Corporation
for Public
Broadcasting

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. EXECUTIVE SUMMARY

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,

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[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 CPB[6] 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

[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,[9] 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.[10] 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

[9] Harris Interactive Trust QuickQuery, February 2012.

[10] 13th Allstate–National Journal Heartland Monitor Poll, June 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]

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[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 month[16] and reaches children in both home and other out-of-school settings.

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[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 multi-media 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.

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[22] There 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+).

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

[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."[29] 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.[32] 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]

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[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.

[33] NPR, 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 guidelines[35] 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.

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[36] Ninety 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**
Contributions by individuals	22%
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%
All other sources	9%

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:

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[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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[40] GAO 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.[43] 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.[45] 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.

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[42] CPB, *Public Broadcasting Revenue Fiscal Year 2010*.

[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.

[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.

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[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

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[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

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

[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 Telecommunications[58] 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.

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[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.

VII. DISCUSSION OF NEW AND EXISTING SOURCES OF FUNDING

Booz & Company evaluated funding options for public broadcasting that are currently not part of the system funding model: television advertising, radio advertising, retransmission consent fees, paid digital subscriptions and digital game publishing.

Booz & Company found that none of the five new options 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. Further, Booz & Company also found that there is no combination of the new sources of funding that together could replace or significantly reduce the federal appropriation.

Booz & Company also examined the prospects for generating significant additional revenue from existing funding sources: merchandise licensing, product sales, digital advertising, education and state government fee-for-service arrangements, events, renting donor lists to marketers, tower leasing, production services, on-demand distribution, content licensing, DVD/CD sales, merchandise sales, magazine publishing, book publishing, and mobile device applications.

Booz & Company found that the existing funding sources could, over time, conceivably generate up to an additional $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. It would also barely begin to recover what has been lost in the recession.

Finally, CPB considered the potential for revenue to 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 selling time for political advertisements.

NEW FUNDING OPTIONS

Commercial Advertising

It has been suggested that advertising on noncommercial educational television and radio could produce significant revenue. Booz & Company's analysis indicates that a shift from a noncommercial model to a commercial model would produce *net negative financial results* for the public broadcasting system because of significant losses of existing funding from traditional voluntary sources that would not choose to support a commercialized public broadcasting service.[62]

Further detail on Booz & Company's analysis with respect to commercial advertising is contained in the Appendix to this report, pages 56-84.

[62] CPB research suggests a range of possible net revenue outcomes, nearly all of which are negative. However, under the most optimistic assumptions about the impact on other sources of funding and about agency commission costs, net positive revenue outcomes can be projected for both radio and television—although only marginally so for the latter.

Specifically, Booz & Company estimates that a system-wide shift to commercial advertising would cause net losses of $54 million a year for public television and $8 million a year for public radio.[63]

Further, a shift from a noncommercial model to a commercial advertising model would have consequences beyond the financial results, both because the financial impact would be distributed unevenly among stations, distributors, and program producers, and because greater dependence on advertising as a source of revenue would change the nature of public media's content and ultimately jeopardize its diverse educational, informational, and cultural mission.

As nonprofit organizations, public broadcasting stations fill marketplace gaps and places where the government cannot efficiently provide services. Like public schools, libraries and museums, public broadcasters are focused on a service mission in their communities. While public broadcasters welcome private support, a shift to a commercial advertising model would lead to a chase for ratings and move public broadcasters off their fundamental role in lifting the educational and informational boat for all Americans.

Background

The Communications Act and FCC rules and policies prohibit public broadcasting stations from airing commercial advertisements. Advertising is defined in the Communications Act as any message or other programming material that is broadcast in exchange for remuneration and is intended to promote any service, facility, or product offered by any person who is engaged in such offering for profit.[64]

Public broadcasting stations are permitted to air non-promotional underwriting messages that acknowledge contributions to the station and/or support for its programming.

Booz & Company studied whether a change by public broadcasters from the longstanding noncommercial model to a model that would permit commercial advertising would generate net revenues sufficient to offset the federal appropriation.

The analysis below considers advertising on public television and public radio separately and distinguishes operations at the network level from those at a station level as the context, outcomes and consequences would differ for each.

However, in the case of both television and radio, Booz & Company found that while advertising could generate new revenue for public broadcasting, both nationally and for some local stations, these revenues would be more than offset by associated operating costs and by losses in current sources of revenue resulting from a switch to commercial advertising.

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[63] CPB's analysis assumed participation in a commercial-advertising business model by all public television stations and program distributors, but by only a subset of stations, program distributors, and program producers in the public radio community.

[64] 47 U.S.C. §399B (a)

At the same time, a change from the noncommercial model to a commercial advertising model would mark the end of public broadcasting as it has been known and valued by the American people for over seventy years. First, it would undermine the diverse informational, educational and cultural nature of public broadcasting's mission by limiting funding for program content to only those programs that would be attractive to advertisers. Second, because funding for individual public broadcasting stations would, in part, be determined by the market under a commercial model that would be less supportive of stations serving smaller cities, rural areas and minority communities, a shift to a commercial advertising model would inevitably undermine public broadcasting's mission of universal service.

Television

Assuming full implementation of a commercial advertising model after a five-year ramp-up and no significant change in stations' broadcast programming, Booz & Company estimates that the sale of television broadcast advertising could generate gross revenues of approximately $239 million a year—$157 million in national sales and $82 million in local station sales. However, at both the national and local level any advertising revenue generated would be more than offset by (a) the direct costs associated with the sale of advertising, (b) the loss of support from corporate underwriting, foundations, and individual charitable giving, (c) audience attrition (and further consequent attrition in gross advertising revenues), and (d) the loss of existing rights concessions (from talent guilds and copyright holders) and pricing discounts (from vendors of program-related services) that would follow from a commercialized public television service.

Analysis

Booz & Company's gross revenue projection is based on an analysis of the demographics of the public television audience, public television station ratings, network schedules and common carriage practices, as well as local programming availabilities. It also reflects certain assumptions, including that advertising loads—including program breaks with multiple ads in each break—and pricing on a cost-per-thousand basis would generally be comparable to those of commercial broadcast television networks, and that there would be no advertising around children's programming, consistent with the practice of commercial television networks that target pre-school audiences, such as Nick Jr. and Disney Jr., which use a sponsorship model similar to that of PBS Kids.

Public broadcasters would face significant challenges in shifting from a noncommercial model to a commercial advertising model. For example, public broadcasters at both the national and station level would have to make substantial institutional investments and changes in order to attract advertisers. These would include: investments in greater national carriage and programming, investments to increase the amount of local news and other content sufficient to generate significant local ad sales, development of ad sales capacity at the national and station levels, development of competitive ad sales packages that feature events, apps, and offer product placement, and a shift away from the existing on-air pledge model that currently drives individual giving and which would interfere with ad sales and ad placements.

Table 1

Given its current model, the likely revenue impact on public television of a shift to an advertising model would be negative

Overview of Public Television Advertising Opportunity

Assumes Full Implementation after 5 Years, in Millions of USD

Revenue / Cost Area	Best Case	Likely Case	Pessimistic Case
Gross Advertising Revenues – National Sales	←	*$157*	→
Gross Advertising Revenues – Local Sales	←	*$82*	→
Average Agency Commissions	*10%*	*12.5%*	*15%*
Net Advertising Revenue	***$215***	***$209***	***$203***
Incremental Sales, IT, Operational & Real Estate Costs – National Level[1]	←	*($8)*	→
Incremental Sales, IT & Operations Costs – Station Level	←	*($53)*	→
Advertising Revenues Net of Direct Costs	***$154***	***$148***	***$142***
Loss of Corporate Revenues (assumes 30%-50% loss of $181MM from lost avails, weaker sales pitch)	($54)	($73)	($91)
Loss of Foundation Revenues (assumes 20-30% loss of $129MM, primarily of program underwriting)	($26)	($32)	($39)
Attrition in Individual Giving (assumes 10% - 20% loss of $390MM in individual giving)	($39)	($59)	($78)
Impact of Audience Attrition (assumes 5%-10% loss of net ad revenue potential of $203-215MM)	($10)	($16)	($21)
Loss of Non-Commercial Status from Vendors, Guilds, Rating Agencies[2]	($17)	($23)	($28)
Total Impact (negative)	***$7***	***($54)***	***($114)***

1) In addition to recurring costs shown, there would be significant start-up costs, including repackaging the existing library of programming, which is estimated to cost $5 MM (2,000 hours of content at $3K-$5K per hour to repackage),and trade marketing costs
2) Assumes 2-4% increase in national public television 2010 programming costs of $364MM plus $10MM in additional costs for a commercial Nielsen subscription. This analysis does not include the additional costs associated with Nielsen subscriptions at the station level, which would introduce significant additional costs.

Source: Booz & Company analysis, PBS financial statements, AFR / FSR / SABS 2010 station data

As shown in Table 1, the $239 million gross advertising revenue estimate would result in net advertising revenue of $148 million.

However, the system would experience significant losses of current revenue and support. In an environment where advertising is allowed, a substantial portion of current corporate underwriting would be lost (or replaced by advertising). Booz & Company estimates that 40 percent of such revenues, or $73 million per year, would be lost. Booz & Company also estimates that charitable foundation support for public television would decline by 25 percent, or $32 million per year.

Further, individual charitable donations to stations (public television's largest current source of funding) would decline as viewers perceive that their charitable donations are no longer required or determine that they no longer wish to support an advertiser-supported service. Booz & Company conservatively estimates that at least 15 percent of such revenue would be lost, or approximately $59 million per year.

Moreover, the move to a commercial advertising model on public television would cause some viewers who currently choose to watch public television because of the *absence* of advertising

and commercial breaks during programs to seek other information and entertainment options. Booz & Company estimates a 7.5-percent audience decline, driving an additional $16 million revenue loss.

Finally, public television stations currently enjoy discounts and rights concessions from vendors and guilds, particularly in copyright and related fees, as a result of their noncommercial operation. In a commercial advertising environment, those discounts and concessions would no longer be available, increasing stations' costs by an estimated $23 million.

In sum, the costs and revenue losses incurred of public television system moving to a commercial advertising model are $263 million per year. Given that commercial advertising would produce gross revenues to public television of $209 million per year, the financial impact of commercializing public television would be a net loss of $54 million per year.

Service Impact

The consequences of a shift by public television stations from a noncommercial model to a commercial advertising model, however, extend beyond the aggregate financial results.

The financial outcomes of such a shift would be asymmetrically distributed, and that will have significant impact on the financial viability of public television service in certain localities and regions. Some public television stations would fare better than others. In general, larger stations would fare better than smaller stations, rural stations, and stations serving diverse audiences. Larger stations are more likely to have the financial resources, as well as the creative, operational, technological, and administrative capacity to make the changes that would be needed to attract local advertisers. Smaller stations, rural stations, and stations serving diverse audiences, on the other hand, are less likely to have those resources and capacity to make all the changes that would be needed. Inevitably, some stations will fail, and the universal reach of public television service will be compromised.

In addition, a greater dependence on advertising as a source of revenue is likely to precipitate a shift in the nature of the content available on public television and ultimately put in jeopardy the diverse educational, informational and cultural mission of public television.

Radio

A similar scenario unfolds with respect to moving to an advertising-support model for public radio. Booz & Company estimates that, assuming full implementation after a five-year ramp-up and focusing on stations with a news/talk or news/talk/music format, the sale of advertising could generate gross revenues system-wide of $213 million a year—$102 million in national sales and $111 million in local station sales. However, at both the national and local station level, any advertising revenue generated would be offset by (a) the direct costs associated with the sale of advertising, (b) the losses of other revenue from corporate underwriting, foundations, and individual charitable giving, (c) audience attrition (and further consequent attrition in gross advertising revenues), and (d) the loss of existing rights concessions (from talent guilds and

copyright holders) and pricing discounts (from vendors of program-related services) that would follow from a commercialized public radio service.

Analysis

Booz & Company's gross revenue projection for public radio is based on the demographics of the public radio audience ratings, programming formats, program schedules, and the number of advertisements that can be placed. It also reflects certain assumptions, including that advertising loads—including frequent commercial breaks with multiple ads in each break— and pricing on a cost-per-thousand basis would generally be comparable to those of commercial radio stations and networks. After reviewing a variety of factors, Booz & Company concluded that significant potential for advertising sales is limited to news/talk or news/talk/music–hybrid formats. Booz & Company's projections are based on advertising sales in those formats only. Music formats such as classical have shown over time that they are difficult to sustain through a commercial radio model, and as a result many classical music stations have opted to shift to a public radio revenue model in recent years.

