadelphia) \$261,954 WYEP-FM (Pittsburgh) \$308,271

FY2018 Pennsylvania Statewide Total

\$11,172,110

Puerto Rico FY2018

Employment Public Broadcasting Employees 208

& Earnings Total Wages \$11,901,304

Average Annual Salary \$57,356

CPB Station Grants (FY2018 Figures)

PublicWMTJ-TV (Rio Piedras)\$1,127,045TV StationsWIPR-TV (San Juan)\$1,802,253

PublicWIPR-FM (San Juan)\$266,106Radio StationsWRTU-FM (San Juan)\$210,019

FY2018 Puerto Rico Total \$3,405,423

Public Broadcasting in

RHODE ISLAND FY 2018

Employment Station Employees in State 46

& Earnings Annual Wages \$3,349,304

Average Annual Salary \$72,811

CPB Station Grants (FY2018 Figures)

Public Rhode Island PBS/WSBE (Providence) \$688,724

TV Stations

Public WRNI (Providence) \$183,782

Radio Stations WRNI-AM (Providence)

WRNI-FM (Narragansett)

FY2018 Rhode Island State Total \$872,506

Public Broadcasting in

SOUTH CAROLINA FY 2018

Employment Station Employees in State 146

& Earnings Annual Wages \$9,081,986

Average Annual Salary \$62,419

CPB Station Grants (FY2018 Figures)

Public South Carolina Educational Television (Columbia) \$2,212,101

TV Stations WNTV-TV (Greenville)

WITV-TV (Charleston)
WRLK-TV (Columbia)
WJPM-TV (Florence)d
WEBA-TV (Allendale)
WJWJ-TV (Beaufort)
WRJA-TV (Sumter)
WNSC-TV (Rock Hill)
WHMC-TV (Conway)

WRET-TV (Spartanburg) WNEH-TV (Greenwood)

PublicWSSB-FM (Orangeburg)\$143,089Radio StationsSCETV Radio\$142,160

WSCI/89.3 (Charleston) WLTR/91.3 (Columbia) WEPR/90.1 (Greenville) WLJK/89.1 (Aiken)

WJWJ-FM/89.9 (Beaufort) WHMC-FM/90.1 (Conway) WRJA-FM/88.1 (Sumter) WNSC-FM/88.9 (Rock Hill)

Other National Educational Telecommunications \$35,876

Hinton, Wilbur H. (Columbia) \$28,000

FY2018 South Carolina Statewide Total \$2,561,226

Public Broadcasting in

SOUTH DAKOTA FY 2018

Employment Station Employees in State 87

& Earnings Annual Wages \$4,411,263

Average Annual Salary \$50,850

CPB Station Grants (FY2018 Figures)

Public South Dakota Public Broadcasting \$1,427,475

TV Stations KUSD-TV (Vermillion)

KBHE-TV (Rapid City)

KCSD-TV (Sioux Falls)
KDSD-TV (Aberdeen)
KESD-TV (Brookings)
KPSD-TV (Eagle Butte)
KQSD-TV (Lowry)
KTSD-TV (Pierre)
KZSD-TV (Martin)

Public	South Dakota Public Broadcasting	\$208,064
Radio Stations	89.7/KUSD (Vermillion)	

89.7/KUSD (Vermillion) 89.3/KBHE (Rapid City) 90.9/KCSD (Sioux Falls) 90.9/KDSD (Aberdeen) 88.3/KESD (Brookings) 97.1/KPSD-FM (Eagle Butte)

97.1/KPSD-FM (Eagle Butte) 91.9/KQSD-FM (Lowry) 91.1/KTSD-FM (Reliance) 102.5/KZSD-FM (Martin)

 KDKO-FM (Lake Andes)
 \$143,089

 KLND-FM (McLaughlin)
 \$143,089

 KILI-FM (Porcupine)
 \$160,793

 KOYA-FM (Rosebud)
 \$159,740

FY2018 South Dakota Statewide Total \$2,242,250

Public Broadcasting in

TENNESSEE FY 2018

EmploymentStation Employees in State213& EarningsAnnual Wages\$12,145,598Average Annual Salary\$57,089

CPB Station Grants (FY2018 Figures)

Public	WTCI-TV (Chattanooga)	\$741,602
TV Stations	WCTE-TV (Cookeville)	\$998,938
	WKNO-TV (Cordova)	\$778,941
	WETP-TV (Knoxville)	\$851,353
	WLJT-TV (Martin)	\$750,593
	WNPT-TV (Nashville)	\$1,023,763

Public	WDVX-FM (Knoxville)	\$85,813
Radio Stations	WUTC-FM (Chattanooga)	\$123,214
	WKNO-FM (Cordova)	\$127,504
	WETS-FM (Johnson City)	\$101,466
	WUOT-FM (Knoxville)	\$153,895
	WPLN-FM (Nashville)	\$332,364

Other Council of Americana Roots Music \$10,000

FY2018 Tennessee Statewide Total \$6,079,446

Public Broadcasting in

TEXAS FY 2018

Employment	Station Empl	oyees in State	614
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& Earnings Annual Wages \$40,302,865

Average Annual Salary \$65,693

CPB Station Grants (FY2018 Figures)

Public	KACV-TV (Amarillo)	\$860,018
TV Stations	KLRU-TV (Austin)	\$2,140,250
	KAMU-TV (College Station)	\$809,920
	KEDT-TV (Corpus Christi)	\$735,881
	KERA-TV (Dallas)	\$1,453,764
	KCOS-TV (El Paso)	\$636,939
	KUHT-TV (Houston)	\$1,464,821
	KNCT-TV (Killeen)	\$448,504
	KTTZ-TV (Lubbock)	\$759,266
	KPBT-TV (Midland)	\$710,441
	KLRN -TV (San Antonio)	\$948,072
Public	KACU-FM (Abilene)	\$119,679
Radio Stations	KUT -FM (Austin)	\$617,050
	KVLU-FM (Beaumont)	\$82,532
	KAMU-FM (College Station)	\$93,646
	KETR-FM (Commerce)	\$127,872
	KEDT-FM (Corpus Christi)	\$127,737
	KERA-FM (Dallas)	\$583,382
	KTEP-FM (El Paso)	\$148,409
	KUHF-FM (Houston)	\$682,970

KNCT-FM (Killeen)	\$71,821
KTTZ-FM (Lubbock)	\$156,265
KRTS-FM (Marfa)	\$185,358
KXWT-FM (Marfa)	\$71,821
KPVU-FM (Prairie View)	\$627,686
KPAC-FM (San Antonio)	\$286,676
KTXK-FM (Texarkana)	\$95,393
KWBU-FM (Waco)	\$108,736
KMFA-FM (Austin)	\$307,482
KTSU-FM (Houston)	\$141,860

Other Vianvo (Austin) \$190,576

FY2018 Texas Statewide Total \$15,794,827

Public Broadcasting in

UTAH FY 2018

Employment Station Employees in State 510

& Earnings Annual Wages \$40,211,089

Average Annual Salary \$78,807

CPB Station Grants (FY2018 Figures)

Public	KBYU-TV (Provo)	\$6,226,852
TV Stations	KUED-TV (Salt Lake City)	\$1,679,481
	KUEN-TV (Salt Lake City)	\$3,575,275

Public	KCPW-FM (Salt Lake City)	\$156,532
Radio Stations	KUSU-FM (Logan)	\$154,994
	KPCW-FM (Park City)	\$50,274
	KBYU-FM (Provo)	\$173,014
	KUER-FM (Salt Lake City)	\$ 262,142

KRCL-FM (Salt Lake City) \$103,546

FY2018 Utah Statewide Total

Public Broadcasting in

VERMONT FY 2018

Employment Station Employees in State 107

\$12,382,110

& Earnings Annual Wages \$7,110,373

Average Annual Salary \$66,608

CPB Station Grants (FY2018 Figures)

Public Vermont Public Television (Colchester) \$986,925

TV Stations WETK (Burlington)

WVER (Rutland)

WVTB (St. Johnsbury) WVTA (Windsor)

PublicWGDR-FM (Plainfield)\$71,821Radio StationsVermont Public Radio\$682,158

WVPS/107.9 (Colchester) WVPR/89.5 (Windsor) WRVT/88.7 (Rutland)

WVPA/88.5 (St. Johnsbury) WBTN-FM/94.3 (Bennington) WVBA/88.9 (Brattleboro)

FY2018 Vermont Statewide Total \$1,740,904

Public Broadcasting in

Virgin Islands FY2018

Employment Public Broadcasting Employees 30

& Earnings Total Wages \$1,909,235 Average Annual Salary \$63,115

CPB Station Grants (FY2018 Figures)

Public WTJF-TV (St. Thomas) \$1,001,985

TV Stations

FY2018 Virgin Islands Total \$1,001,985

Public Broadcasting in

VIRGINIA FY 2018

Employment Station Employees in State 624

& Earnings	Annual Wages Average Annual Salary	\$57,561,718 \$92,320
	CPB Station Grants (FY2018 Figures)	
Public TV Stations	WETA-TV (Arlington) WVPT-TV (Harrisonburg) WHRO-TV (Norfolk) Commonwealth Public Broadcasting WCVE-TV (Richmond) WHTJ-TV (Charlottesville) WNVT-TV (Falls Church) WBRA-TV (Roanoke)	\$14,421,863 \$469,486 \$1,251,139 \$2,629,196
Public Radio Stations	WETA-FM (Arlington) WTJU-FM (Charlottesville) WMRA-FM (Harrisonburg) WHRV-FM (Norfolk) WCVE-FM (Richmond) WVTF-FM (Roanoke) WNRN-FM (Charlottesville) WNSB-FM (Norfolk)	\$357,194 \$91,021 \$135,986 \$334,380 \$228,109 \$ 221,402 \$100,465 \$107,731
Other (Producers, Consultants, Etc.)	Public Broadcasting Service (Arlington) Washington Speakers Bureau, Inc. (Alexandria) APTS (Arlington) NEWSHOUR PRODUCTIONS LLC (Arlington) Kevin Clark Group, LLC Media Institute Cavell, Mertz and Associates, Inc. Blue Land Media, LLC BIA Advisory Services LLC	\$96,476,089 \$36,000 \$26,708 \$4,407,128 \$2,438 \$10,000 \$56,250 \$50,000
FY2018 Virginia Stat	ewide Total	\$122,717,722
Public Broadcasting in WASHINGTON		FY 2018

Employment	Station Employees in State	477
& Earnings	Annual Wages	\$33,787,176
	Average Annual Salary	\$70,870

CPB Station Grants (FY2018 Figures)

Public	KWSU-TV (Pullman)	\$757,187
TV Stations	KCTS-TV (Seattle)	\$1,889,713
	KSPS-TV (Spokane)	\$1,009,815
	KBTC-TV (Tacoma)	\$1,029,753
Public		
Radio Stations	KSVR-FM (Mount Vernon)	\$71.821

KWSU-AM (Pullman) \$279,656 KUOW-FM (Seattle) \$649,416 KEXP-FM (Seattle) \$540,000 KPBX-FM (Spokane) \$208,104 KPLU-FM (Tacoma) \$545,776 KING-FM (Seattle) \$230,119 KDNA-FM (Granger) \$166,765 KNHC-FM (Seattle) \$115,040 KBCS-FM (Bellevue) \$114,023

Other Organizational Research Services (Seattle) \$372,968

FY2018 Washington Statewide Total \$7,980,156

Public Broadcasting in

WEST VIRGINIA FY 2018

Employment Station Employees in State 102

& Earnings Annual Wages \$4,634,910

Average Annual Salary \$45,440

CPB Station Grants (FY2018 Figures)

Public West Virginia Public Broadcasting \$1,376,288

TV Stations WPBY-TV (Huntington)

WSWP-TV (Beckley) WNPB-TV (Morgantown)

WPWP (Beckley)

PublicWVPB-FM (Charleston)\$260,093Radio StationsAllegheny Mountain Radio\$247,144

WVMR-AM (Frost) WVLS-FM (Dunmore)

WCHG-FM (Hot Springs, Virginia)

WVMR-FM (Dunmore) WVPC-FM (Franklin) WNMP-FM (Marlinton)

FY2018 West Virginia Statewide Total

\$1,883,525

Public Broadcasting in

WISCONSIN FY 2018

Employment Station Employees in State 422

& Earnings Annual Wages \$25,588,569

Average Annual Salary \$60,636

CPB Station Grants (FY2018 Figures)

Public Wisconsin Public Television \$2,835,001

TV Stations WHA-TV (Madison)

WHLA-TV (La Crosse)
WHRM-TV (Wausau)
WHWC-TV (Menomonie)
WLEF-TV (Park Falls)
WPNE-TV (Green Bay)

Milwaukee Public Television/WMVS-TV \$1,889,422

PublicWOJB-FM (Hayward)\$143,089Radio StationsWORT-FM (Madison)\$87,772

WUWM-FM (Milwaukee) \$248,768 WYMS-FM (Milwaukee) \$181,416 WXPR-FM (Rhinelander) \$128,263 WLSU (Madison) \$144,384 Wisconsin Public Radio \$1,138,966

WHAD FM 90.7 (Milwaukee)
WERN FM 88.7 (Milwaukee)
WHA AM 970 (Madison)
WHID FM 88.1 (Green Bay)
WRST FM 90.3 (Oshkosh)
WHND FM 89.7 (Sister Bay)
WSHS FM 91.7 (Sheboygan)
WHLA FM 90.3 (La Crosse)
WHHI FM 91.3 (Highland)
WSSW FM 89.1 (Platteville)
WHWC FM 88.3 (Menomonie)

WUEC FM 89.7 (Eau Claire) WRFW FM 88.7 (River Falls) KUWS FM 91.3 (Superior) WHSA FM 89.9 (Brule) WHRM FM 90.9 (Wausau)

FY2018 Wisconsin Statewide Total

\$6,797,081

Public Broadcasting in

WYOMING FY 2018

Employment Station Employees in State 47

& Earnings Annual Wages \$2,541,969

Average Annual Salary \$54,666

CPB Station Grants (FY2018 Figures)

Public Wyoming PBS \$1,159,983

TV Stations KCWC (Riverton)

KWYP (Laramie) KPTW (Casper)

Public Wyoming Public Radio \$317,319

Radio Stations KBUW/90.5 (Buffalo)

KDUW/91.7 (Douglas)
KSUW/91.3 (Sheridan)
KUWA/91.3 (Afton)
KUWC/91.3 (Casper)
KUWD/91.5 (Sundance)
KUWG/90.9 (Gillette)
KUWI/89.9 (Rawlins)
KUWJ/90.3 (Jackson)
KUWN/90.5 (Newcastle)
KUWP/90.1 (Powell)
KUWR/91.9 (Laramie)
KUWT/91.3 (Thermopolis)
KUWX/90.9 (Pinedale)

KUWZ/90.5 (Rock Springs)

FY2018 Wyoming Statewide Total

\$1,477,302



Excerpt from the Report on

Alternative Sources of Funding for Public Broadcasting Stations

This report is provided by the Corporation for Public Broadcasting (CPB) in response to the Conference Report accompanying the Military Construction and Veterans Affairs and Related Agencies Appropriations Act, 2012 (H.R. 2055).

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I. INTRODUCTION

This report is provided by the Corporation for Public Broadcasting (CPB) in response to the Conference Report accompanying the Military Construction and Veterans Affairs and Related Agencies Appropriations Act, 2012 (H.R. 2055). The conferees requested that CPB provide a report to House and Senate Committees on Appropriations within 180 days of enactment of the Act on alternative sources of funding for public broadcasting stations in lieu of federal funding.

II. <u>EXECUTIVE SUMMARY</u>

The public broadcasting community is fully aware of the fiscal and budgetary challenges facing the federal government. Since the recession struck in 2008, public broadcasters have seen their own budgets ravaged by declining contributions from individuals, corporations, foundations, universities, state and local governments—and a \$50 million reduction in federal support in the last two years alone. ¹

More than 60 percent of public television and radio stations are operating with budget deficits today.² Public broadcasters sympathize with the Congress's effort to find economies, efficiencies and cost savings. As this report shows, public broadcasters are making similar efforts.

In response to Congress's request for this report, CPB engaged the management consulting firm of Booz & Company to explore in depth possible alternatives to the federal appropriation, to identify existing funding sources that could yield any significant new revenue, and to consider the impact of the loss of the federal appropriation on the public broadcasting system.

In the course of this effort, CPB and Booz & Company consulted with the leaders of the national public broadcasting organizations, officials from public radio and television stations across the country, and media and financial experts. From these consultations, Booz & Company considered a broad range of possible funding sources, both new and existing. CPB and Booz & Company then narrowed the focus to five new options and 14 existing sources that offered the most realistic opportunity to enhance revenue. These options were beyond public broadcasting's core charitable fundraising efforts, which stations are constantly working to grow and improve.

The five new or alternative funding options for public broadcasting stations include: television advertising, radio advertising, retransmission consent fees, paid digital subscriptions and digital game publishing.

The 14 existing sources from which public broadcasting already draws include: merchandise licensing, digital online advertising, education and state government fee-for-service arrangements, events, renting donor lists to direct marketers, tower leasing, production services,

¹ National Telecommunications and Information Administration's Public Telecommunications Facilities Program and the CPB Digital Appropriation.

² Analysis of 2009 and 2010 financial reports submitted to CPB by public radio and television stations showed that 60 percent had experienced deficits in their unrestricted operating budgets.

on-demand distribution, content licensing, DVD/CD sales, retail product sales, magazine publishing, book publishing and mobile device applications.

Finally, CPB examined the potential for revenue that might be generated through the sale of spectrum, as well as the potential impact of a change in the law that currently bars public broadcasters from airing paid political advertisements.³

CPB, through Booz & Company's comprehensive analysis, found—as a study by the Government Accountability Office (GAO) concluded in 2007 ⁴—that there is simply no substitute for the federal investment to accomplish the public service mission that Congress has assigned to public broadcasters and that the American people overwhelmingly support.

The mission of public broadcasting—service to our democracy and civic life—can be traced at least as far back as 1938, when the Federal Communications Commission (FCC) set aside spectrum for noncommercial broadcasting in the early years of radio (and before television was introduced at the 1939 World's Fair).

Public broadcasting is rooted in education, keeping faith with the commitment President Eisenhower and Congress made with the National Defense Education Act of 1958 to use the unique power of television, radio and other media to enrich the teaching and learning experience in America's classrooms. In 1967, Congress passed the Public Broadcasting Act,⁵ launching the modern system of public television and radio, including satellite-delivered national programming services to supplement local programming and other essential community services provided by public television and radio stations.

While private donations and existing funding sources can and do help defray considerable costs for the much-honored programs of public television and radio—nonfederal funding represents five of every six dollars invested annually in public broadcasting—both CPB⁶ and the 2007 GAO study found that the federal investment is indispensible to sustaining the operations of public broadcasting stations, the public service missions they pursue, and the universal service to which the Public Broadcasting Act aspires.

The American public clearly believes that federal funding is an appropriate, effective and valued use of their tax dollars. Overwhelmingly, the public believes that federal funding for public

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³ The Ninth Circuit United States Court of Appeals recently struck down §399B(a)(2) and (3) of the Communications Act, which ban issue and political advertising on public broadcasting stations, as unconstitutional restrictions on free speech. *Minority Television Project v. FCC*, __ F2d __ (2012). The mandate in that case has not yet issued.

⁴ GAO report on *Issues Related to the Structure and Funding of Public Television* (GAO-07-150, January 2007) ("GAO Report") at 36.

⁵ 47 U.S.C. §396ff.

⁶ CPB engaged McKinsey & Company in 2002-03, Brody Weiser Burns in 2004, and Booz Allen Hamilton in 2007 to study the potential of various funding sources for public broadcasting.

broadcasting is money well spent and the best value for America's tax dollars, second only to national defense.⁷

The 15 percent of financial support for the public broadcasting system that is derived from the federal appropriation is vital money. It incentivizes private donations and other funding sources by leveraging those dollars with federal dollars, enabling innovation and technological advances and providing crucial support to stations—particularly those serving rural, minority and other underserved communities—that rely to a much greater degree on federal support and thus are most at risk from its loss.

The public-private partnership represented by the federal appropriation and public broadcasting is a uniquely American approach. Federal money is the foundation upon which stations build and raise, on average, at least six times the amount they receive from the federal government. This nonfederal money lets CPB know that stations are receiving a positive "report card" from the communities they serve. Of every federal dollar, 95 cents goes to support local stations and the programs and services they offer; only five cents goes to administration of funding programs and overhead.⁸

This report also shows that, in the absence of the federal appropriation, a domino effect will result in the loss of those stations most "at risk" first, and then a cascading debilitating effect on remaining stations and the national programming services. At bottom, the loss of federal support for public broadcasting risks the collapse of the system itself.