Table 2

Given the risk to other sources of revenue, radio advertising does not appear viable

Overview of Public Radio Advertising Opportunity
Assumes Full Implementation after 5 Years, in Millions of USD

Revenue / Cost Area	Best Case	Likely Case	Pessimistic Case
Gross Advertising Revenues – National Sales	←	$102	→
Gross Advertising Revenues – Local Sales	←	$111	→
Agency Commissions	*10%*	*12.5%*	*15%*
Net Advertising Revenue	***$192***	***$186***	***$181***
Incremental Sales, IT, Operational & Real Estate Costs – National Level	←	($6)	→
Incremental Sales, IT & Operations Costs – Station Level	←	($44)	→
Advertising Revenues Net of Direct Costs	**$141**	**$136**	**$131**
Loss of Corporate Revenues at Participating Stations (assumes 30-50% loss of $165MM)	($49)	($66)	($82)
Loss of Foundation Revenues at Participating Stations (assumes 20-30% loss of $54MM)	($10)	($13)	($15)
Attrition in Individual Giving at Participating Stations (assumes 10-20% loss from $237MM)	($24)	($36)	($47)
Impact of Audience Attrition (assumes 5-10% loss of ad revenue potential of $181 – 192MM)	($9)	($14)	($19)
Loss of Non-Commercial Status from Vendors & Guilds[1]	($13)	($15)	($16)
Total Impact (negative)	***$35***	***($7)***	***($49)***

Note: In addition to recurring costs shown, there would be significant start-up costs, including repackaging the existing library of programming and trade marketing costs

1) Assumes 2-5% increase in NPR programming costs of $72MM plus $12MM in additional costs for a commercial Arbitron subscription

Source: Booz & Company analysis, NPR financial statements, AFR / FSR 2010 station data

As shown in Table 2, the estimated gross advertising revenues of $213 million per year would result in revenue to public radio after commissions of $186 million per year.

Both local public radio stations and national content producers and distributors would face significant challenges in shifting from a noncommercial model to a commercial advertising model. Local public radio stations would have to invest in producing more high-quality, distinctive local content that will attract advertisers. Like their television counterparts, public radio stations would need to develop competitive advertising sales packages that feature events, apps, and product placement. In addition, public radio stations would have to shift away from their existing on-air pledge model of fundraising, which currently drives individual giving. Direct costs would have to be incurred. Defraying the costs of these operational changes would result in net advertising revenue of $136 million.

However, an advertising-supported model for public radio would result also in the loss of significant current revenues. In an environment where advertising is allowed, a substantial portion of current corporate underwriting would be lost (or replaced by advertising). Booz & Company estimates that 40 percent of such revenues, or $66 million per year, would be lost. They also estimate that charitable foundation support for public radio would decline by 25 percent, or $13 million per year.

Further, there would inevitably be attrition in individual charitable donations to public radio stations, as listeners perceive that their charitable donations are no longer required or determine that they no longer wish to contribute to an advertising-supported service. Booz & Company conservatively estimates that at least 15 percent, or approximately $36 million per year, would be lost.

Moreover, the move to a commercial advertising model on public radio would cause some listeners who choose to listen to public radio because of the *absence* of advertising and program interruptions to seek other information and entertainment options. This audience attrition (estimated at 7.5 percent) would reduce advertising revenues by $14 million per year.

Finally, public radio stations enjoy discounts and rights concessions from vendors and guilds resulting from their currently noncommercial operation. In a commercial advertising environment, those discounts and concessions would no longer be available, increasing stations' costs by $15 million.

The costs and revenue losses incurred by the public radio system moving to a commercial advertising model are $221 million per year system-wide. Given that commercial advertising would produce revenues to public radio of only $213 million per year system-wide, the financial impact of commercializing public radio would be a net loss of $8 million per year.

Service Impact

A move to a commercial advertising model by the public radio system would also have consequences that reach beyond the aggregate financial results.

The financial outcomes of such a shift would be distributed unevenly, even among the portion of the system that might choose to engage in selling and airing advertising. As with television, some public radio stations would fare better than others. In particular, larger-market stations would fare better than smaller-market stations, rural stations, and stations serving diverse audiences.

Stations serving larger markets are more likely to have the financial resources, as well as the creative, operational, technological, and administrative capacity, to produce the high-quality local news/talk content that would be needed to attract local advertisers. Smaller-market stations, rural stations, and stations serving diverse audiences are more dependent on federal funding and less likely to have the resources and capacity to make the changes needed to attract local advertisers. As a result, public radio service in small and rural markets would be put at risk.

Moreover, not all stations would choose to sell advertising, even among the subset of public radio stations that air a news/talk or news/talk/music–hybrid programming format. An NPR decision to introduce advertisements into its national content would be problematic for stations that choose to remain advertising-free. The fragmentation of the public radio system that would result from some stations choosing to adopt a commercial advertising model and other stations choosing to maintain their noncommercial posture would lead to "brand confusion." As a result of both kinds of disparities, universal service would be compromised.

In addition, over time, greater dependence on advertising as a source of revenue is likely to precipitate a shift in the nature of the content available on public radio stations and ultimately put in jeopardy the mission of public broadcasting.

Retransmission Consent Fees

Retransmission consent fees are fees paid to broadcast television stations by cable and satellite television system operators for the right to retransmit the broadcast stations' content. The legal and regulatory framework in which these fees are paid applies only to the carriage of *television* stations, so any revenue opportunity here would apply only to public television stations and would not provide a funding alternative for public radio stations. Booz & Company's analysis indicates, however, that retransmission consent fees would offer substantial net revenue only if public television were to have considerable leverage in complex negotiations.[65]

Section 325 of the Communications Act and corresponding FCC rules provide that *commercial* television stations may choose between two alternative legal frameworks in establishing the terms under which their programming is to be carried on cable television or other multichannel video programming distributor (MVPD) systems, including direct broadcast satellite systems. The broadcast stations may choose either a "retransmission consent" framework or a "must carry" framework.

[65] Booz & Company incorporated this uncertainty into their model by discounting the projected gross revenues over a range of values, from 25 percent to 75 percent, reflecting the amount of leverage, if any, that public television stations would have in negotiations with the cable and satellite operators. This analysis resulted in a wide range of projected net financial results, from $18 million to $107 million.

For stations choosing carriage under retransmission consent, the terms of carriage—including compensation for use of the signal by the MVPD system—are subject to negotiation between the parties. If no agreement is reached between the station and the MVPD system, the system may not carry the station's programming. In effect, the retransmission consent rules permit a station to withhold its signal from the MVPD system's subscribers, unless agreement can be reached on the amount of payment for the right to carry the signal. These fees paid to commercial television stations are usually calculated on a per-subscriber basis.

For stations choosing carriage under "must carry," the MVPD system is required by law to carry the broadcast station's programming, but the station may not demand any compensation from the system operator.

For public television stations, only the "must carry" option is available under current law and FCC rules. The retransmission consent option is not applicable, so public television stations may not withhold their signals from MVPD systems in order to obtain compensation. Instead, public television stations have aggressively pursued "must carry" status on MVPD systems, including negotiating landmark arrangements with numerous system operators that include carriage of stations' multiple programming services (or "digital multicast channels").

In the last few years, most commercial television stations have successfully negotiated retransmission consent arrangements with MVPD system operators, adding retransmission fees as a significant new source of revenue for commercial television broadcasters. Based on publicly available information, commercial stations are typically obtaining between 40 cents and 60 cents per subscriber per month. While analysts have projected that these revenues will continue to grow between 15 to 20 percent a year for the next four years (generating as much as $2.6 billion in yearly revenues by 2016), MVPD system operators—cable, satellite and telco companies—have been lobbying the FCC and Congress for a review of retransmission consent framework and for relief in terms of carriage payments in some markets.[66]

Booz & Company has studied whether a change in the legal model, permitting public television stations to withhold their signals from MVPD systems in order to negotiate retransmission consent deals, would result in the payment of significant retransmission consent fees to public television. The analysis is based on estimated 2016 industry-wide retransmission consent fees, and the calculation of a retransmission fee per rating point in various contexts, which is then applied to public television's current audience ratings to calculate potential revenue.

If public television stations were able to successfully manage negotiations throughout the country, the revenue opportunity presented by retransmission consent fees could generate significant net revenues. However, the pursuit of these revenues would carry substantial challenges and uncertainties, as it would be contingent on successful negotiations with powerful cable and other MVPD interests (including the direct broadcast satellite operators DirecTV and Dish Network). Nearly 70 percent of cable and MVPD subscribers are represented by the four largest multiple-system operators (MSOs), while seven more MSOs represent approximately

[66] *Media Daily News*, "FCC Hints Cable Coverage Payments Could Lessen, " May 22, 2012.

another 24 percent of the total potential revenue. Negotiations with these entities by commercial television stations and groups have often been contentious and have sometimes resulted in stations or networks "going dark" on cable and MVPD systems when retransmission consent agreements cannot be reached.

The obstacles are particularly large for public television stations, which would be starting from an extremely difficult negotiating position—stations would likely have little or no tolerance for actually losing carriage on the systems by withholding their signals in the absence of an acceptable agreement. They may be willing to trade off revenues for carriage of multiple signals in addition to their primary signals, to preserve existing carriage patterns. In addition, given the decentralized and independent ownership and management structure of public television, organizing stations to pursue this opportunity would be a major (and expensive) challenge.

More important, the entire retransmission consent concept and regime—which relies on the threat (sometimes carried out) of a station or network withholding its signal from an MVPD system's subscribers unless and until the desired fee is paid—is antithetical to public television's mission of universal service—to provide services freely and reliably accessible by all Americans. The goal of universal access to public television stations is simply not compatible with having public television stations threaten to withhold—or actually withholding—their signals to wrest fees from cable and other MVPD systems.

For the reasons noted above, if retransmission consent fees are deemed an appropriate source of potential funding for public television, it may ultimately require a different sort of legislative intervention—in the form of statutorily-mandated retransmission fees for public television stations—to achieve significant revenues from this source.

Paid Digital Subscriptions

Booz & Company examined whether stations could provide content on a subscription basis and thereby generate a subscription fee revenue stream. Booz and Company estimates that paid digital subscriptions might have modest potential for generating small amounts of revenue, perhaps between $3 million and $9 million. CPB, however, believes that the subscription model has greater potential if it is developed as an enhancement for individual giving, for example by providing certain content only to contributing station members. Successful subscription models for single media outlets (as opposed to aggregators such as Netflix or Rhapsody) have been limited almost solely to the digital offerings of print publishers, where user access to their traditional print offerings was already conditioned on a subscription "paywall". By contrast, public broadcasting's broadcast offerings have always been—in keeping with public broadcasting's mission—available free over-the-air, so any conversion of broadcast content to a paid digital subscription model would be tricky at best. Further detail from Booz & Company's analysis of paid digital subscriptions is contained in the Appendix to this report, at pages 109-113.

Digital Game Publishing

Booz & Company's analysis indicates that digital game publishing does not have much potential as a new line of business for public broadcasting, despite several PBS projects that have explored game publishing on a noncommercial basis for educational purposes. The digital game publishing industry is dominated by entertainment/pastime games, and by a handful of blockbuster hit games in particular, from which earnings defray the significant development costs that result in the great majority of published games showing negative financial results. Moreover, public broadcasting's educational offerings—focused on early childhood—generally aim to serve users younger than the players of most entertainment games at the heart of the games market.

EXISTING FUNDING SOURCES

Beyond the alternative or new funding opportunities analyzed above, Booz & Company examined whether, with greater investment and improved economic conditions, certain existing funding sources might generate additional funding for the public broadcasting system. These sources include: digital online advertising, production services, tower leasing, events, renting donor lists to direct marketers, merchandise licensing, product sales, content licensing, on demand, DVD and CD sales.

However, Booz & Company found that, even if public broadcasting stations could make the necessary investments (which for most of these opportunities they are already doing), and even in an improving economic climate, the very modest net revenue that might be generated would be insufficient to replace the federal appropriation.

Booz & Company projects that there could conceivably be up to $23 million in net ancillary revenue that could potentially be generated each year from existing activities that are consistent with public broadcasters' mission and ordinary course of business. This includes capturing, over time, incrementally more revenue from paid digital advertising ($13 million), monetizing production services ($5 million to $7 million), and from tower leasing ($2 million to $3 million).

CPB believes that the potential opportunity to generate revenue from these sources is somewhat smaller ($20.75 million) than Booz & Company's estimate, because the potential revenue opportunity in leasing radio towers is smaller (perhaps only as much as $750k) than Booz & Company's for reasons stated below.

Booz & Company also found that two potential funding sources that may conceivably generate significant ancillary revenue—events ($7 million to $12 million) and renting donor lists to direct marketers ($9 million)—are risky, both because it is uncertain whether significant net revenues can actually be achieved, and because they will likely cause a fundamental shift away from public broadcasting's mission. CPB agrees with Booz & Company's assessment of the risky nature and thus limited actual revenue potential of both ventures, which are largely outside the operations of most public broadcasting stations.

Further, while it is beyond the scope of this report, it should be noted that revenue generated through opportunities such as "events" could be deemed subject to unrelated business income tax (UBIT) under the Internal Revenue Code. The IRS limits the amount of unrelated business income that 501(c)(3) organizations may earn, so most stations would have to consider whether activities such as events would jeopardize their tax-exempt status. The loss of tax-exempt status would have a devastating impact on charitable giving, which is the primary source of support for public radio and public television stations.

Finally, CPB believes that the aggregate cost and aggregate benefit of pursuing a number of these existing funding opportunities may not align. Several of them, as discussed below, will be available only to larger stations and/or stations in larger, urban markets. Absent the federal appropriation, this will ultimately degrade public broadcasting's mission of universal access and service.

Digital Online Advertising

Booz & Company believes that, over time, one potential source of modest revenue growth for public broadcasting—perhaps $13 million a year in additional revenue—will be digital online advertising—advertising on public television and radio websites.

A significant portion of the potential revenue stream is and will be captured by program producers through current sponsorship agreements with corporate and foundation underwriters.

Most of the revenue potential for public broadcasting is on the radio side. Currently NPR and many of the larger public radio stations have a growing digital audience—via their websites, mobile products, apps and podcasting—and they have created robust digital sponsorship programs.

In public television, the model is different. Much of the traffic on the PBS site is related to content to which producers have retained digital distribution rights, so a significant portion of this potential revenue stream for public television is and will be captured by program producers through current sponsorship agreements with corporate and foundation underwriters.

But even modest net revenue growth is uncertain because of the potential for an adverse effect on on-air program sponsorship packages and/or underwriting sales. The negative effect on those revenues would occur as a result of reducing the digital availabilities currently used as a "value add" for television programming sponsorship packages.

For both radio and television, a fully commercialized digital advertising model would be likely to reduce the quality of the website, resulting in loss of traffic, ultimately undercutting any growth achieved.

Events

Booz & Company estimates that public broadcasting stations and national organizations could earn modest revenues—$7 million to $12 million a year—by hosting and/or sponsoring events

such as concerts and conferences. Booz & Company's projection assumes that only stations in high population DMAs will have a large enough local audience and potential sponsors to drive sufficient attendance. In order for public broadcasting to pursue this opportunity widely, more stations and national organizations would need to develop the professional capabilities necessary to effectively plan and produce many different kinds of events and events at a larger scale than currently produced. Based on Booz & Company's analysis, CPB believes that while a few large stations could conceivably pursue this opportunity, most stations–especially small and rural stations—would find this to be outside the scope of their core business, risk tolerance and current capacity.

Renting Donor Lists to Direct Marketers

Booz & Company estimates that public broadcasting stations could generate some additional net revenue, perhaps $9 million a year, by providing their donor lists to direct marketing companies. Booz & Company believes that public broadcasting station's member databases could generate approximately one dollar per name per year. Booz & Company and CPB recognize that this opportunity is limited by restrictions placed on the use of donor lists by the Public Broadcasting Act, state regulators and by the stations themselves. In an era of heightened privacy concerns, donors are reluctant to allow their names and personal information to be shared with other entities. Moreover, public broadcasting stations may be reluctant to explore this opportunity due to past controversies associated with the distribution of public broadcasting donor lists.

Tower Leasing

Some public broadcasting stations currently generate revenue by leasing unused portions of their communications towers to other entities. Only 15 of the 111 public television stations that own a tower are not already realizing revenues from leasing space on their towers, and Booz & Company judged it unlikely that the number of television stations leasing capacity will increase. Booz & Company estimates that public radio stations could generate some addition net revenue, possibly $2 to $3 million a year. However, CPB believes that given that stations that own towers are already exploiting revenue in places where capacity is needed, appropriate space available, and where stations are legally permitted to lease such capacity, there is little prospect for generating any significant additional revenue—probably no more than $750,000 system-wide.

Merchandise Licensing and Product Sales

Merchandise licensing and retail product sales are often thought to be potent sources of revenue for public broadcasting. For years, opponents of public broadcasting have pointed to successful programs such as *Sesame Street*—whose properties make money from licensing and from toy and consumer product sales—as a source of funding for public broadcasting.

In reality, the revenue potential for public broadcasting of merchandise licensing is very limited, given public broadcasting's minor investment in and ownership of the type of programming that would generate licensing revenues (mainly popular children's programs). Further, the standard business model for licensing arrangements provides only modest income for the organization selling the license. This is because most of the cost and most of the risk of

these activities falls on the manufacturer and the retailer. Accordingly, most of the money that families spend for *Sesame Street*–branded products goes to the retailer (typically 50 percent) and the product manufacturer (usually 45 percent). Only five percent goes to the independent producer (Sesame Workshop), and only a small slice of that revenue to the distributor, PBS.

Similarly, the revenue potential for public broadcasters in retail product sales is minimal due to limited rights ownership and small profit margins on proprietary products (mainly souvenir goods).

Merchandise Licensing

Children's television has been at the heart of the United States' public broadcasting system for nearly forty years, during which time PBS has built a reputation for offering some of the most distinctive and high quality children's programming in the world.

However, children's television has become a very challenging business. Educational programming requires large upfront investments, and with an increasing range of media available to many children, including a number of dedicated children's channels, few programs ever become hits, much less substantial licensing franchises. Investments are frequently made in programs that do not yield any financial return.[67]

Children's television broadcasters and producers are facing significant financial pressures. Programs like *Sesame Street* are very costly to produce.[68] Its content is carefully scrutinized by academic advisors to ensure that it conforms to educational curricula. Producers of children's programming rely on licensing revenue to cover programming development and creation costs. In fact, licensing arrangements for new programs often stipulate that licensing revenues cover production deficits before distributors receive any revenue. In the case of the only public television franchise that generates significant merchandise sales, *Sesame Street*, licensing fees comprise approximately one-third of Sesame Workshop's total revenue.[69] Without licensing revenue, Sesame Workshop would have had losses of more than $58 million in 2009 and $45 million in 2010.[70]

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[67] Licensing opportunities for children's television properties are primarily in three categories: (1) toys and games; (2) books; and (3) clothing. While some hit children's television shows generate significant licensed merchandise revenue at retail, most generate very little revenue. In fact, most programs that run on PBS Kids today do not generate any substantial licensing revenue—for either PBS or the producers.

[68] The production budget for *Sesame Street* domestically is about $16 or $17 million per year, which produces about 26 episodes.

[69] The rest came mainly from distribution fees and royalties, and from private donors, corporate sponsors, and government grants.

[70] The operating expenses for the Sesame Workshop totaled about $133 million, including $37 million for production and development of television shows at home and abroad; $41 million for production and distribution of non-television content including apps, home video, and live entertainment; the balance goes towards education, outreach, fundraising expenses, "muppet acquisition" and assorted smaller costs. (Forrest Wickman, "Brought to

Broadcasters such as UPN have dropped out of the children's programming business. The reasons cited for their departure include FCC restrictions on quantity of advertising on children's programs,[71] the content of such advertising, syndicators moving their most popular product to cable only, and the growth of cable channels directed at children (which have fewer advertising restrictions).

In typical licensing arrangements, the size of the revenue opportunity is commensurate with the amount of upfront financial investment and risk taken. Retailers and manufacturers take greater risk in typical licensing and merchandising arrangements and keep the lion's share of the revenue generated. Rights holders receive up to five percent of the retail price or up to ten percent of the wholesale price for licensed merchandise sales.

Because PBS is not an exclusive rights holder of or significant investor in the programs that it broadcasts, its licensing revenues are relatively modest (about $6.5 million a year), and it is probably already achieving what is possible. Booz & Company does not believe that additional material revenue opportunities exist for merchandise licensing without very large upfront investments in content production. These investments are inherently risky given the hit-driven and highly competitive nature of this market, in which multiple large competitors (Disney, Nickelodeon, Hasbro, etc.) are competing for limited shelf space at retailers such as Wal-Mart and Target.

Retail Product Sales

As mentioned above, public television and PBS do not have the rights necessary to create program-themed products and it merely shares a small revenue slice from content producers for products that are sold through their online shops. While public radio and NPR own more program rights (e.g. *Morning Edition* and *All Things Considered*), there are few clear product categories where NPR could create NPR-branded products. Generally, the products that are proprietary to PBS, NPR and the stations are mainly souvenir goods, such as branded t-shirts, mugs and caps for which profit margins are low.

Accordingly, Booz & Company believes that the public broadcasting system (principally PBS) is already achieving what is possible and little or no additional material opportunity exists in either merchandise licensing without a substantially greater investment in programming or in retail product sales, except as a brand-builder for popular programs.

<u>Content Licensing</u>

Booz & Company does not believe that content licensing represents a significant additional revenue opportunity. The incremental opportunity for PBS to license content is limited by the nature of public television content. Further, public television program producers typically retain

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You by the Letter '$': With All Its Merchandising, Does *Sesame Street* Really Lose Money?" Slate, posted January 3, 2012.)

[71] Based on The Children's Television Act of 1990, Public Law 101-437.

rights for North American distribution beyond the public television broadcast window, so PBS does not typically control domestic licensing. PBS Distribution (PBSd), PBS International and PBS UK have already exploited the available opportunities. The demand for licensed radio content is very limited. Producers of public radio content have already exploited most of the available licensing opportunities, both domestically and internationally. A large proportion of public radio content is oriented to news and current events, which limits the potential for exploitation in later distribution "windows" as this content is fundamentally perishable in nature. Booz & Company believes that the revenue opportunity for public radio from content licensing is negligible.

On Demand Distribution

Booz & Company found that public broadcasting—television and radio—already appear to be maximizing revenue opportunities for the distribution of content to on-demand audio and video channels. While on-demand video services are rapidly growing, PBS already has licensing agreements with the major on-demand video channels (Netflix, Hulu Plus, Amazon Prime and iTunes) and these existing revenue sharing arrangements suggest that the additional upside revenue possibilities are limited for the foreseeable future. In addition, Booz & Company found that audio on-demand distribution channels also provide minimal opportunity for public broadcasting.

Production Services

Booz & Company estimates that public broadcasting stations could generate an additional $5 million to $7 million a year in net revenue through greater efforts to monetize the excess capacity in their production facilities, equipment and related technical services that is not needed for the provision of public broadcasting programs and services. Booz & Company noted, however, that many stations would not be able to capitalize on this opportunity due to the limitations of their facilities. Other stations would not be able to capitalize on this opportunity because of restrictions placed on the use of their facilities due to state prohibitions on the use of government-owned equipment and other resources in providing services that would be in competition with private sector companies.

DVD and CD Sales

DVD and CD expenditures in the United States have declined substantially as digital distribution of content continues to cannibalize physical media sales. PBS reports that it ships approximately three million DVDs each year. Booz & Company anticipates that, given the market trends, the volume of DVDs shipped by PBS will fall to 2.1 million units by 2015. Booz & Company further expects that PBS's DVD sales will be replaced by online and other on-demand services, but with the likely result of lower overall profits. The declining use of DVDs and CDs will also have a negative impact on station pledge drives as they are often used as "premiums" offered to incentivize charitable giving.

Various Other Sources of Revenue

Booz & Company also examined other sources of new or increased revenues for public broadcasting, such as education and state government fee-for-service arrangements, magazine publishing, book publishing and mobile device apps. In each case, these activities do not seem to have potential to provide any significant funding. Further detail on Booz & Company's analysis of these various other sources of revenue is contained in the Appendix to this report, at pages 132-146 and 149.

Spectrum Sales

The Middle Class Tax Relief and Job Creation Act,[72] signed by President Obama on February 22, 2012, gives the FCC authority to conduct a "reverse auction" in which television licensees may voluntarily surrender their channels in exchange for compensation from the proceeds of the resale to wireless carriers of such recovered and reorganized television UHF band spectrum in a separate "forward auction."

CPB has examined whether opportunities exist for funding from sales of public broadcasting spectrum. There is an expectation that, in perhaps the largest 20 to 30 television markets, some number of television channels will be offered up by broadcasters at bids that may seek millions of dollars in exchange for the surrender of their channels. If successful, the reverse auction will likely result in substantial revenues flowing to television station owners who are willing to leave the broadcast business entirely, share channels (and presumably compensation) with other television stations, or move their television transmissions to the now-undesirable VHF frequency band.