Our key findings are:

- 1) Ending federal funding for public broadcasting would severely diminish, if not destroy, public broadcasting service in the United States. Noncommercial radio and television stations in many localities would struggle to survive without the national impact, high-quality content and accountability that federal funding has made possible for the last 45 years.
- 2) Fifty-four public television stations in 19 states are at high risk of no longer being able to sustain operations if federal funding were eliminated. Of the 54 stations, 31 serve predominantly rural areas, and 19 provide the only public television service available to viewers in their service area. If these 54 stations ceased broadcasting, more than 12 million Americans would lose access to the only public television program service currently available to them over the air.
- 3) Seventy-six public radio stations in 38 states are at high risk of no longer being able to sustain operations if federal funding were eliminated. Of the 76 stations, 47 serve rural

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⁷ This finding has been replicated again and again in polls conducted by different research firms, including Harris Interactive (Trust QuickQuery, February 2012), Hart Research/American Viewpoint (PBS Voter Survey, February 2011), and GfK Roper (2010 and earlier years).

⁸ Public Broadcasting Act, as amended. 47 U.S.C. §396 (k)(3)(A)(i)(I).

communities, 46 offer the only public radio service available to their listeners, and 10 provide the *only broadcast service*—radio *or* television, public *or* commercial—available over the air to their listeners. If these 76 stations at high risk ceased broadcasting, nearly 3.5 million Americans would lose access to the only public radio program service currently available to them over the air.

- 4) None of the five options for alternative sources of revenue offers a realistic opportunity to generate significant positive net revenue that could replace the current amount of federal funding that CPB receives through the appropriations process on behalf of public broadcasting.
- 5) There is no combination of alternative sources of funding that together could replace or significantly reduce the federal appropriation.
- 6) A shift from a noncommercial model to a commercial advertising model would have dramatically negative consequences for many of the communities that public broadcasters serve. In the absence of federal funding, there are small urban stations, small-market stations, rural stations and stations that serve diverse communities that will likely fail because they do not have the capacity to either shift to a commercial model or raise the revenue to replace the loss of CPB funding.
- 7) Public broadcasting is raising at least six times the federal appropriation and engaging in enhanced efforts to increase revenue in appropriate ways. Even if public broadcasting could raise additional revenue through charitable giving, corporate underwriting and other, smaller existing sources of potential revenue in the faltering economic recovery, the revenues raised would barely begin to cover the losses that public broadcasting has experienced due to the recession and other funding cutbacks, and could never replace the federal appropriation.
- 8) There is no clear plan for how the sale of spectrum could provide revenue for public broadcasting. In fact, if any revenues were derived from the sale of spectrum, they would flow on a one-time basis and only to television stations willing to give up their channels. Even if the proceeds could be aggregated into a common endowment fund for public broadcasting, they would not be sufficient to provide an ongoing source of funding for public television and radio stations that could replace the federal appropriation.
- 9) The sale of issue or political advertising would quickly erode the public's trust in the integrity of public broadcasting's content, even more quickly than would the sale of commercial advertising. Moreover, revenues that could be obtained from the sale of issue or political advertising would be volatile and unevenly distributed, since any particular station's attractiveness to prospective political or issue advertisers will depend on local political, public opinion, and advertising conditions that may change from one election cycle or legislative session to the next.

CPB embraces this opportunity to address the important issue of whether and how to fund public broadcasting in the United States. The issue goes directly to whether the United States should have a public broadcasting system.

For decades, this country's leaders and the public have answered this question in the affirmative. Over that time, the public broadcasting system, with both public and private investment, has pursued the goal of promoting and enhancing our democracy and civil society. Its viewers and listeners are first and foremost citizens of the United States, and they have come to rely on public broadcasting to be informed and engaged on matters of importance to our country and our society. Any debate about the value of public broadcasting is fundamentally a debate about the value of an informed and engaged citizenry and the role of an institution—public broadcasting—that is central to America's pursuit of this goal.

This report concludes that there is no substitute for federal support of public broadcasting, and that the loss of federal support would mean the end of public broadcasting, and with it the end of an extraordinarily useful national teaching tool, the loss of the most trusted source of news and public affairs programs in the nation, the erosion of our national memory and exceptional culture, the compromise of our civil defense and emergency alert system, and the demise of a federal investment that the American people consider a better use of tax dollars than any other except national defense.

These are the inevitable consequences of a loss of federal funding for public broadcasting, as this report will demonstrate in detail.

III. THE ROLE OF PUBLIC BROADCASTING IN THE UNITED STATES

Public broadcasting was born with the FCC's decision in 1938 to set aside spectrum for noncommercial broadcasting. In the aftermath of the launch of the Sputnik satellite by the Soviet Union in 1957, President Eisenhower and Congress saw in "educational television" and similar media the power to expand and enrich essential instruction in science, technology, engineering and mathematics to allow the United States to better compete in the "space race" and the Cold War with the Soviet Union. Title VII of the National Defense Education Act of 1958 is devoted to this topic.

Congress itself launched the modern system of public television and radio with the Public Broadcasting Act of 1967, creating the Corporation for Public Broadcasting to serve as the steward of continuing federal appropriations for public television and radio.

Recognizing the sheer power of media in the lives of citizens, there was strong consensus that there should be at least one place in the media landscape where the ownership, production and distribution of content would be shielded from both political crossfire and the commercial marketplace. Public broadcasting would be free of government control and the pressure to turn a profit by the promotion of products and thus enabled to pursue the mission of informing and educating our citizens.

The Public Broadcasting Act expressed these goals: responsiveness to the people's interests, diversity and excellence in noncommercial programming, and the provision of service to all citizens of the United States. Section 396(a)(5) of the Communications Act declares that "it furthers the general welfare to encourage public telecommunications services which will be responsive to the interests of people both in particular localities and throughout the United States, and will constitute an expression of diversity and excellence, and which will constitute a source of alternative telecommunications services for all the citizens of the Nation." Section 396(a)(7) further states, "it is necessary and appropriate for the Federal Government to complement, assist and support a national policy that will most effectively make public telecommunications services available to all citizens of the United States."

Forty-five years later, this uniquely American public-private partnership is keeping its promise to the American people by providing a safe place where children can learn on-air and online, providing high-quality educational content for teachers in the classroom and learners at home, and providing reliable and trusted news and information beyond a sound bite. This partnership is making a difference in the lives of individuals and communities.

Public broadcasting has directly, forcefully and effectively pursued its mission to inform and educate, promote civic discussion, innovate, take creative risks, and serve the underserved. Now even more, a robust public broadcasting system is necessary to maintaining an educated and informed citizenry and a civil society that enriches public life throughout the nation.

MISSION

The mission of public broadcasting is to advance a well-educated, well-informed society capable of self-governing the world's greatest democracy. Public broadcasting aspires to be media that matters—to provide content of consequence, to keep faith with the visions of political, educational, philanthropic and community leaders across the decades who have seen in public broadcasting the potential to strengthen our nation by promoting lifelong learning and an informed citizenry.

The need for public broadcasting today is greater than ever. The proliferation of channels and content speaks to quantity—not quality and not real diversity. Commercially sponsored video and audio services can do many things, including providing good entertainment, but they are not dedicated to providing trusted content that educates and informs. The clutter of media voices, many of which are unabashedly viewpoint-based or unfiltered by responsible journalist-curators, actually makes it harder for viewers and listeners to learn and understand what they need to

¹⁰ 13th Allstate–National Journal Heartland Monitor Poll, June 2012.

⁹ Harris Interactive Trust QuickQuery, February 2012.

know to be critical and discerning citizens. This is why the public *trusts* public broadcasting above virtually all other institutions in our society. ¹¹

Commercial media are also oriented to serve the mass market, yet their business must focus on generating the largest possible audience in demographic categories that advertisers value most. These commercially desirable audiences do not include children (other than perhaps for the purpose of stimulating demand for certain food, clothing, toys and theme-park admissions), adults aged 50-plus, minority communities, and audiences in rural areas. The cost of producing high-quality children's, educational, cultural, documentary and similar programs has largely caused the successful commercial services to move away from such programming to the realm of low-cost reality television, and programming aimed at the lowest common denominator. Most programming services are only available to the subscribers of cable and satellite services, not to the entire country for free. Public broadcasting has been charged with the mission of addressing the educational and informational needs of these unserved and underserved communities, and only public broadcasting provides the media diversity that our country needs.

Each day, public broadcasting stations train teachers and help educate America's children in school and at home. They provide in-depth journalism that informs citizens about important issues in their neighborhoods, their country and around the globe. They make the arts accessible to all citizens regardless of where they live. They constitute a forum where ideas can be explored and discussed in a respectful and civil way.

Public broadcasting enjoys overwhelming public support—170 million Americans regularly rely on public broadcasting. At a time of increasing cynicism and distrust of public institutions, public media has earned and maintained the trust of the American people. Public opinion surveys routinely rank public television as the country's most trusted institution. Recent studies conducted by independent non-partisan research companies find that PBS is the most trusted institution in the United States—with a trust level twice that of the next most-highly-trusted American institution, the courts. ¹² Nearly half of all registered voters trust PBS "a great deal"—more than trust commercial television or newspapers. ¹³ PBS was also found to be the most fair outlet for news and public affairs among such networks as ABC, CBS, NBC, CNN, MSNBC and Fox. ¹⁴

¹¹ Far from viewing public broadcasting as enjoying an unfair advantage in the media world, most commercial media appreciate the work of public broadcasting, as it relieves them of public service obligations that might otherwise be imposed on them by law or regulation, and it does not compete with them for advertising revenues.

¹² Harris Interactive Trust QuickQuery, February 2012.

¹³ Hart Research Associates/American Viewpoint PBS National Voter Survey, February 2011.

¹⁴ ORC International—Online Caravan, January 2012.