The FCC has yet to propose rules for the reverse auction, and thus it is uncertain whether it might propose or adopt any limitation on the participation of public television stations in this process (such as, for example, prohibiting a station providing the sole public television service in a given area from participating in the reverse auction). Even if there were such a limitation, of the top ten television markets in the United States (New York, Los Angeles, Chicago, Philadelphia, Dallas–Fort Worth, San Francisco–Oakland–San Jose, Boston, Washington DC, Atlanta and Houston), it would be theoretically possible for one or more public television stations to participate in eight television markets (Dallas–Fort Worth and Houston having only one public television station each). Thus, it is possible that one or more public television station licensees could be paid to surrender their channels.

There are a number of other uncertainties here as well. It is impossible to know whether the television band-clearing effort contemplated in the legislation will be successful. In the event that too few television stations are willing to surrender their channels, or the price at which they would be willing to surrender their channels is too high, the spectrum purchase, band reorganization and subsequent spectrum resale to wireless carriers cannot be completed. Even if the process is successful, it is impossible to know how many and which public television stations

[72] Public Law 112-96.

might choose to participate, whether their bids will be successful, and if so the prices at which their channels might be recovered.

Further, in the absence of some sort of requirement that funds from the sale of public television channels be placed into a trust fund to support public television stations generally (which would presumably create a serious disincentive for individual public television stations to participate since they would ultimately receive little of the resulting revenues), any such revenue would flow on a one-time basis and only to the particular television station giving up its channel. When the station is owned by a larger entity, such as a college or university or a division of state government, there is no assurance that auction revenues would be allocated to the public broadcasting station, rather than to other activities of the parent institution. Moreover, spectrum sales would not provide an ongoing source of funding for public television and radio stations generally that could replace federal funding. Finally and most important, it would be revenue at a cost of services lost.

Political and Issue Advertising

A federal appeals court recently held unconstitutional the longtime statutory ban on public broadcasting stations' sale of issue and political advertising.[73] This decision has raised the possibility that revenues from the burgeoning market for political broadcast advertising—a very important, if cyclical, revenue source for commercial broadcasters—could become a source of funding for at least some public broadcasting stations as well.

The ultimate result in that case is not yet known and may well not be known for some years to come, given the likelihood of rehearing and/or appeal of the decision. But if the decision is upheld and comes to be applied nationwide, public broadcasting stations would be permitted to sell political and issue advertising. For any particular station, however, the revenue potential is likely to be volatile, because a public broadcasting station's attractiveness to any prospective political advertiser, relative to other available broadcast advertising outlets, is a function of market-specific political, public opinion, and advertising-market conditions that may change considerably from one election cycle and one legislative season to the next.

Moreover, many if not most public stations would likely not be inclined to sell political or issue advertising, either because of the adverse effect such advertising would have on their programming service and its perception among their audiences, and because of the myriad other legal and constitutional issues that would be implicated (for example, whether a public television station licensed to a state government agency or public university could sell such advertising).

[73] The Ninth Circuit United States Court of Appeals 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.

VIII. PROMOTING EFFICIENCY IN THE PUBLIC BROADCASTING SYSTEM

CPB is the steward of the federal investment in public broadcasting. In addition to aiding individual stations, CPB is responsible for ensuring the strength and relevance of the overall public broadcasting system so that it can continue to serve the American people—for example—by funding an interconnection system that allows programming to be distributed and by helping to pay for some system-wide costs, such as music royalties. Beyond that, CPB is uniquely positioned to assess the health and needs of the system as a whole, and to guide the system to innovate, collaborate and streamline operations—helping stations to reallocate resources to invest in content creation, community engagement, education and journalism.

Collaboration

CPB works closely with stations to develop best practices in terms of collaboration covering content development, fundraising, technology and infrastructure, administration, and operations.

Public broadcasting station leaders want to effectively serve their increasingly diverse communities and seek ways to collaborate. CPB is working with stations to create innovative partnerships that seek to preserve what is essential about being local, and outsource what is not essential. Examples of collaboration in public media today include:

Collaborative Bandwidth Optimization. This initiative is designed to encourage stations in overlap markets to manage bandwidth and on-air services in a coordinated and cooperative way so as to put bandwidth to its best and most valuable use, provide more choice for viewers, and free up resources that can in-turn be invested in more content and services. Beginning in FY 2012, $18.25 million in Community Service Grant (CSG) funds will be set aside for these programs and the Mergers and Consolidations initiative described below.

Contributor Development Partnership. CPB is funding this WGBH initiative, which aims to help stations grow revenues and fundraise more efficiently by identifying and promoting best practices and leveraging investments in expertise and research across multiple stations. The partnership currently comprises 90 public television stations, which have created the first contributor data reference file that spans the nation, allowing fundraising analysis and implementation at scale across the entire database rather than station-by-station.

Joint Master Control initiative. CPB is developing new infrastructure models that will reduce costs and enable stations to increase investments in content and services. One model that has great potential for cost savings is the centralization of multiple master control facilities, or a "central-cast" model. During the last year, CPB has worked with eight stations in New York state to plan such a facility. CPB supported the development of a technology plan, a design for organizational structure and analysis of potential savings. The New York Association of Public Broadcasting Stations created an operating model that will save millions of dollars over the years to come. CPB has made an initial investment in equipment for the facility.

In addition to working with stations to consolidate infrastructure, CPB is also studying what the technical architecture for public broadcasting might look like in the future. For example, it is

possible that five to six central-cast systems could replace more than 100 separate master control facilities across the country, becoming the backbone for a future interconnection system, and resulting in significant cost savings. With the loss of PTFP funding, individual stations are looking for ways to fund equipment replacement costs for their master controls. Moving to a more centralized model is a way to distribute those costs among many stations, and to save on operations costs as well.

Public Media Platform. CPB is working with PBS, NPR, APM, PRI and PRX to develop what is essentially an "interconnection system for the digital age." The Public Media Platform will create a shared content inventory and a common data standard that will allow all public media entities to exchange content easily and permit the creation of new user applications that will advance public media into the 21st Century. The Public Media Platform will also reduce the need for redundant systems at national organizations and stations, thereby generating significant savings in operating and content distribution expenses.

Local Journalism Centers (LJCs). This initiative promotes collaboration among public radio and television stations to build capacity for local journalism. CPB funded seven regional teams that provide multi-platform coverage on particular topics. Each team consists of an editor and reporter based at a lead station and other reporters based at LJC partner stations. The editor works with the partner stations' newsrooms to set the editorial agenda for the LJC coverage, and the resulting content airs on the partner stations and is posted on a project and/or station Websites. LJC content and reporters have been used by the partner stations as well as national news outlets such as *PBS NewsHour*, NPR, *Marketplace* and the BBC.

Argo. NPR's Argo Project was funded by grants from CPB and the Knight Foundation. The project enabled a pilot group of 12 NPR member stations to curate and report on news about specific topics of local interest. Each Argo website is produced by a full-time journalist-blogger (or, in some cases, a combination of full-and part-time journalists). The sites focus exclusively on reporting and aggregating news about a single topic particularly relevant to the station's community. Stations feed their work into NPR's API, where participants have easy access to one another's work to inform, enrich and add context as they produce their stories. This common content-sharing infrastructure provides a solid platform to support stations' online publishing needs and to expand the power of the network.

Administrative and Operational Collaborations. CPB is working with several groups of stations across the country to develop models for station infrastructure collaborations. In New England, for example, a smaller station facing financial hardship is maintaining its local identity and local service while significantly reducing its operating costs by entering a master services agreement with a larger, financially secure station. This combination will enable the smaller station to continue to serve its community without the burden of large infrastructure and overhead costs, and it enables the larger station to improve its fundraising performance and reduce its costs through economies of scale. CPB is beginning a larger grant program to further encourage such collaboration efficiencies in Summer 2012.

CoastAlaska. This is a service organization for the public radio stations in five Southeast Alaska communities. Started as an informal alliance, CoastAlaska has become a fully independent non-

profit organization that provides leadership, planning and support for member stations. The services include all financial systems (payroll, personnel administration, bank accounts, investment accounts, benefits, bookkeeping and grant administration), fundraising support (including underwriting and membership services), engineering services (to maintain studios, transmitters and translators throughout the region) and regional news reporting, editorial support, coordination and training for news personnel.

QUEST. CPB is supporting KQED's new operational infrastructure and business initiative designed to expand its successful STEM (science, technology, engineering and mathematics) education initiative, QUEST, to six additional stations and eventually to stations across the country.

NewsWorks. CPB invested in WHYY's NewsWorks project in the Philadelphia metropolitan area. NewsWorks is a hyperlocal journalism initiative that takes news reporting down to the neighborhood level.

Mergers and Consolidation

Mergers and acquisitions that consolidate several independent stations into one entity can increase operational efficiency, develop economies of scale and secure long-term sustainability while improving service and preserving local identity. CPB is working to foster mergers and collaborations and develop new infrastructure models, consistent with its mission to maintain universal service and support operational efficiencies.

Mergers and Consolidation initiative. With financial incentives, CPB encourages grantees to increase operational efficiency by joining with other stations to share costs and improve service, while maintaining universal access. A number of public radio stations have acquired other public radio stations or entered into long-term local marketing agreements (LMAs) for the operation of other stations, creating efficiencies in large and small markets.

A recent example is the acquisition **of WBFO-FM** from the University at Buffalo by the Western New York Public Broadcasting Association (WNED). Executives and board members from both organizations explored ways to strengthen public radio in the region and make better use of donor and taxpayer funding. For grantees that choose to aggregate under a single general programming and development structure, current CSG policy provides for CPB to maintain both CSGs for a transition period before phasing out the acquired station's base CSG over several years, rather than terminating it upon the transfer of the station.

Iowa Public Radio. In 2007, the Iowa Board of Regents and Iowa Public Radio developed a Public Service Operating Agreement, with the consent of the public university presidents, to engage Iowa Public Radio to manage day-to-day operations of three universities' public radio stations and to serve as the primary fundraising entity. Previously, the three groups had operated as separate entities, encompassing 23 stations covering nearly all of Iowa's 99 counties.

Louisville Public Media. The Public Media Partnership in Louisville, Kentucky, unified all production and administrative functions of three separately licensed public radio stations. This

operating structure allowed Louisville Public Media to align the programming schedules of the three stations and eliminate duplicate programming.

IX. 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?

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.

Appendix

Washington, D.C. May 21, 2012

Corporation for Public Broadcasting

booz&co.

Alternative Sources of Funding Report to CPB

Final Report

This document presents Booz & Co.'s analysis of alternative revenue sources for public broadcasting and the impact of reduced funding

- CPB requested that Booz support them to produce a report on alternative sources of funding for public broadcasting in lieu of federal funding, including:

  1. Review and assess prior reports, document findings, and incorporate relevant information into analysis

  2. Validate, verify, and update the Hamilton Place Strategies' 2011 model, including both the model's logical structure and its principal parameters

  3. Provide new analysis on a range of potential approaches to replacing federal funding of public broadcasting

- This document contains analysis of:

  – Potential revenue opportunities, which were generated through review of past analysis, extensive industry interviews and analysis of the commercial media sector

  – The impact on stations of a loss in federal funding

  – Additional back up analysis supporting our assumptions and calculations

We used a variety of inputs to generate a list of potential opportunities

Inputs for Idea Generation

- **Preliminary Opportunity List from CPB**
- **Past Reports (GAO, Booz, McKinsey, Public Radio Capital, etc.)**
- **Interviews with Stakeholders in Public and Commercial Broadcasting**
- **Media Industry Research**

Revenue Sources

- TV Ad Sales
- Radio Ad Sales
- Digital Online Advertising
- Merchandise Licensing
- Retransmission Consent Fees
- Mobile Device Apps
- On-Demand Distribution (e.g., Netflix)
- Content Licensing
- Paid Digital Subscriptions
- Games (Social, Online, Console)
- Magazine Publishing
- Book Publishing
- Educational and State Gov't Services
- DVD or CD Sales
- Tower Leasing
- Production Services
- Events
- Retail Product Sales
- Renting Donor Lists to Direct Marketers

Note: Spectrum sale, universal fund and other sources of government revenue (tax-related) considered to be out of scope for this analysis

We evaluated these opportunities and divided them into four categories based on their potential impact on public broadcasting

- The first category includes opportunities where there is a perception of significant revenue upside for public broadcasting; however, the true upside is limited to negative. We labeled this category "high profile, low potential"
  - TV advertising
  - Radio advertising
  - Merchandise licensing
- The second category includes opportunities where there appears to be net revenue upside of $10MM + each that should be explored and evaluated further; these opportunities have a mixed level of risk and execution complexity
- The third category includes opportunities that may be promising for some stations but overall upside is limited or challenging to capture
- The last category are areas where the upside potential seems very limited to negative
- The impact on UBIT has not been calculated for these opportunities