THE ROLE OF CPB

CPB's mission is to facilitate the development of, and ensure universal access to, high-quality noncommercial programming and telecommunications services, and to strengthen and advance public broadcasting's service to the American people. CPB does not own or operate public broadcasting stations, or govern the national organizations. CPB is responsible for the taxpayer's investment in the public broadcasting service. Although CPB funds are distributed through a statutory formula, under which only five percent can be used for administrative expenses, CPB ensures that the federal funding is wisely invested in stations and programs that contribute to our country and serve our citizens. Over the past few years, CPB has instituted policies and procedures to make it even more accountable and transparent to the taxpayers who provide the funding. In this respect, CPB acts as a guardian of the mission and purposes for which public broadcasting was established.

For the last three years, CPB has strategically focused investments on the "Three Ds"—Digital, Diversity and Dialogue. This refers to support for innovation on digital platforms and extending public media's reach and service over multiple platforms; content that is for, by and about Americans of all backgrounds; and services that foster dialogue and a deeper engagement between the American people and the public service media organizations that serve them.

EDUCATION

As mentioned above, most public television stations began as part of the "educational television" initiative inspired by President Eisenhower in 1957. President Eisenhower's vision for public television was a revolutionary means of enriching American students' learning experience especially in science, technology, engineering and mathematics—to meet the challenges of the space race and the Cold War. In effect, President Eisenhower saw public television as an element of America's national defense—in the same way he saw the interstate highway system—and more than five decades later, it remains just so.

Public broadcasting's contribution in education is well documented and spans the spectrum from early childhood through adult learning. We are America's largest classroom, with content available to all children, including those who can't afford preschool. Built on the success of programs like Sesame Street, Reading Rainbow and Mister Roger's Neighborhood, PBS is the Number 1 source of media content for preschool teachers and a leading place parents turn to for preschool video online, with content proven to improve critical literacy skills in young children. Our content is repeatedly regarded as "most trusted" by parents, caregivers and teachers. Further, according to a recent Nielsen study, national weekday ratings for PBS children's programming by mothers of children aged three and under increased 45 percent since 2009. 15

In addition, the PBS Kids family of Websites (PBS Kids & PBS Kids GO!) averages 14 million unique visitors per month¹⁶ and reaches children in both home and other out-of-school settings.

¹⁵ Nielsen Television Index (NTI) NPower Live+7 AA Time Period Ratings M-F 7A-6P, February data for each year, 2009-2012.

¹⁶ Google Analytics, February 2012.

These services create a seamless connection between early learning and elementary education. A recent evaluation of PBS Kids GO! (a website and video player offering a diverse and engaging Web destination for children aged 6-10) showed that GO! could increase children's interest in learning inside and outside the classroom, and encourage classroom participation, positive classroom behavior and homework completion. Parents also agreed that public media was the innovator in children's educational media—more innovative than either cable or commercial network television.¹⁷

The FCC's recent report *The Information Needs of Communities* states that when cable television matured there was some question whether new commercial children's channels would obviate the need for public television's children's programming. The report asserts that few would make that argument now, as "it has become evident that commercial outlets tend to excel at entertainment programming, while public broadcasting emphasizes educational content, content geared toward younger children, and content designed specifically to improve cognitive functioning and school performance." ¹⁸

In addition to creating content for broadcast, Web and mobile platforms, local stations work with community partners to extend the learning by providing additional resources to Head Start centers, daycare facilities, faith-based organizations and others. No other media organization has both national reach coupled with on-the-ground deployment of resources specifically charged with serving underserved and low-income communities. Exploring other models of content development and service to communities, especially through commercial means, would drastically change public broadcasting's ability to first serve the educational needs of children. Major networks usually provide upfront costs to cover the production of new content with the expectation that cost (plus profit) would be recouped through ancillary product sales. This model requires content creators to assume a "product first" rather than an "education first" approach in designing children's programs. The public media model—service to kids, parents and caregivers first—means content is built with educational goals at the forefront. These are incorporated through engaging characters and storylines that inspire and instill learning outcomes.

CPB's work with the Department of Education's Ready To Learn program is an excellent example of how public media brings together high-quality educational content with on-the-ground work in local communities. We also invest in research that demonstrates and promotes the effectiveness of this content in formal and informal educational settings. One example is the series *Super Why!*, a preschool literacy program for children aged 3 to 5. In one study, children who interacted with *Super Why!* content scored 46 percent higher on standardized early literacy tests. ¹⁹

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¹⁷ Evaluation of PBS KIDS GO! (Submitted to the Public Broadcasting Service July 2011 by WestEd: Betsy McCarthy, Ph.D.; Michelle Tiu; Sara Atienza; Weiling Li, Ph.D.; Jonathan Nakamoto, Ph.D.).

¹⁸ Steven Waldman and the FCC Working Group on Information Needs of Communities, *The Information Needs of Communities, The Changing Media Landscape in a Broadband Age* (June, 2011) at 156.

¹⁹ Deborah L. Linebarger, Deborah K. Wainwright and Katie McMenamin, Annenberg School for Communication at the University of Pennsylvania, "Summative Evaluation of SUPER WHY!" 2008.

Throughout the United States, public television stations have worked with local summer learning programs to facilitate literacy through the *Super Why!* Summer Reading Camps, by using a curriculum that provides critical literacy support to at-risk rising kindergarten students. Another series for early elementary students, *Martha Speaks*, pairs 4th-grade students with kindergartners to create the eight-week Martha Speaks Reading Buddies program. Over the last five years, this program has taken place in elementary school classrooms, helping younger students build vocabulary and comprehension while building older students' leadership and literacy skills. Studies have found that the program has a positive impact on fluency, vocabulary development, comprehension and written expression as well as children's enthusiasm for reading.²⁰

In partnership with local schools, public broadcasters provide a wide array of resources and services to thousands of schools across the country. PBS Learning Media is an example of multimedia content that is leveraged for K-12 formal education purposes by building "just in time" resources for teachers to use to supplement their instruction. Currently reaching 500,000 teachers and with over 50,000 registered users, Learning Media includes nearly 20,000 interactive, curriculum-aligned digital learning resources that have been created from the best of public television's top-quality content such as *Nova*, and in conjunction with partners such as the Library of Congress, the National Archives, NASA, the National Science Foundation and other federal agencies. Local public television stations in 42 states are working to bring these resources to more classrooms across the country. PBS Learning Media also includes over 2,000 science, technology, engineering and mathematics (STEM) resources, funded by CPB through digital learning resources grants to local public television stations. A study involving more than 3,500 middle school students in eight states showed that students who received instruction using one of these STEM resources outperformed their peers in a matched comparison group in each tested area. ²¹

"American Graduate: Let's Make It Happen" is a public media initiative supported by CPB to help students stay on the path to graduation and future success. Public broadcasting has a long history of improving educational outcomes for high-need students and communities. CPB is supporting public broadcasting stations in 30 states, plus the District of Columbia and Puerto Rico, that are working with more than 600 national and community-based partners to raise awareness of the high-school dropout crisis by creating targeted national PBS and NPR content as well as local productions, delivered on multiple platforms, on all facets of the issue. In addition, it is working to engage and empower teachers and at-risk students through community collaborations and classroom resources. Leveraging the trust and convening power of local stations, CPB has partnered with the Bill & Melinda Gates Foundation to host and broadcast teacher town halls to provide teachers with a voice about the challenges their students face in the classroom and in the community, as well as to offer solutions to the crisis.

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²⁰ Rebecca Silverman, University of Maryland, "WGBH Martha Speaks Outreach Evaluation" 2009.

²¹ STEM Digital Media Resources: Final Evaluation Report (Submitted to the Corporation for Public Broadcasting May 2012 by James Marshall Consulting).

In addition to providing over 700 curriculum resources online for teachers and parents on AmericanGraduate.org, stations are responding to the needs in their communities to help address the dropout crisis. In Hampton Roads, Virginia, and Las Vegas, Nevada, public broadcasting stations have developed virtual learning academies with high-quality, standards-based courses for high school completion. The Virtual High School operated by Vegas PBS had 8,900 public enrollments in 2010-2011, with a 75-percent passing rate—higher than the district average—with 100 percent highly qualified teachers and a 40-percent increase in enrollment over the previous year.

Public broadcasting's educational content, deployed with the latest in learning technology, can continue to be the "tip of the spear" in educational reform to help improve the academic achievement of millions of American students.

LOCAL SERVICE AND ENGAGEMENT

Today, public broadcasting serves virtually the entire country. Public television stations and public radio stations, supplemented with television and radio translator stations, reach nearly 281 million people with an over-the-air signal—approximately 98 percent of the population.²² More than 123 million people watch public television in a typical month,²³ and nearly 65 million listen to a public radio station.²⁴ Each month, more than 36 million people visit a public broadcasting Website.²⁵

By design the American public broadcasting system is locally owned, locally controlled and locally supported, making it unique among media in the United States, and perhaps the world. Other media tend to be centralized, top-down enterprises. Public television and radio stations are licensed to community-based nonprofit entities, state and local government agencies, and both public and private educational institutions. The stations and their licensees are important institutions in their communities.

Because of their local ties, their commitment to a mission of service and their direct financial dependence on the public and other community institutions for support, stations have a high level of engagement with their communities.

²⁴ Arbitron Spring 2010 National Regional Database, CPB Station Composite, Persons 12+, M-Su 6a-12m, US Total, compiled by Radio Research Consortium.

²²There are 364 public television stations and 1,017 public radio stations in the United States. For administrative purposes, CPB groups co-licensed stations into 171 public television grantees and 406 public radio grantees.

²³ Nielsen Television Index (NTI) NPower Live+7 6A-6A October 2011 (persons aged 2+).

²⁵ Omniture SiteCatalyst, February 2012; Google Analytics, February 2012; Nielsen @plan, Release 3 2010, persons 18+.

Public television and radio stations are at the center of literally hundreds of community endeavors and partnerships addressing all manner of local issues of importance, ranging, for example, from gangs to obesity, high school dropout rates to job training.

One of the most important services that public television and radio stations provide to their communities is to alert citizens to emergencies and guide them to safety. All public television and radio stations participate in the Emergency Alert System (EAS), broadcasting thousands of alerts and warnings regarding weather threats, child abductions, and many other types of emergencies. Further, every public television station is actively involved in the Warning, Alert and Response Network Act (WARN) program, which uses public television signals as a core part of the Commercial Mobile Alerting System (CMAS) for the Department of Homeland Security and the Federal Emergency Management Agency (FEMA). 26 CMAS is a nationally coordinated method of sending geographically targeted text-like Wireless Emergency Alerts (WEA) to the public.²⁷ Although the primary distribution of these messages will be over the Internet, public television stations, by virtue of their community-based mission, widespread geographical coverage, and satellite delivery system, are considered to be an ideal platform to support a backup method of transmitting these messages. ²⁸ Finally, CPB and PBS are funding the Mobile EAS pilot project, which aims to foster more collaboration between public and commercial broadcasters and their local alert and safety organizations. Three public broadcasting stations participated in the pilot—WGBH/Boston television and radio, Vegas PBS and Alabama Public Television—creating and distributing emergency alerts using video, text and other media.

SERVING THE UNDERSERVED

Public broadcasting provides virtually all Americans with free, over-the-air access to its programming and services. More than 98 percent of the U.S. population can access public broadcasting's over-the-air signals. This has become increasingly important to Americans who, in difficult economic times, find the expense of cable or satellite service a luxury they cannot afford. Moreover, in some rural areas of the country, public television and radio stations are the only broadcast signals available.

One of public broadcasting's greatest priorities is to meet the information needs of an increasingly diverse nation—in the words of the Public Broadcasting Act, to address "the needs of unserved and underserved audiences, particularly children and minorities." Public

²⁶ The Warning, Alert, and Response Network Act (2006) established the Commercial Mobile Alert System (CMAS), a partnership between FEMA, the FCC and wireless carriers for the purpose of enhancing public safety.

²⁷ WEAs will relay Presidential, AMBER and Imminent Threat alerts to mobile phones using cell broadcast technology that will not get backlogged during times of emergency when wireless voice and data services are highly congested.

²⁸ In 2008, the FCC passed a rule [FCC 08-164] requiring public television stations to "provide a hardened diverse path for the delivery of CMAC messages from FEMA to Cellular Carriers." In 2010, PBS received a grant from the Department of Commerce to ensure that all eligible public television stations meet this FCC mandate to transmit these essential emergency alerts.

²⁹ 47 U.S.C. §396 (a)(6).

broadcasting accomplishes this by maintaining universal access—by providing service in areas that are not well served by other media and by investing in content and enhancing connections among diverse producers and stations and the leading national program distributors.

CPB pays particular attention to public broadcasting's mission to serve underserved and unserved audiences—rural populations, minorities and young children—that commercial media does not often reach. The focus on diversity is deeply embedded in public broadcasting's culture and increased service to diverse audiences is a consideration in virtually every investment CPB makes. In 2009, CPB created a Diversity and Innovation fund to support the creation of content of interest and service to diverse communities. The fund supports documentaries such as the award-winning *Freedom Riders* and *Slavery By Another Name*, expanded news and public affairs programming for diverse communities, translation services for news and election programming, a new radio service in Los Angeles and the fulltime multicast World channel, designed to attract a diverse audience.

CPB also supports diversity in programming by funding the Independent Television Service, minority program consortia in television—representing African American, Latino, Asian American, Native American, and Pacific Islander producers—and numerous radio stations around the country serving diverse audiences. In addition, CPB has funded Koahnic Broadcasting's Native Voice One and Native Public Media, which serve some of the nation's poorest and most isolated communities, including stations broadcasting on Hopi reservations and on the North Slope of Alaska. Audience research shows how much *all* segments of the public value public broadcasting programming, not just upper-income Americans.³⁰

NEWS AND PUBLIC AFFAIRS

For decades, political leaders of both parties have determined that the value of public broadcasting to our nation and our society is worth the investment of public money. But knowing that public money carries with it a risk of governmental interference in programming, successive Congresses have carefully structured that investment—in the form of advance appropriations that are distributed through the "heat shield" of the private, nonprofit CPB pursuant to broad funding formulas specified in the law—to prevent government support from turning into government interference. Governmental support does not cause public broadcasting to become a governmental enterprise. It is most decidedly a private one that values both its public support and its freedom from content interference by the government.

In-depth journalism is required to support democratic institutions, and public broadcasting is a reliable source of in-depth and documentary reporting. Americans rely on public broadcasting's information and perspectives as they make decisions in their public and personal lives, and the public consistently says public television and radio are their most trusted sources among many media choices.³¹ Trust is the most important asset for public broadcasting in the evolving media future.

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 $^{^{30}}$ Nielsen Television Index (NTI) NPower Total Day 2010-2011 Full Season.

³¹ 13th Allstate–National Journal Heartland Monitor Poll, June 2012.

At a time when many commercial media—both broadcast and print—are cutting back on their journalistic efforts, and the Internet is increasingly oriented toward niche audiences, public broadcasting continues to make substantial investments in, and deliver, in-depth news and public affairs coverage and investigative reporting.

With CPB's assistance, NPR is adding international bureaus where American military forces are engaged so that we do not rely solely on "foreign" news sources to inform Americans of places where our troops are engaged or our economic future is at stake. With 17 foreign bureaus (more than any other broadcast news organization in the United States), 17 national bureaus, and more than 800 NPR member stations also contributing to the news stream, NPR brings global, national, and local perspective to the most important issues of our time. NPR Worldwide, which also serves the American Forces Network, reaches listeners seeking American perspectives in more than 170 counties.

Through *PBS NewsHour*, *Frontline*, *Charlie Rose*, *Ideas in Action with Jim Glassman*, NPR's *Morning Edition*, *All Things Considered*, *Marketplace* and other local radio and television programs, millions of Americans rely on their local public broadcasting station to bring them news and information about our nation and the world. Public radio stations alone reach more Americans every day than the top 78 newspapers combined. NPR's *Morning Edition* alone reaches more than the three morning network television shows combined. ³³

Local news and public affairs programming complements and often informs national programming. Public broadcasting stations in every corner of the country are some of the last locally owned and locally operated media institutions in the nation, producing trusted public affairs programming such as Iowa Public Television's *Market to Market* and KPBS's *Envision San Diego*. Local public broadcasting stations are also expanding their coverage of state capitols and city halls, including gavel-to-gavel legislative coverage and comprehensive coverage of issues of concern regarding our schools, our job prospects, our transportation systems and our returning veterans.³⁴

³² According to Nielsen, 4.6 million viewers watched the *PBS NewsHour* at least once per week during October 2011 (monthly cume/unique viewers = 12.8 million). According to Google Analytics, the *PBS NewsHour* Website on pbs.org attracts an average of 1 million monthly unique visitors. *PBS NewsHour* video content is viewed 440,000 times each month.

³³NPR, Public Radio Facts & financial Profile, 2012. NPR's audience is larger than the total combined circulation of the top 56 newspapers in the U.S., including *USA Today*, *The Wall Street Journal*, and *The New York Times*.

³⁴ On average, 28 percent of public radio stations programming is locally produced by station staff, 30 percent is produced by NPR, and 42 percent comes from other public radio station producers and national distributors. NPR serves and collaborates with member stations in newsgathering, program development, fundraising, radio distribution, new platform initiatives and development of traditional and new revenue streams. Member stations contribute reporting to NPR news programs, making it possible for NPR to be on the scene, no matter where news happens. NPR stations bring local flavor, relevance, and regional perspective to national programs. While a regular part of NPR's national programs, station reports are particularly important around milestone news events such as natural disasters, the impact of war on local communities and national elections.

In just the last five years, public broadcasting stations won five Alfred I. duPont–Columbia University awards and six George Foster Peabody Awards for their local programs.

During the same period, PBS won 48 Emmy Awards for news and documentaries, far outpacing other networks in both nominations and awards. PBS also won 24 George Foster Peabody awards—more than any other media organization—and 12 Alfred I. duPont-Columbia University awards.

NPR is also a cornerstone of high-quality enterprise journalism. Since 1971, it has won 31 duPont-Columbia awards, 58 Peabody awards, 70 White House News Photographers Association awards, and 20 awards from the Overseas Press Club of America.

For their online content and services, public media organizations—television and radio—have won 24 Webby awards in the last five years. Individual stations win many of these same prestigious national awards, as well as awards from state broadcasting associations, news directors associations and journalism societies.

Because trust and integrity are essential to public media, the public broadcasting community maintains and periodically refreshes an editorial code and guidelines³⁵ that stations use in ways that reflect shared values and address their unique circumstances. Some of the activities covered in this code include: journalism, transparency in content and fundraising, program selection, management and partnerships. While offered as a model for all public service media, the principal focus of the code is the public television and radio stations that benefit from federal support through CPB.

In an era of growing media consolidation, and with an increasing focus on sensational news, it is important that the country invest in media whose impetus is the production and distribution of high-quality educational and investigative journalism. Public broadcasting not only has a proven track record of providing award-winning and high-quality journalism, its civility is a welcome alternative to the boisterous, opinion-focused cable news and talk radio programs.

HISTORY, SCIENCE AND CULTURAL CONTENT

Public broadcasting offers civic engagement and lifelong learning to every American, regardless of age. High-quality programs, such as *Nature*, *Nova*, *American Experience*, *American Masters*, *This American Life*, *Radiolab*, *StoryCorps* and the films of Ken Burns, are just a few examples of content that serves and is accessible by virtually all Americans for free. No other media institution has the mission and the reach, and no other media institution provides the full breadth of informational programming that public broadcasting does.

Public television stations offer significant cultural programming as well, such as *Masterpiece*, the longest-running primetime drama program in American television; *Great Performances*, the only continuing primetime performance showcase on American television; and contemporary

³⁵ http://pmintegrity.org/pm_docs/CodeofEditorialIntegrityforLocalPublicMedia-Apr2012update.pdf (PDF).

programming like Austin City Limits.

Public radio stations offer listeners a selection of music and cultural programming that for the most part is simply no longer available anywhere else. In fact, without public broadcasting stations, genres such as classical music and jazz would face extinction.³⁶ Stations that support classical music and jazz are essentially providing free exposure and education to millions of Americans in the art, culture and understanding of music.

IV. THE ORGANIZATIONAL STRUCTURE OF PUBLIC BROADCASTING

The public broadcasting system comprises a diverse collection of independent stations, state and regional networks of stations, and producers and distributors of programming. Public broadcasting stations are licensed to and operated by nonprofit corporations, public and private universities, and state and local government agencies. Some licensees have a single radio and/or television license in their communities, while others operate statewide or regional networks of stations. Many stations produce their own programming for local broadcast, but they also in many cases produce programming for distribution to other stations, either directly or through other channels of distribution. A few stations, typically in the largest markets, produce significant amounts of programming specifically for distribution to other stations through nonprofit distributors such as PBS, NPR, Public Radio International (PRI) and American Public Media (APM).³⁷

SYSTEM FUNDING

Funding for public broadcasting comes from voluntary contributions by viewers and listeners, support from businesses that underwrite programming and station operations, grants from private foundations, support from both public and private educational institutions, and funding from local, state and federal governments.