Introduction & Summary

Analyses by Area

Station Viability Analysis (Hamilton Place Update)

Advertising in TV and radio is not advisable; negative impacts on the mission and risk to other revenues outweigh the benefits

- Today, public broadcasting is striking a balance between generating revenues from corporate underwriting while maintaining a non-commercial operating model
- Maintaining this operating model allows public broadcasters to tap into benefits that commercial broadcasters cannot:
  - Creates a high level of trust with audiences and the public
  - Generates individual gifts from audiences
  - Attracts underwriting support from foundations and corporations
  - Qualifies for discounts from guilds and vendors
- Collectively, the public broadcasting system generates approximately $700MM in individual giving and $600MM in underwriting revenue from corporations and foundations. We estimate that shifting to a commercial model would enable public broadcasting to capture gross advertising revenues of approximately $400MM
- Given the unique revenue model of public television, we anticipate that costs and other revenue impacts will exceed the potential upside of advertising by:
  - Superseding much of the current underwriting revenues from corporations and foundations
  - Resulting in substantial drops in individual giving by disrupting the on-air pledge-drive model and reducing rates of membership renewals
  - Eroding audiences who chose public broadcasting because of the absence of advertising / internal breaks
  - Requiring additional sales, operational, technology, real estate, administrative resources and related costs
  - Resulting in a loss of non-commercial status with talent guilds, copyright holders and vendors of program-related services
- Given the decentralized ownership and governance of public broadcasting, a transition to an ad-supported model would require many years to implement given the significant shift in operating model that it represents and investment required
- Over time, greater dependence on advertising is likely to precipitate a shift in the nature of the content available on public media and ultimately put in jeopardy the mission of public broadcasting

Given its current model, the likely revenue impact on public television of a shift to an advertising model would be negative

Overview of Public Television Advertising Opportunity

Assumes Full Implementation after 5 Years, in Millions of USD

Revenue / Cost Area	Best Case	Likely Case	Pessimistic Case
Gross Advertising Revenues – National Sales	←	*$157*	→
Gross Advertising Revenues – Local Sales	←	*$82*	→
Average Agency Commissions	*10%*	*12.5%*	*15%*
Net Advertising Revenue	***$215***	***$209***	***$203***
Incremental Sales, IT, Operational & Real Estate Costs – National Level[1]	←	*($8)*	→
Incremental Sales, IT & Operations Costs – Station Level	←	*($53)*	→
Advertising Revenues Net of Direct Costs	***$154***	***$148***	***$142***
Loss of Corporate Revenues (assumes 30%-50% loss of $181MM from lost avails, weaker sales pitch)	($54)	($73)	($91)
Loss of Foundation Revenues (assumes 20-30% loss of $129MM, primarily of program underwriting)	($26)	($32)	($39)
Attrition in Individual Giving (assumes 10% - 20% loss of $390MM in individual giving)	($39)	($59)	($78)
Impact of Audience Attrition (assumes 5%-10% loss of net ad revenue potential of $203-215MM)	($10)	($16)	($21)
Loss of Non-Commercial Status from Vendors, Guilds, Rating Agencies[2]	($17)	($23)	($28)
Total Impact (negative)	***$7***	***($54)***	***($114)***

1) : In addition to recurring costs shown, there would be significant start up costs, including repackaging the existing library of programming, which is estimated to cost $5MM (2,000 hours of content at $2-3K per hour to repackage), trade marketing costs

2): Assumes 2-5% increase in national public television 2010 programming costs of $364MM plus $10MM in additional costs for a commercial Nielsen subscription. This analysis does not include the additional costs associated with Nielsen subscriptions at the station level which would introduce significant additional costs

Source: Booz & Company analysis, PBS financial statements, AFS / FSR / SABS 2010 station data

Public television is designed to meet the needs of large underserved audiences, not advertisers

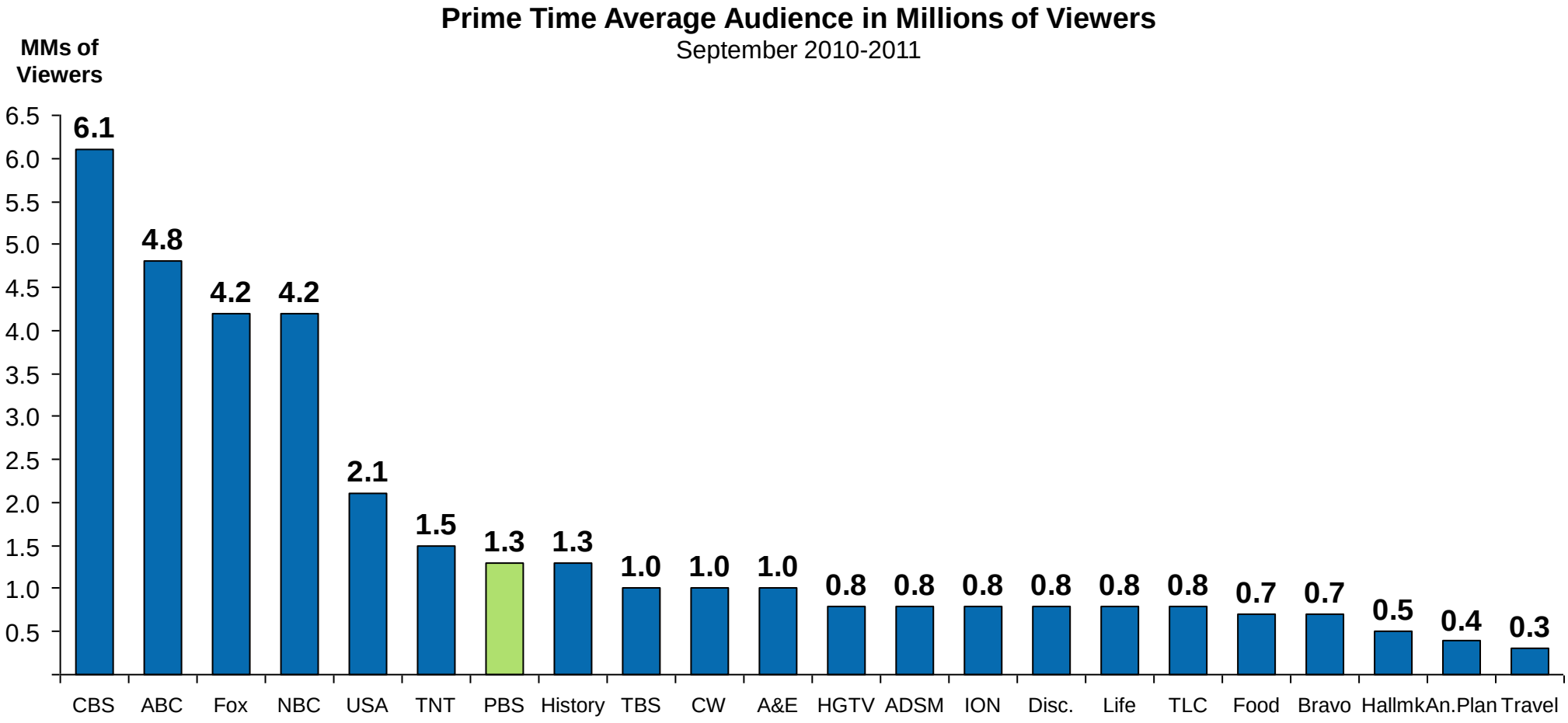
Public TV Advertising Scorecard

Advertiser Need	Public TV Score	Comments
Large audiences	◕	▪ Average prime time audience of 1.3MM ▪ Larger than many major cable networks, though smaller than major broadcast networks
Concentration of Audience in Highest Value Demos (e.g., A18-49)	◔	▪ Public TV serves older and younger audiences ▪ 30% during the day and 19% in the evening are A18-49 ▪ While children 6-12 are a target demo for advertisers, pre-school age audiences (2-5) are generally not
High Level of Guaranteed Common Carriage	◔	▪ Minimal national common carriage requirements in public TV given focus on local autonomy for stations ▪ Relative to other TV networks, common carriage in public TV is low
Ad-friendly content	◔	▪ Content focused on very young children is risky for advertisers; cable networks voluntarily limit advertising to young children ▪ Much of the current prime time schedule likely to be viewed as controversial (e.g., Frontline), or not providing the right environment
Innovative Cross-Platform Offerings, Product Integration	◔	▪ National digital platforms are strong, local platforms are underdeveloped ▪ PTV does not offer product integration, as do many commercial networks
High Quality Local News & Content for Local Advertising	◔	▪ Commercial stations produce ~6 hrs/day of local news / programming with a focus on content that can be sponsored by advertisers (sports, weather) ▪ PTV has fewer local programming hours with less focus on content that attracts advertisers and greater focus on public affairs, in-depth interviews

Source: Nielsen, PBS Research, Booz & Company analysis

● - Fully Meets ◕ - Largely Meets ◑ - Partially Meets ◔ - Largely Does Not Meet ○ - Does Not Meet

Public television's ratings are below most other English-language broadcast networks, but higher than most cable networks