By design, the public broadcasting system must balance the need to generate revenue from corporate underwriting and the need to maintain a noncommercial service. This model has allowed public broadcasters to build a high level of trust with the American people—generating individual gifts from their audiences and attracting underwriting support from foundations and corporations.

Funding for public broadcasting flows primarily to the local stations. This element of local control and decision-making shapes an incredibly effective federal investment that is directed back toward local communities. As the local stations make independent decisions about how to re-aggregate funds for production of national programming, they support producers through distributor-affiliation fees and program-carriage fees, which in turn reinforces the local control of decision-making inherent in the public broadcasting system.

³⁶Ninety percent of all classical radio stations are public radio stations. The number of public radio classical stations has almost tripled in the past 20 years as commercial radio has abandoned the format.

³⁷ NPR, PRI and APM also produce their own programming for distribution to stations.

For public television and radio stations system-wide, the share of funding derived from the federal appropriation to CPB is approximately 15 percent, with larger percentages to smaller and rural stations, and smaller percentages to larger stations.

According to information reported to CPB by public television licensees during fiscal year 2010 (the latest information available),³⁸ individual contributions accounted for 22 percent of system revenue, the largest single source of revenue. The share of revenue for public television from CPB was 18 percent. System-wide, public television revenue sources were as follows:

Source of Funding Percentage of TV System Revenues 22% Contributions by individuals CPB (federal appropriation) 18% State government support 14% Underwriting by businesses 13% University support 8% Foundation support 7% Other federal grants and contracts 5% Local government support 4% 9% All other sources

The revenue received from these various funding sources differs significantly from licensee to licensee. Smaller licensees (those with less operating revenue) and licensees that provide service in small television markets tend to receive a greater percentage of their revenue from federal sources than large licensees and those operating in large television markets.

According to an earlier study by the GAO,³⁹ for public television stations with annual budgets less than \$3 million, the federal share of their revenue is approximately 33 percent, while for the largest public television stations the federal share is approximately 10 percent.

Public radio revenue sources are similar to those for public television, with individual contributions again being the largest source of revenue. The share of revenue for public radio from CPB in FY 2010 was 11 percent. System-wide, public radio revenue sources were as follows:

³⁸ Each public television and radio station that receives a Community Service Grant from CPB must file an Annual Financial Report (AFR) or Annual Financial Summary Report (FSR) reporting its revenues and expenditures, and a Stations Activities Benchmarking Survey (SABS) on non-financial activities.

³⁹ GAO Report at 29.

Source of Funding

Percent of Radio System Revenues

Contributions by individuals	34%
Underwriting by businesses	19%
University support	13%
CPB (federal appropriation)	11%
Foundation support	8%
State government support	3%
Local government support	1%
Other federal grants and contracts	1%
All other sources	10%

Again, the relative sources of funds differ significantly from licensee to licensee. Smaller licensees and licensees that provide service in small markets receive a greater percentage of their revenue from federal sources than large licensees and those operating in large markets.

As reported by the GAO and discussed below, substantial growth of traditional sources of nonfederal support for public broadcasting sufficient to offset a deep reduction in or elimination of the federal appropriation is unlikely. ⁴⁰ This is confirmed by more recent AFR or FSR information reported to CPB, which shows a decline in both private funding and in overall nonfederal funding (combined private funding and state and local government funding, including public university funding) during 2008, 2009 and 2010, as compared to levels in 2007.

Contributions from viewers and listeners through individual giving and major/planned giving programs represent the largest existing source of revenue for public broadcasting, comprising as much as 22 percent (for television) to 34 percent (for radio) of current system revenues.

However, charitable giving for public television declined by 13 percent between 2005 and 2010, wiping out a decade's worth of revenue growth. The decline in charitable giving to public television has been attributed to a number of factors, including an increasing number of jobless Americans who can no longer give as a result of a failing economy and increased competition for gifts from a growing number of nonprofit entities.

Charitable contributions to public radio stations, on the other hand, increased steadily between 2000 and 2010. This increase is attributed to a growth in the number of stations, with corresponding growth in audience, an increase in the number of donors, and concerted efforts to increase the average contribution per member.⁴¹

Underwriting by businesses is also a major current source of revenues for public broadcasting, constituting 13 percent of public television revenues and 19 percent of public radio revenues.

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⁴⁰GAO Report at 6.

⁴¹ CPB, *Public Broadcasting Revenue*, Fiscal Years 2000-2010.

Unfortunately, public broadcasting revenue from corporate underwriting declined sharply during the recession as corporations cut back on their spending for marketing and promotion.

Another traditional source of public broadcasting funding has been foundation grants. CPB found no evidence that foundations would contribute *additional* revenue sufficient to offset the loss of federal funding. While many television licensees receive foundation support, the amount varies significantly between licensees. Producing stations in large cities are able more easily to attract foundation support than stations in smaller cities and rural areas. Typically, foundations do not provide support for general station operations, but instead fund special projects or capital expenditures. Moreover, foundation support appears to be increasingly difficult to obtain because of greater competition from other nonprofit organizations for the funds, and because foundations often seek out projects that have a direct and measurable impact on a specific issue or demographic, which is difficult to apply to public television and radio programming. In 2009-2010, foundation giving to both public television and radio declined (together, by 6.1 percent). 42

Revenue from state and local governments, universities, and from the provision of services to state and local agencies and educational institutions has declined significantly. CPB believes it is unlikely that in the future such revenues will rise even to their former levels, much less offer the prospect of providing any material amount of additional revenue to offset the loss of, or any significant reduction in, federal funding.

More than 95 percent of public television and 77 percent of public radio stations receive support directly from state and local governments. However, in the last few years, budget battles at the state level have eroded these funding sources for public broadcasters around the country. In some states, this has meant, at least for now, an end to decades of support for public broadcasting, a move that seriously restricts stations' ability to produce local content, threatens small and rural stations with closure and even risks the loss of regional public broadcasting coverage. 44

Large cuts in government funding have also put pressure on public university budgets. Nineteen state governments reduced state appropriations for higher education by more than 10 percent during the 2011-2012 academic year. Given that public universities rely on state governments for more than 28 percent of their budgets, this represents a significant hardship. Universities, which are also experiencing difficulty in attracting private revenue from foundation grants and tuition payments, have reacted with cost-saving measures (including hiring freezes and deferrals on capital projects) that are impairing public broadcasting station operations as a result.

⁴³ In the last four years, several governors and state legislatures have dramatically reduced state funding for local stations. In 2008, for example, more than \$85 million was cut from public broadcasting support. The accumulated loss of state funding over the five-year period from 2008 through 2012 was approximately \$202 million.

⁴²CPB, Public Broadcasting Revenue Fiscal Year 2010.

⁴⁴ Hamilton Place Strategies, *The Impact of Budget Cuts on Public Broadcasting* (April 2011) ("Hamilton Place") at 10.

⁴⁵ Chronicle of Higher Education. "State Support for Colleges Falls 7.6% in 2012 Fiscal Year" (January 23, 2012).

Local governments, a smaller source of revenue for public broadcasting stations, are also strained as their traditional sources of revenue (property taxes, state and federal government, sales taxes) are depressed and costs associated with education, pensions and infrastructure investments continue to climb.

CPB expects that funding declines from state and local governments are likely to worsen before any significant recovery takes place. Further, given the financial challenges that public universities are facing, university licensees cannot expect significant additional funding from their universities until the pace of the economic recovery improves.

Public broadcasters have long been exploring every opportunity to bring resources into public broadcasting without compromising the integrity of the content and the service itself. Merchandising, gift shops, CD and DVD sales and other ancillary activities of public broadcasting stations reflect the need of stations to generate funds to survive and meet their mission in a time of decreasing support from nonfederal sources. These ancillary activities generate (and have the potential to generate) only minimal amounts of money, far less than would be necessary to replace the federal appropriation.

Some additional funding from charitable giving conceivably might occur, to some extent, in the years to come, particularly with an improving economic climate. However, the charitable giving landscape currently presents significant challenges for public broadcasting and, in particular, public television. Foremost among these challenges is an apparent shift in U.S. charitable giving away from organizations focusing on arts and culture, and an increase in the total number of nonprofit organizations competing for charitable dollars.

For stations to succeed in implementing efforts to increase charitable funding considerable resources will need to be dedicated: time of station managers, staff and governing board members, creation of shared fundraising resources, and the development of a large-scale national campaign to complement local efforts. Some public television stations—particularly those in small markets, rural markets, and those stations serving diverse audiences—may not be able to make the investments required to seek additional charitable revenue. And even if the system's larger and stronger stations are successful in raising some additional funds, that will ultimately only offset losses in fundraising they have experienced over the last several years.

Corporate spending on marketing will likely grow as the economy recovers. If stations were able to implement significant efforts to grow revenues from corporate underwriting, with a recovering economy some modest improvement in this revenue stream can be expected. However, given the magnitude of the losses in corporate underwriting during the recession, these additional funds will again only begin to return this revenue stream to its pre-recession levels. 46

For nine consecutive years, since the question was first asked, Americans have ranked PBS second as the best value for the American tax dollar. Eighty-two percent said they consider the

⁴⁶ Mindful of their public service mission, public television and radio stations strive to strike a balance between generating revenues from corporate underwriting and maintaining a noncommercial broadcast service.

federal investment in public broadcasting to be money "well spent." Nearly 70 percent across the political spectrum support continued federal funding, including nearly half of self-identified Tea Party members/supporters.⁴⁷

Yet the federal investment in public broadcasting has been reduced by over \$50 million—about 13 percent of our overall federal funding—over the last two fiscal years, in response to the budget and deficit challenges facing our country.⁴⁸

At the same time, changes in audience expectations and technology, and the country's recent economic crisis, have placed severe financial constraints on all parties in the system resulting in reductions in services, staffing, and local and national programming nearly across-the-board.