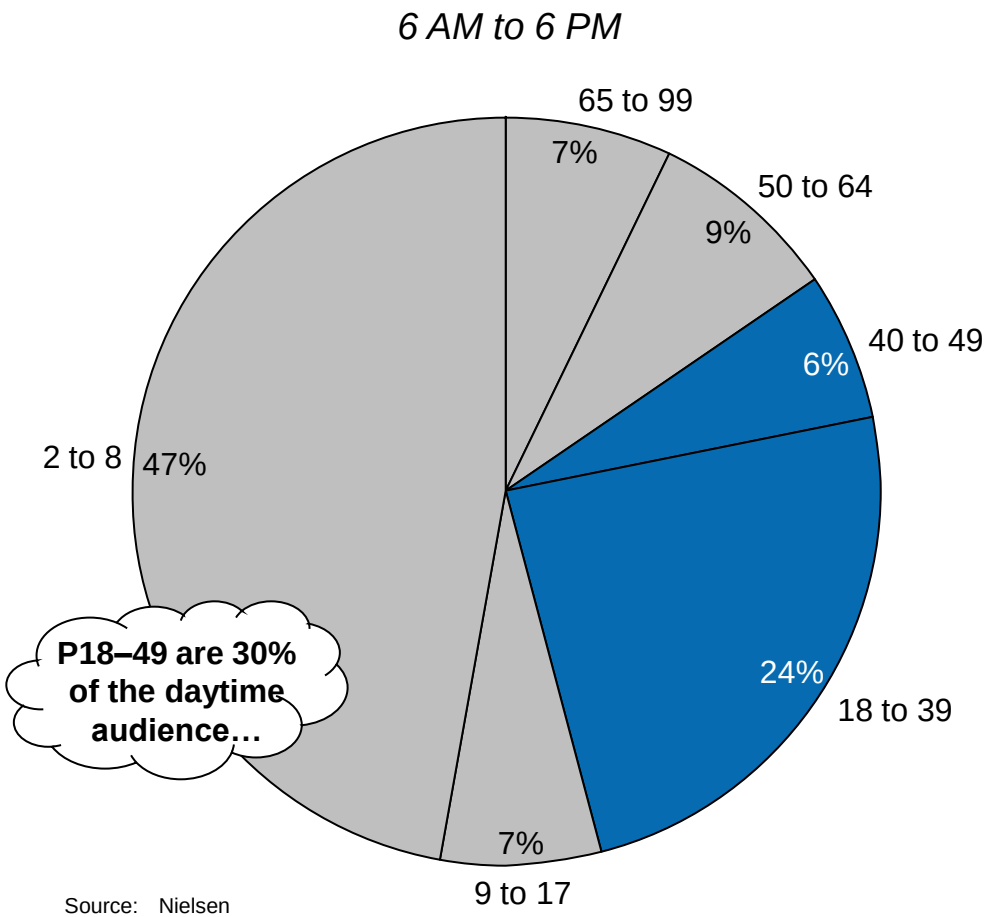


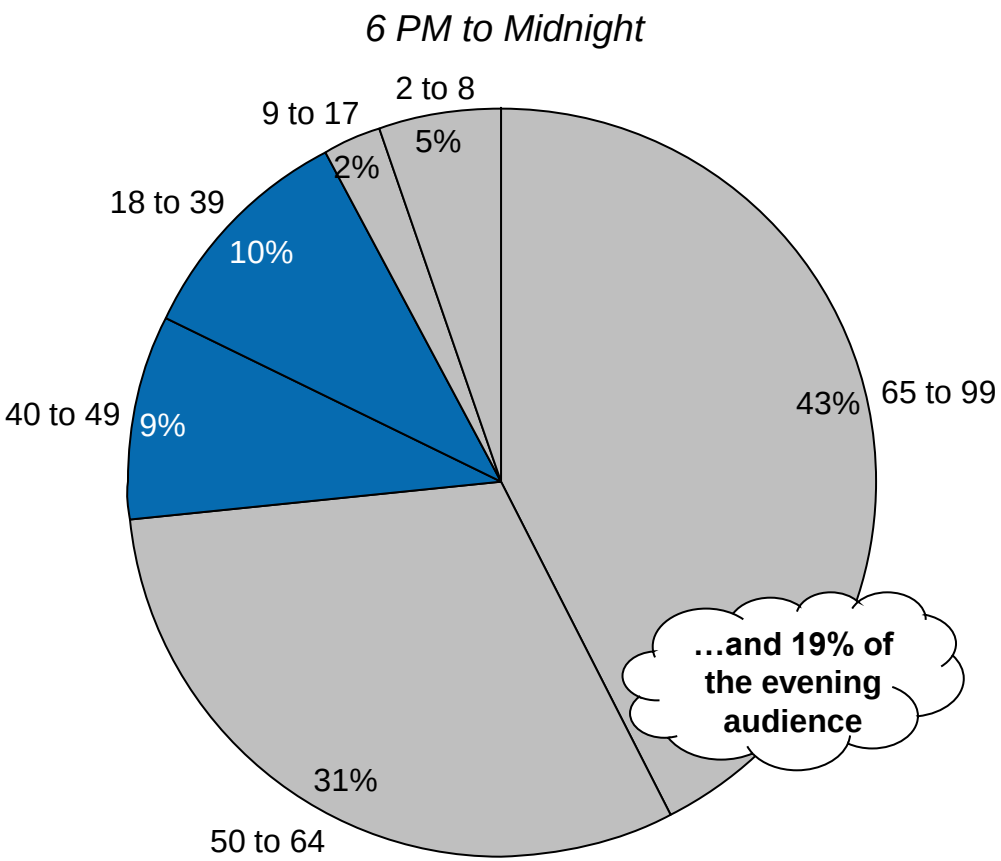
Source: Nielsen

Public TV attracts younger and older viewers; adults 18-49, the most sought-after ad demo, is a small percentage of the audience

Public TV Audience Demographics

February 2012





Source: Nielsen

With its focus on local autonomy, PTV has low levels of common carriage relative to commercial broadcasters

PBS Programming Grid by Level of Common Carriage
February 2012 7:00 PM – Midnight

Time	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
7:00 – 7:30	Nova 7%	The NewsHour 54%					Antiques Roadshow 4%
7:30 – 8:00							
8:00 – 8:30	Masterpiece Classic: Downton Abbey (Rerun) 46%	Antiques Roadshow 78%	Freedom Riders: American Experience 72%	Nature 78%	This Old House 13%	Washington Week 68%	Freedom Riders: American Experience 1%
8:30 – 9:00						Need to Know 36%	
9:00 – 9:30	Masterpiece Classic: Downton Abbey (First Run) 85%	Antiques Roadshow 75%		Nova 81%	Frontline 7%	American Songbook 37%	
9:30 – 10:00							
10:00 – 10:30		Underground Railroad 74%	Frontline 81%	Inside Nature's Giants 81%	Independent Lens 19%	American Songbook 52%	Underground Railroad 1%
10:30 – 11:00							
11:00 – 11:30	Austin City Limits 6%	Charlie Rose 21%			Sky Island 2%	Charlie Rose 21%	Austin City Limits 20%
11:30 – 12:00							

> 80% | 70 – 80% | 50 – 70% | 20 – 50% | Less than 20%

Source: PBS Research February 2012

The prime time schedule has few programs that would generate active interest from media buyers

Characteristics of PBS Prime Time Programming & Commentary on Fit with Advertisers

1 Potentially Controversial Content

- Programs such as Frontline, American Experience and Independent Lens often focus on topics that are controversial or serious in nature (religion, war, politics, social issues, race, etc.)
- Advertisers seek to avoid association with controversial topics that may have a negative reflection on their brands / products and / or offend their customers or shareholders

2 Appeal to Older Audiences

- Advertisers traditionally seek to reach younger viewers whose brand preferences are seen as more malleable
- PBS content and sensibilities appeal to older viewers who are underserved by commercial networks, e.g.:
  - The PBS NewsHour's audience is more than 50% 65+, and more than 85% 50+
  - Antiques Roadshow, the top rated Dec. 2011 PBS program, had a 5.9% share of the 65-99 demo but a 0.9% share of the 40-49 demo[1]

3 Focus on Arts & Sciences

- PBS programming is designed to provide access to arts and sciences to mass audiences
- These genres struggle in commercial media; cable networks covering arts & sciences (Bravo, Discovery) have shifted focus to general entertainment
- Endemic advertisers (luxury goods, travel, financial services) have many other more targeted media options to reach their audiences

1) Based on September 2010 to September 2011 season

Source: Nielsen data from "PBS Research Prime Time Audience Update: '10-11 TV Season in Review", Nielsen data from "PBS Research Monthly National Report" Dec. 2011", NewsHour Audience analysis from PBS Research, Booz & Company analysis

Daytime schedules are dominated by programming for pre-schoolers; a highly sensitive audience for advertisers

Areas of Sensitivity	Description
Volume of Ads	▪ Parents object to excessive numbers of ad messages aimed at their young children ▪ The Children's Television Act of 1990 limits the number of ads that programming can contain ▪ Networks who exceed these limits are subject to fines (e.g., in 2005, Nick & ABC Family were fined $1MM and $500k respectively for exceeding limits)
Products Featured	▪ Given the ability of advertising to manipulate young children's preferences, there is high sensitivity around advertising in certain categories; e.g., food and restaurants ▪ Increasingly, advertisers whose products target children self-regulate to avoid backlash ▪ Coca Cola, Mars, Hershey, and Cadbury USA agreed in 2010 not to advertise at all to young children; other advertisers have established nutritional standards on products they advertise to kids
Product Claims & Messaging	▪ An *American Psychological Association* report, in concurrence with others, found that children 5 and younger cannot distinguish programming from advertising ▪ Children's Advertising Review Unit (CARU) is responsible for establishing guidelines for advertising to children under the age of 12 on all media, advertisers are responsible for self-regulating for truth, accuracy, appropriateness and sensitivity ▪ Rate of voluntary compliance by advertisers with CARU decisions is 97%
Content & Tone of Advertising	▪ Commercials airing in programming for young children need to be age-appropriate ▪ CARU's core principles encourage advertisers to portray positive cultural and diversity messaging due to concerns around social stereotyping

Source: FCC, *Children's Advertising Review Unit (CARU),* American Psychological Association Report on Children's Advertising, WSJ, Advertising Age, Booz & Company analysis and interviews

Nick and Disney do not run traditional ads on their "junior" nets; they generate revenue from these audiences from other channels

- Originally launched as Noggin in 1999; re-branded in 2009 to Nick Jr.
- Nick Jr. currently reaches 77 million U.S. households
- Nick Jr. is aimed at a 2-6 year old audience with an emphasis on learning content
- Until March 2012, Nick Jr. ran commercial-free with only limited sponsorships between shows
- Beginning in March 2012, Nick Jr. will carry a limited number of ads and displaced its popular "Moose & Zee" characters which appeared in between shows
- This shift has led to a backlash from parents via online petitions and comments on the network's Facebook page; recent viewing of Nick Jr. reveals that they continue to employ a sponsorship model

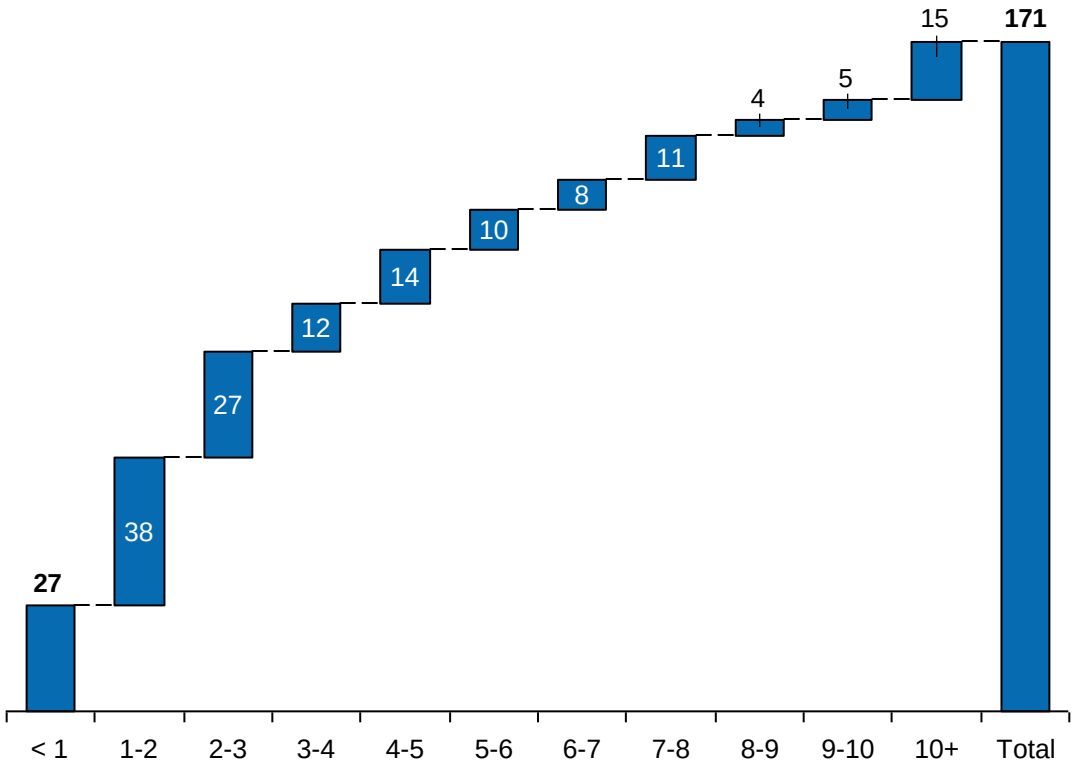
- In 2010, following the rebranding of Nick Jr., Disney/ABC announced that it would launch Disney Jr. in 2012, replacing its low-rated cable network SoapNet
- Disney Jr. currently reaches 30 million U.S. households
- Disney Jr. was launched on March 23, 2012 with a slate of programming aimed at children ages 2-6
- Both Disney and Disney Jr. are primarily commercial-free carrying only Disney-related spots or sponsorships with less overt commercial messaging aimed at moms
- Disney uses its cable nets to generate other sources of revenue outside of advertising:
  - Disney captures a higher affiliate fee than Nick: 94 cents / sub vs. 50 cents per sub respectively
  - Disney uses TV to build characters that it can monetize through theme park visits, merchandising, publishing, etc.

Source: WSJ, Advertising Age, Booz & Company analysis

Stations do not produce high volumes of ad-friendly local programming today

# of Public TV Stations by Local Production Hours per Week

2010 Total Local Production Hours, 171 TV Stations,



Discussion

- Commercial TV stations often produce multiple local newscasts daily– around 6 hours per day at a high cost
- These stations are increasingly investing in local news and programming to attract revenue as competition for local ad dollars intensifies with the advent of local digital platforms
- Relatively speaking, public broadcasting stations have little local content that could be used to capture local ad dollars
- In addition, focus areas for programming (public affairs, in-depth interviews) are fundamentally less ad-friendly versus the breaking news, sports and weather covered by commercial stations

Source: SABS TV 2010 Report, Booz & Company analysis

Based on these considerations, we sized the advertising opportunity for public television making the following assumptions:

1. **PBS Kids programming should not change its current sponsorship model**:
   - Parents are highly sensitive about advertising messages targeted at children 2-5 who cannot yet distinguish between ads and content
   - The advertising market for kids 2-5 is limited; advertisers are acutely aware of negative perceptions of commercials aimed at very young children
   - Other networks targeting young children (Nick Jr. and Disney Jr.) also do not interrupt programs with advertising; they have sponsorship messages between shows, not unlike PBS Kids
   - Focusing instead on enhancing the current sponsorship model is preferable
2. **PBS and producing stations would partner to sell national advertising in 15 hours per week of the prime time schedule**; we assume:
   - The PBS NewsHour is viable for national ad sales (5 hours per week)
   - Prime time programming Monday, Tuesday and Wednesday is viable for national ad sales (3 hours on Monday, 2 on Tuesday – excludes Frontline, 3 on Wednesday)
   - Sunday night programming is viable for national ad sales (2 hours per week)
   - Thursday, Friday and Saturday have no hours appropriate for national ad sales outside of the NewsHour
   - Adults 18-49 demo will be sold; demand for other demos is limited and prices paid lower
3. Stations will also sell advertising; **we assume that on average, stations have two hours / day of ad-friendly content that could be monetized locally**
4. To pursue this opportunity, an **ad sales capacity would need to be built at both the national and the station levels**, resulting in additional costs that can only be partially offset by current resources
5. **Programming will not materially change**; the mission to educate and inform the public is unchanged, the volume of hours will remain constrained by budgetary considerations

After a significant ramp up time, TV advertising could generate approximately $240MM in gross revenue annually

Key Inputs & Assumptions

National Ad Sales	Amount
# of Hours/Week of Programming Appropriate for National Ad Sales, based on common carriage & ad environment considerations	15
Average Audience A18-49 in '000s Weekday Prime (13 hours)	348
Average Audience A18-49 in '000s Sunday Prime (2 hours)	1,400
% of national audience that cannot be commercialized due to limited common carriage	20%

Local Ad Sales	
# of hours per week available to sell – all stations	14
Average Audience A18-49 in '000s Assuming sales are of highest rated hours	280

Revenue Sizing

Optimistic Ramp Up Scenario

	Year 1	Year 2	Year 3	Year 4	Year 5
Sell out	30%	40%	50%	60%	70%
# of 30 Sec. Avails / Hour	16	20	24	28	32
CPM: National	$15	$17	$19	$21	$23
CPM: Local	$10	$12	$14	$16	$18
National Sales in $MM	$22	$41	$69	$107	$157
Local Sales in $MM	$10	$19	$34	$54	$82
Total in $MM	**$32**	**$61**	**$103**	**$162**	**$238**

Source: Nielsen, SQAD, PBS Research, Booz & Company analysis

Assuming that a large portion of staff costs could by offset by current resources, station costs would be approximately $50MM

Estimated Incremental Station-Level Costs

Numbers may not add due to rounding

Role	FTEs: Small Stations	FTEs: Mid Market Stations	FTEs: Large Stations	Salary: Small Stations[1]	Salary: Mid Market Stations[1]	Salary: Large Markets[1]	Additional Costs for Benefits, T&E (% of Salary)[2]	Cost / Station: Small Market	Cost / Station: Mid-Market	Cost / Station: Large Stations
Traffic & Operations	1	1	2	$64K	$82K	$106K	30%	$83	$107	$275
Ad Sales Agents	1	3	6	$48K	$72K	$106K	50%	$71	$322	$957
Marketing / Creative	0	1	1	$63K	$82K	$101K	30%	$0	$106	$132
Admin & Billing	0	1	1	$38K	$51K	$63K	30%	$0	$67	$82
Total Staff Costs / Station [$K]								**$154**	**$602**	**$1,446**
# of Stations[3]								85	63	23
% of Cost Defrayed by Redeployment of Current Resources[4]								25%	50%	75%
Total Staff Costs for All Stations – Incremental [$MM]								**$10**	**$19**	**$8**
Annual Cost of Upgraded Trafficking Software per Station [$K][5]								$72	$108	$144
Software Costs for All Stations – Incremental [$MM]								**$6**	**$7**	**$3**
Total Incremental Costs [$MM]								**$16**	**$26**	**$12**

1): Based on Bureau of Labor Statistics data for "TV Broadcasting", uses median salary for small stations, 75th percentile for medium stations and 90th percentile for large stations
2): Assumes 30% of salary for benefits costs, 50% for sales positions to account for benefits and travel and entertainment expenses
3): Stations segmented based on Nielsen DMA size: large stations are in the top 10 DMAs, medium sized stations are in DMAs ranked 10 – 60, small stations are in DMAs smaller than the top 60 (less than 500K TV households)
4): Based on evaluation of corporate underwriting sales force in place today at stations
5): Based on interviews with TV operations software vendors, assumes $6K / month for small stations, $9K / month for mid-sized stations and $12K / month for large stations
Source: Bureau of Labor Statistics, Interviews with TV operations software vendors, Booz & Company analysis

At the national level, there would be an additional $6 - 9MM in direct costs to supplement current resources

Estimated Incremental Network-Level Costs

Numbers may not add due to rounding

1. Staff Costs – Sales Team

	SVP	VP	Sales	Planners	Creative	Marketing	Admin	Total
New York	1	2	8	2	1	2	2	**18**
Chicago	0	1	8	2	1	2	2	**16**
LA	0	1	8	2	1	2	2	**16**
Total FTEs	**1**	**4**	**24**	**6**	**3**	**6**	**6**	**50**
Salary[1]	$200K	$151K	$106K	$107K	$139K	$101K	$63K	-
Benefits (% of Salary)[2]	50%	50%	50%	30%	30%	30%	30%	-
Total Costs [$MM]	**$0.3**	**$0.9**	**$3.8**	**$0.8**	**$0.5**	**$0.8**	**$0.5**	**$7.7**
Total Incremental Costs Assuming 50% of Cost Defrayed by Redeployment of Current Resources [$MM][3]								**$3.8**

2. Staff Costs - Other Functions

	Operations Mgmt.	Research	Pricing / Yield Mgmt.	Traffic	Total
FTEs	2	2	4	6	**14**
Salary[1]	$106K	$101K	$107K	$106K	-
Benefits (% of salary)[2]	30%	30%	30%	30%	-
Total Costs [$MM]	**$0.3**	**$0.3**	**$0.6**	**$0.8**	**$1.9**
Total Incremental Costs Assuming 25% of Cost Defrayed by Redeployment of Current Resources [$MM][3]					**$1.4**

3. Non-Staff Costs

	Total
Trafficking Software Upgrade [$MM][4]	$0.5 - $3.0
Real Estate Costs [$MM][5]	$0.1 - $0.7
Total Non-Staff Costs [$MM]	**$0.6 - $3.7**

1): Based on Bureau of Labor Statistics data for "TV Broadcasting", uses 90th percentile benchmarks
2): Assumes 30% of salary for benefits costs, 50% for sales positions to account for benefits and travel and entertainment expenses
3): Based on evaluation of corporate underwriting sales force in place today at producing stations, National Public Media
4): Based on interviews with TV operations software vendors
5): Assumes 100-200 square feet per FTE, $20-55 per square foot based on Cassidy Turley US Office Trends Report, Q1 2012
Source: Bureau of Labor Statistics, Interviews with TV operations software vendors, Cassidy Turley, Booz & Company analysis

Growing the size of this opportunity would require large additional investments and changes to current operations

Greater National Common Carriage and Programming

- National broadcast networks have common, standardized programming grids that enable scaled national sales at the network and station levels
- National commercial networks and their station groups such as CBS, NBC and ABC carry on average 10+ common hours of programming each day; Fox has ~2
- In comparison, there are less stringent common carriage requirements for public broadcasting and very few hours per week where there is a high rate of common carriage system-wide
- Building out larger blocks of programming will require significant new programming investments

Increased Local Programming Hours

- Commercial stations are investing more in local news coverage which they can monetize via local advertising – non-network programming (syndication + local) hours range from 7 (CBS affiliates) to 10 (ABC affiliates)
- News hours are a primary contributor to TV station revenues (about ~40% of revenues)
- Few public TV stations have the resources required to invest heavily in local news and other content that would generate significant local ad sales

Greater Focus on Cross-Platform Ad Packages

- To compete effectively with other media, public television would need to enhance its ad sales packages to include features such as events, apps, product placement, etc. which are becoming “table stakes” to compete for advertisers
- While traditional media placements continue to be the most expensive element in ad packages, the additional offerings drive a disproportionate amount of focus and interest

Shift Away from On-Air Pledge

- Currently, stations average 64 days of on-air pledge to drive individual giving
- On-air pledge is the primary approach to reaching new donors as the effectiveness of direct mail donor acquisition campaigns is declining
- Identifying a model wherein commercials and on-air pledge co-exist is required, it is infeasible to retain on-air pledge while pursuing an advertising model

Source: CPB, Booz & Company analysis

Creating more hours of programming will be expensive at both the national and local levels

Prime Time Production Costs per Hour in $MM
Based on Documentary Television Data from Production Studios

	Low	Mid	High	"Showcase"
Discovery Channel	$0.25	$0.28	$0.60	$1.50
TLC	$0.20	$0.25	$0.38	$0.40
Animal Planet	$0.18	$0.25	$0.40	$0.50
History	$0.23	$0.30	$0.43	$1.25
National Geographic	$0.28	$0.33	$0.40	$0.50
A&E	$0.23	$0.33	$0.50	*n/a*

Assuming an average cost per hour, adding 100 hours of national programming would cost $45MM, genres such as scripted dramas would cost significantly more

Local News Costs Assuming 4 Hours / Day
Based on Booz & Company Station Benchmarks

	Small Markets	Mid-Sized Markets	Major Markets
# of News Staff	20-50	50-80	50-150
# of PTV Stations	85	63	23
Total Staff Needs in Thousands of FTES	1.7 - 4.3	3.2 – 5.0	1.2 – 3.5
Typical Production Costs in $MM (Staff & Other)	$2MM	$5MM	$13MM
Total Investment $MM	$170	$315	$299

Local stations have large staffs and high spend to produce news. Scaling up local news operations system-wide would cost almost $800MM

Source: Documentary Television 2010 data, local news costs based on Booz & Company client experience, Booz & Company analysis

Overall, pursuing radio advertising is also not viable from revenue impact and mission perspectives

- While in theory a large media property such as public radio has the potential to sell ads, introducing advertising is likely to do more harm than good to the overall revenue of the public radio ecosystem:
  - Audience research has shown that the public radio audience has strong negative attitudes about advertising and appreciate NPR's and other public radio producers' offerings in large part because of the absence of interruptions; introducing ads is likely to result in significant audience attrition
  - Other large revenue streams such as giving, corporate, and foundation underwriting will be significantly undercut by the shift to an advertising model
  - Cost benefits from non-profit status will also likely be eliminated
- From a mission perspective, the advertising opportunity is problematic in multiple ways;
  - The greatest potential benefit would accrue to large stations which already have opportunities to tap into a greater range of revenues and which are less dependent on federal funding
  - Small stations, which tend to be more dependent on federal funding, have the lowest potential upside from advertising, leaving smaller market coverage at risk
  - Introducing advertising will inevitably lead to a shift in the nature of programming over time, which will erode public trust in NPR programming
  - Not all stations will choose to sell advertising; NPR opting to introduce more ads in its national content will be viewed as problematic for stations who prefer to remain largely ad-free
- While some large stations have strong sales capabilities, most stations would need to build these capabilities over time and at considerable expense

Given the risk to other sources of revenue, radio advertising does not appear viable