The federal investment in public broadcasting is extraordinarily cost-effective. For all the work it does—such as support the works of Ken Burns, *Sesame Street*, *Great Performances*, *American Experience*, *A Capitol Fourth*, *Nova*, *Nature*, *Masterpiece*'s dramatic series, the *PBS NewsHour*, and so much more—to say nothing of the news coverage and cultural contributions of NPR, the cost to the federal taxpayer amounts to approximately \$1.35 per citizen per year. 49

V. THE EFFECT OF A LOSS OF FEDERAL FUNDING ON THE PUBLIC BROADCASTING SYSTEM

CPB's funding is an integral part of the public broadcasting economy. If federal funding of public broadcasting through CPB is significantly reduced or ended, the lost revenue will not be replaced by other sources, and the impact on public broadcasting will be severe.

As discussed above, the economic engine that drives public broadcasting starts with the funds that CPB distributes to stations. Seventy-one percent of CPB's appropriation—\$300 million—goes directly to qualified radio and television stations. Stations use these funds to produce and acquire programming, paying distributors such as PBS, American Public Television, NPR, APM, PRI and others, who in turn invest in content creation. Stations broadcast content and provide services to their community, which then help provide financial support for the stations' operations.

⁴⁷ Hart Research/American Viewpoint PBS National Voter Survey, February 2011.

⁴⁸ National Telecommunications and Information Administration's Public Telecommunications Facilities Program and the CPB Digital Appropriation.

⁴⁹ This puts the United States in stark contrast to other developed countries, which spend significantly more per capita on public broadcasting. (In many countries, public broadcasting funding is derived from a government-mandated television license fee.) As noted in the 2011 report of the FCC's Working Group on Information Needs of Communities, the comparable figure for Canada is \$22.48, for Japan is \$58.86, for the United Kingdom is \$80.36, and for Denmark is \$101. See Steven Waldman and the FCC Working Group on Information Needs of Communities, *The Information Needs of Communities, The Changing Media Landscape in a Broadband Age*, (June, 2011) at 198.

In 2007, the GAO reported that federal funding is important to public broadcasting stations because it can be used to support general station operations, it is efficient (the out-of-pocket cost to secure federal funding is minimal as compared to the cost of raising funds from other sources) and, because of the matching mechanism in the CPB grant formula, it is a vehicle to leverage other funding.⁵⁰

In 2011, CPB engaged Hamilton Place Strategies (HPS)⁵¹ to examine the implications of the elimination of federal funding, through CPB, on the public broadcasting system and the audience it serves.

The public broadcasting system is more than a collection of television and radio stations transmitting from big cities on the east and west coasts. The interdependence of today's public broadcasting system is such that while eliminating federal funding would be a blow to public radio and television stations in Boston, New York, Los Angeles and San Francisco, it would create a spiral of diminishing service and reach in every community with particularly devastating consequences to dozens of smaller stations in states such as Maine, Iowa, Colorado, New Mexico, Montana, Idaho and Alaska. It is in those communities that the public television and radio stations provide critical and sometimes the *only* available communications services in sparsely populated areas, and where they rely on federal funding more heavily to produce their local programming.

According to Hamilton Place Strategies, the closure of significant numbers of public television and radio stations, and substantial cutbacks in services at many remaining stations, would only be the first wave of negative impacts on the public broadcasting system as a result of the loss of federal funding without replacement by other sources of funding. The downstream consequences of the loss of federal funding would be even worse.

As small stations fail or cut services and larger stations seek to reduce costs, there would be a significant negative impact on producers of programming. Funds flowing to such programming sources as WGBH, NPR, WNET, American Public Media and Florentine Films (Ken Burns) would be reduced.⁵² These producers would be forced to cut already lean production budgets, limiting their ability to produce high quality programming, or would be forced to raise prices for the broadcast stations still in operation in the system. These outcomes are likely to happen in some combination, with negative consequences for the quantity and quality of public

⁵⁰ GAO Report at 5.

⁵¹ Hamilton Place at 8.

⁵² At the current appropriation level (\$445 million), \$29 million flows through CPB for national programming for public radio and \$73.5 million flows to producers of nationally-distributed public television programs. In public radio, more than \$22 million is disbursed to stations, which then buy programs from national program distributors, but in public television, the \$73.5 million goes to producers without passing to the stations first.

broadcasting content. That, in turn would impact the remaining stations, further undermining their ability to attract viewers, listeners and support. ⁵³

Small-market stations, rural stations, and those who serve diverse audiences will not be able to rely on the fundraising drives that sustain public broadcasting stations in more populous parts of the nation. In a world where Congress no longer provides funding for public broadcasting stations, the public television and radio stations (and the related national organizations) would ultimately not be able to raise the funds necessary to replace the federal appropriation.

According to Development Exchange, Inc., a leading advisor to public broadcasting station management on membership and underwriting development, to replace a dollar of federal funding, public broadcasters would have to raise, on average, \$1.27, taking into account the higher costs of raising funds from other sources. This figure, however, does not take into account the impact on public broadcasters' fundraising efforts of losing the imprimatur that the support of the U.S. Congress lends to public broadcasting.

Ultimately, the system itself would be at serious risk of collapse. Even if it would survive, the public broadcasting system in the United States would suffer with reduced numbers of stations resulting in gaps in service, and the remaining stations would be impoverished. This would dangerously impair public broadcasting's ability to help create and maintain the educated and informed citizenry that is required for a healthy democracy and civil society.

In connection with this report and in light of changed economic circumstances, CPB asked Booz & Company to review, validate and update the Hamilton Place Strategies findings. The analysis by Hamilton Place Strategies and Booz & Company uses the concept of "risk" to characterize a station's financial viability. A "high-risk" station is not likely to have, absent federal funding, sufficient funds to continue operations. ⁵⁴ The results of Booz's analysis are sobering.

In the event of the loss of federal funding, by 2015, approximately 76 public radio stations and 54 public television stations would be at high risk of simply closing, depriving their communities of public broadcasting service. 55 These "high risk" stations would disproportionately be those

Congressional Quarterly Weekly, "Cutting NPR Would Hit GOP Heartland Hardest," March 19, 2011.

⁵³ CPB funding, for example, accounts for approximately one-third of the annual budget for Wyoming's statewide public television network. CPB funding makes up about a quarter of the budget for WERU-FM, which serves approximately 30,000 people near East Oreland, Maine, with a mix of national and local programming. Without the federal appropriation, the station would have to lay off several employees. Some smaller stations, such as KUYI-FM in Keams Canyon, Arizona, known as "Hopi Radio," would go off the air entirely without CPB support.

⁵⁴ In 2012, high-risk television stations are those that have total revenue less than \$2.4 million per year. For radio, high-risk stations are those that have total revenue below \$350,000 per year. Though it will vary by station and the communities they serve, we found these to be the lowest levels of funding where stations are consistently viable. The outcomes below this threshold differ for television and radio. For television stations, closure is comparatively more likely, while for radio they can exist at much lower funding levels, albeit in an unrecognizable form (e.g., a pass-through for music streaming).

⁵⁵ For the purpose of this portion of their analysis, Booz & Company considered each recipient of a CPB Community Service Grant to be a "station." In fact, most CPB Community Service Grant recipients operate more than one noncommercial broadcast station.

that serve rural areas and minority community audiences, or that provide the sole public broadcasting service to their communities. The number of "high risk" stations at risk would increase over time.

Of the 76 public radio stations (in 38 states) at "high risk," 47 serve rural communities, 46 offer the only public radio service available to their listeners, and 10 provide the *only broadcast service*—radio *or* television, public *or* commercial—available over the air to their listeners. If these 76 stations at high risk were forced to cease broadcasting, nearly 3.5 million Americans would lose access to the only public radio program service currently available to them over-the-air.

Of the 54 public television stations (in 19 states) at "high risk," 31 serve predominantly rural areas, and 19 provide the only public television service available to viewers in their service area. If these 54 stations at high risk were forced to cease broadcasting, more than 12 million Americans would lose access to the only public television program service currently available to them over the air.

VI. PRIOR EFFORTS TO IDENTIFY ALTERNATIVE SOURCES OF REVENUE IN LIEU OF THE FEDERAL APPROPRIATION

The current effort to identify alternative sources of funding for public broadcasting is not the first such attempt. Over the last 30 years, there have been several prior studies of alternatives to federal government funding. The result in each case has been that no alternatives exist to generate sufficient net revenue to replace the federal appropriation.

In 2007, the GAO examined the funding and operation of public television in response to a Congressional request for information on how to fund public television. In its report, the GAO stated, "Public television stations are pursuing a variety of nonfederal funding sources, but substantial growth to offset a reduction or elimination of federal support appears unlikely. Public television is unlikely to generate significant additional back-end revenues." ⁵⁶

In 1995, CPB, with the assistance of Lehman Brothers, reported to Congress on its analysis of a combination of cost-reduction measures (station mergers/collaborations and automation of broadcast operations) and new or expanded nonfederal sources of revenues (including ancillary revenues from licensing program-related merchandise, spectrum sales or swaps, advertising, enhanced underwriting, and transponder leasing). CPB reported that "[T]he combination of cost reductions and revenue increases described here could not compensate for a complete loss of the federal appropriation. In the absence of a reliable alternative, a continued federal appropriation is necessary."⁵⁷

⁵⁶ GAO Report at 36, 46.

⁵⁷ Common Sense for the Future (Corporation for Public Broadcasting report to Congress, June 1995).

In 1983, the Temporary Commission on Alternative Financing for Public Telecommunications⁵⁸ examined and assessed a wide variety of "existing and reasonably available alternatives to traditional federal support," which included both nonfederal funding sources and alternatives to general tax revenues (such as dedicated taxes and fees) as a means of funding federal financial support. The Temporary Commission found that "[b]alance and diversity in funding sources are essential to the unique character of public broadcasting services. Federal support stimulates other sources of revenue and is an indispensible part of public broadcasting's financial base."⁵⁹ The Temporary Commission closely examined ancillary business ventures as a potential nonfederal source of additional funding and concluded: "Venture activities may provide helpful revenues for certain stations, but they are not expected to generate substantial net revenues system-wide."60

The Temporary Commission's analysis also included findings from an 18-month experiment in which a dozen public television stations sold time for and broadcast commercial messages that went beyond the boundaries of existing laws and FCC policies for underwriting credits. A few of the participating stations limited their messages to what became known later as "enhanced underwriting," but most broadcast outright commercial messages, although they were limited in number and placed only between programs, and not in breaks that would have interrupted programs.

The Temporary Commission concluded: "Limited advertising could be a significant supplemental business revenue source for certain public television stations. However, many public broadcast stations would not carry advertising, and the significant financial risks associated with advertising cannot be quantified in advance. Further, these risks could extend to public broadcasting stations—both television and radio—that decide not to air limited advertising."61 Booz & Company's analysis confirms that the significant financial risks associated with advertising will in fact result in a net revenue loss for public broadcasting.

 $^{^{58}}$ The Temporary Commission on Alternative Financing for Public Telecommunications was created by Congress in the Public Broadcasting Amendments Act of 1981, Public Law Number 97-35. The members of the commission included James H. Quello, Commissioner, Federal Communications Commission; Ron Bornstein, Acting President National Public Radio, Frederick Breitenfeld, Executive Director, Maryland Center for Public Broadcasting; Bruce L. Christensen, President, National Association of Public Television Stations, Ernest F. Hollings, United States Senator; William H. Kling, President, Minnesota Public Radio; Robert W. Packwood, United States Senator; Edward J. Pfister, President, Corporation for Public Broadcasting, Kenneth Robinson, Policy Advisor to the Assistant Secretary National Telecommunications and Information Administration, U.S. Department of Commerce; Al Swift, United States Congressman, Thomas J. Tauke, United States Congressman. The Commission delivered its final report and recommendations to Congress on October 1, 1983, after extensive research, including an Advertising Demonstration Program at a number of public television stations.

⁵⁹ Final Report of the Temporary Commission on Alternative Financing for Public Telecommunications to the Congress of the United States (October 1983) ("TCAF Final Report") at iii.

⁶⁰ TCAF Final Report at i.

⁶¹ TCAF Final Report at ii.

X. CONCLUSION

The extensive research conducted by Booz & Company, like other independent studies conducted over the years, supports the finding that there are no new or alternative sources of revenue, alone or collectively, that could replace CPB's annual appropriation.

Moving public television and radio to an advertising model would result in a net loss of revenue, and the change would force stations to deviate from their statutory service mission. Additionally, the major traditional funding sources for public television and radio—individual contributions, major giving programs, corporate underwriting and foundations, universities and state and local governments—which have been devastated by the economy, are not expected to provide additional material support other than perhaps rising to previous levels, and some of these sources may be subject to further reductions in funding.

Existing funding sources could, over time, conceivably generate up to \$23 million a year in net ancillary revenue. This would not offset the loss of *hundreds* of millions of dollars a year in federal funding, and in several instances, generating new revenues may require changes that neither viewers, listeners, stakeholders, public officials nor public media itself would find acceptable. It would also barely begin to recover what has been lost in the recession.

Without the federal appropriation, the public broadcasting system as we know it will not survive. For \$1.35 per American this service leverages additional operating revenue from a variety of sources in communities across the country. Compare this entrepreneurial public-private partnership to the almost total funding provided by other countries for their public broadcasting service—in Canada it is \$22.48 per citizen, for Japan \$58.86, for the United Kingdom \$80.36, and for Denmark it is \$101 per citizen.

At the beginning of this report, we said that the issue of whether and how to fund public broadcasting in the United States went directly to question of whether the United States should have a public broadcasting system and what is the value of an informed and engaged citizenry and the role of an institution—public broadcasting—that is central to our country's pursuit of this goal.

How important is an informed electorate, respectful of the difficult choices and complex challenges in policy making and diplomacy, to America's security, prosperity, productivity and competitiveness?

And how much more challenging would it be without a public broadcasting system committed to a thorough, thoughtful and fair articulation of the challenges facing our country? 48

Where in broadcast/cable media is there a detailed examination of the issues America will face as a result of the events transpiring in Greece, Syria, Yemen, Iran, Russia and China? Or the critical choices regarding our economy, our borders, defense, education, infrastructure and American competitiveness?

Whether providing a safe place to educate our children with content that is proven to prepare them to learn, or quality news and public affairs programming that contributes to our civil society and treats the audience as citizens rather than consumers, Americans own a valuable public broadcasting service that is trusted and supported. This service reflects our country, contributes to our democracy and is accountable to the citizens we serve.

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ADMINISTRATIVE PROVISIONS—Continued THE BUDGET FOR FISCAL YEAR 2020

1990 Act, and subject to partial waiver consistent with section 2521.70 of title 45, Code of Federal Regulations.

SEC. 402. In addition to the requirements in section 146(a) of the 1990 Act, use of an educational award for the purpose described in section 148(a)(4) shall be limited to individuals who are veterans as defined under section 101 of the Act.

SEC. 403. For the purpose of carrying out section 189D of the 1990 Act—

- (a) entities described in paragraph (a) of such section shall be considered "qualified entities" under section 3 of the National Child Protection Act of 1993 ("NCPA"):
- (b) individuals described in such section shall be considered "volunteers" under section 3 of NCPA; and
- (c) consistent with Public Law 92–544, State Commissions on National and Community Service established pursuant to section 178 of the 1990 Act are authorized to receive criminal history record information.

(TRANSFER AUTHORITY)

SEC. 404. Only for purposes of effectuating a transfer of appropriated funds from any account under the heading "Corporation for Community Service" to any executive agency under 31 U.S.C. 1531, the term "executive agency" as used in section 1531 shall apply to the Corporation for National and Community Service.

(CANCELLATION)

SEC. 405. Of the unobligated balances available in the National Service Trust Fund, identified by the Treasury Appropriation Fund Symbol 95X8267, [\$139,000,000] \$40,000,000 are hereby permanently cancelled. (Departments of Labor, Health and Human Services, and Education, and Related Agencies Appropriations Act, 2019.)

GENERAL FUND RECEIPT ACCOUNT

(in millions of dollars)

	2018 actual	2019 est.	2020 est.
Offsetting receipts from the public: 485–322055 All Other General Fund Proprietary Receipts Including Budget Clearing Accounts	3		
General Fund Offsetting receipts from the public	3		

CORPORATION FOR PUBLIC BROADCASTING

Federal Funds

CORPORATION FOR PUBLIC BROADCASTING

[For payment to the Corporation for Public Broadcasting ("CPB"), as authorized by the Communications Act of 1934, an amount which shall be available within limitations specified by that Act, for the fiscal year 2021, \$445,000,000: Provided, That none of the funds made available to CPB by this Act shall be used to pay for receptions, parties, or similar forms of entertainment for Government officials or employees: Provided further, That none of the funds made available to CPB by this Act shall be available or used to aid or support any program or activity from which any person is excluded, or is denied benefits, or is discriminated against, on the basis of race, color, national origin, religion, or sex: Provided further, That none of the funds made available to CPB by this Act shall be used to apply any political test or qualification in selecting, appointing, promoting, or taking any other personnel action with respect to officers, agents, and employees of CPB: Provided further, That none of the funds made available to CPB by this Act shall be used to support the Television Future Fund or any similar purpose.

Of the amounts which are made available to the Corporation for Public Broadcasting (CPB) on October 1, 2019 by Public Law 115–141, \$415,000,000 is hereby permanently cancelled: Provided, That section 396(k)(3) of the Communications Act of 1934 (47 U.S.C. 396(k)(3)) shall not apply to the remaining amounts made available to CPB for fiscal year 2020 by Public Law 115–141, or to the unobligated balances of the Fund established in section 396(k)(1)(A) of such Act (47 U.S.C. 396(k)(1)(A)).

[In addition, for the costs associated with replacing and upgrading the public broadcasting interconnection system and other technologies and services that create infrastructure and efficiencies within the public media system, \$20,000,000.]

Of the amounts which are made available to CPB on October 1, 2020 by Public Law 115–245, \$415,000,000 is hereby permanently cancelled. (Departments of Labor, Health and Human Services, and Education, and Related Agencies Appropriations Act, 2019.)

Program and Financing (in millions of dollars)

Identif	ication code 020-0151-0-1-503	2018 actual	2019 est.	2020 est.
0001 0002	Obligations by program activity: General programming Interconnection	465	445 20	30
0900	Total new obligations, unexpired accounts (object class 41.0)	465	465	30
	Budgetary resources: Budget authority: Appropriations, discretionary:			
1100	Appropriations, discretionary: AppropriationAdvance appropriations, discretionary:	20	20	
1170 1174	Advance appropriation - General Programming	445	445	445 -415
1180	Advanced appropriation, discretionary (total)	445	445	30
1900	Budget authority (total)	465	465	30
1930	Total budgetary resources available	465	465	30
	Change in obligated balance: Unpaid obligations:			
3010	New obligations, unexpired accounts	465	465	30
3020	Outlays (gross)	-465	-465	-30
	Budget authority and outlays, net: Discretionary:			
4000	Budget authority, gross Outlays, gross:	465	465	30
4010	Outlays from new discretionary authority	465	465	30
4180	Budget authority, net (total)	465	465	30
4190	Outlays, net (total)	465	465	30

The Budget proposes to eliminate funding for several independent agencies and other federal entities, including the Corporation for Public Broadcasting, as part of the Administration's plan to move the Nation towards fiscal responsibility and to redefine the proper role of the Federal Government. The Budget requests up to \$60 million over two years to conduct an orderly closeout of Federal funding for the Corporation beginning with \$30 million in fiscal year 2020. The request includes funding for personnel, rental, and other necessary close-out costs.

COUNCIL OF THE INSPECTORS GENERAL ON INTEGRITY AND EFFICIENCY

Federal Funds

INSPECTORS GENERAL COUNCIL FUND

$\label{eq:program and Financing} \textbf{Program and Financing} \ (in \ millions \ of \ dollars)$

Identif	ication code 542-4592-0-4-808	2018 actual	2019 est.	2020 est.
0801	Obligations by program activity: Inspectors General Council Fund (Reimbursable)	9	11	11
	Budgetary resources: Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	12	15	15
1021	Recoveries of prior year unpaid obligations	1		
1050	Unobligated balance (total)	13	15	15
	Spending authority from offsetting collections, mandatory:			
1800	Collected	12	11	11
1801	Change in uncollected payments, Federal sources			
1850	Spending auth from offsetting collections, mand (total)	11	11	11
1930	Total budgetary resources available	24	26	26
1941	Unexpired unobligated balance, end of year	15	15	15
	Change in obligated balance: Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	2	1	1
3010	New obligations, unexpired accounts	9	11	11
3020	Outlays (gross)	-9	-11	-11
3040	Recoveries of prior year unpaid obligations, unexpired	-1		