Overview of Public Radio Advertising Opportunity

Assumes Full Implementation after 5 Years, in Millions of USD

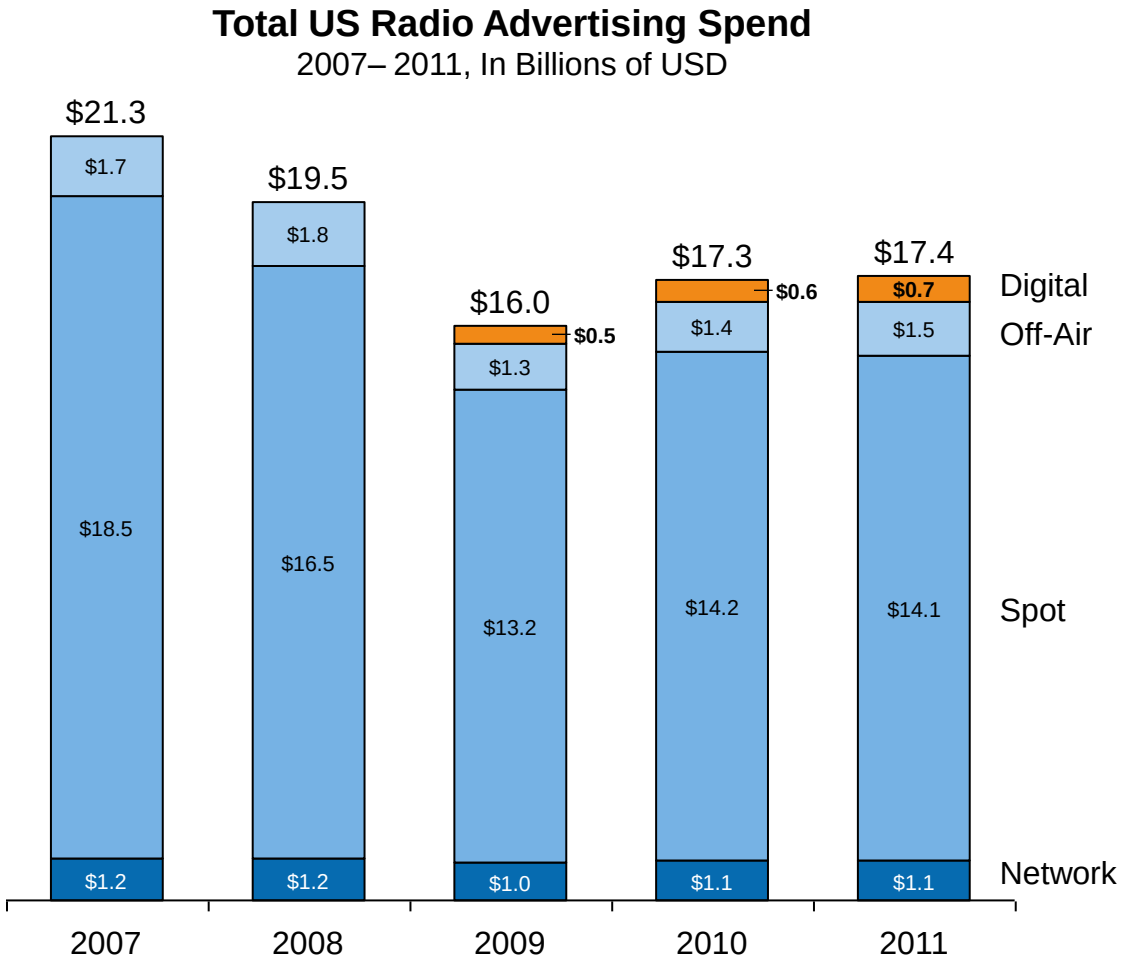
Revenue / Cost Area	Best Case	Likely Case	Pessimistic Case
Gross Advertising Revenues – National Sales	←	$102	→
Gross Advertising Revenues – Local Sales	←	$111	→
Agency Commissions	*10%*	*12.5%*	*15%*
Net Advertising Revenue	***$192***	***$186***	***$181***
Incremental Sales, IT, Operational & Real Estate Costs – National Level	←	($6)	→
Incremental Sales, IT & Operations Costs – Station Level	←	($44)	→
Advertising Revenues Net of Direct Costs	**$141**	**$136**	**$131**
Loss of Corporate Revenues at Participating Stations (assumes 30-50% loss of $165MM)	($49)	($66)	($82)
Loss of Foundation Revenues at Participating Stations (assumes 20-30% loss of $54MM)	($10)	($13)	($15)
Attrition in Individual Giving at Participating Stations (assumes 10-20% loss from $237MM)	($24)	($36)	($47)
Impact of Audience Attrition (assumes 5-10% loss of ad revenue potential of $181 – 192MM)	($9)	($14)	($19)
Loss of Non-Commercial Status from Vendors & Guilds[1]	($13)	($15)	($16)
Total Impact (negative)	***$35***	***($7)***	***($49)***

Note : In addition to recurring costs shown, there would be significant start up costs, including repackaging the existing library of programming and trade marketing costs

1) : Assumes 2-5% increase in NPR programming costs of $72MM plus $12MM in additional costs for a commercial Arbitron subscription

Source: Booz & Company analysis, NPR financial statements, AFS / FSR 2010 station data

Commercial radio advertising declined 25% from 2007 to 2009; it has only recovered a fraction of these losses since then

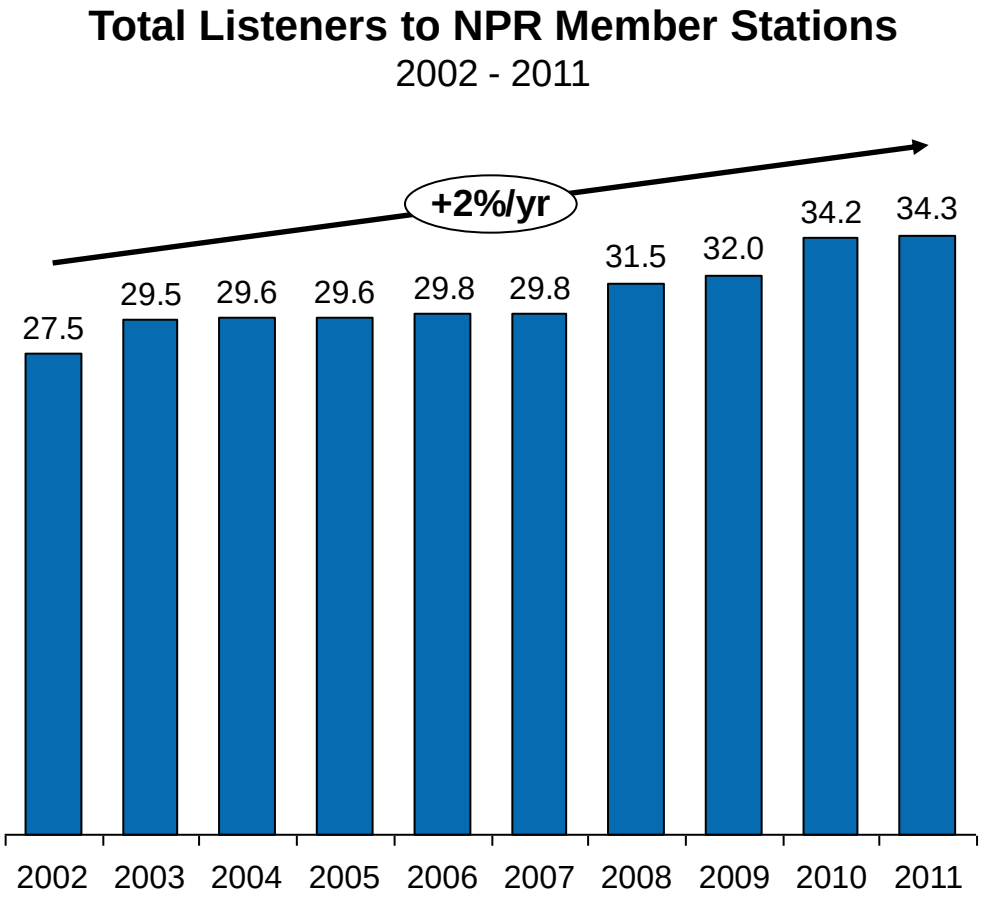


Source: Radio Advertising Bureau analysis, Miller, Kaplan, Arase & Co. data

Discussion

- Radio generates only one revenue stream; the decline in overall radio advertising spend signals significant distress for the radio industry
- Spot radio, which accounts for 80% of radio advertising, is down more than $4B since 2007; while other segments of media such as TV and digital have rebounded since the recession, spot radio's stalled growth suggests a secular decline
- Digital radio advertising has failed to generate significant revenue despite growing audiences on digital platforms; anticipated growth will not be sufficient to offset losses in spot radio revenue
- This landscape makes the outlook for growth in the radio market challenging

The audience of NPR member stations are large and growing



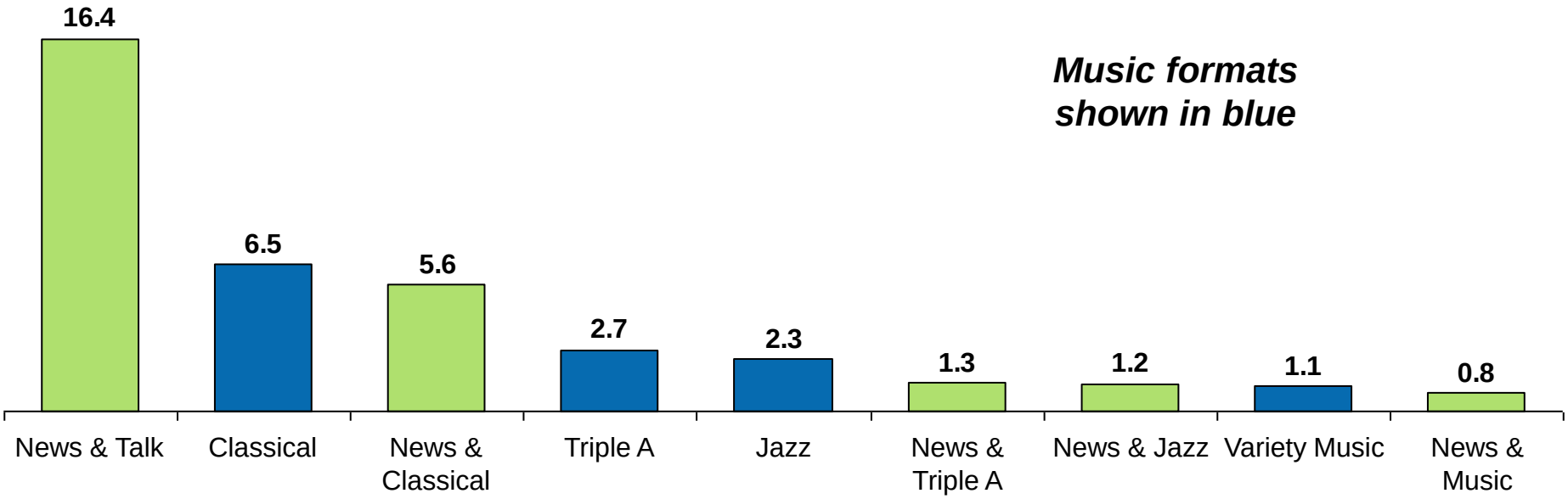
Landscape & Trends

- The audience for NPR member stations has grown in recent years :
  - NPR member stations attracted 34.3 million listeners in Spring 2011, up 2% from Fall 2010, 1% Y/Y
  - Since Spring 2006, the number of listeners who tune into NPR member stations has increased from 29.8MM to 34.3MM
  - An average listener spends ~3½ hours per week with NPR programming
- NPR member stations attract a relatively educated & affluent audience:
  - 54% male, 46% female
  - Median age: 49
  - Median HH income: $92.4K ($59.5K for gen. pop)
  - ~70% have at least a bachelor's degree (27% for gen. pop), 31% have an advanced degree (9% for gen. pop)

Source: Arbitron, National Highlights for the Spring 2011 Broadcast Ratings from NPR Research, NPR Profile 2011

However, these audiences are spread across multiple formats which have different levels of ad sales potential

Public Radio Stations – 12+ Weekly Listeners Cume
n = 1046



	News & Talk	Classical	News & Classical	Triple A	Jazz	News & Triple A	News & Jazz	Variety Music	News & Music
# of Stations	376	110	241	91	39	54	27	44	64

Source: Public Radio Today 2011, Arbitron

Public media's music formats have limited ad sales potential; commercial broadcasters have largely abandoned these formats

Format	# of Stations	% of NPR Listening	AQH (each station)[1]	% of Audience Outside of Commercially Viable Demos (A25-54 & A25-64)	Comments
Classical	110	17%	2,657	56%	▪ More than half of audience is outside of key advertising demographics ▪ No national content blocks
Adult Album Alternative (AAA)	91	7%	1,458	21%	▪ Stylistically out of the mainstream; less appealing to advertisers ▪ No national content blocks
Jazz	39	6%	1,908	45%	▪ Almost half of audience is outside of key advertising demographics ▪ No national content blocks
Variety	44	3%	869	27%	▪ No national content blocks

1): Excludes stations not covered by Arbitron or stations showing missing AQH data
Source: Public Radio Today 2011, Arbitron Fall 2010 ratings data, Booz & Company Analysis

For example, classical music stations have relatively large audiences but are difficult to sustain through advertising revenue

WQXR

- Acquired by WNYC in July 2009 in a 3 way trade with the New York Times Company & Univision Radio, WQXR is the NY-metro's classical station
- Formerly operated as a commercial station, WNYC has opted to run WQXR as a public station given more favorable economics

KDFC

- KDFC is San Francisco's classical music station
- At the beginning of 2011, KDFC changed over from being a commercial station to become a public station, given financial challenges

CLASSICAL KING FM 98.1 www.KING.org

- In May 2011, Seattle's classical music station, KING FM shifted to a non-commercial model
- Faced with mounting financial challenges, KING opted for a listener supported model, which it believes to be more sustainable

Discussion

- While classical music stations attract dedicated audiences, these audiences tend to be older relative to those listening to other radio formats; as such, classical radio formats are not highly attractive to advertisers
- In addition, many classical music fans, in particular younger fans, are shifting to online platforms to find and listen to classical music, further reducing audiences
- Many classical music stations have closed in recent years as aging audiences and limited advertising revenues make their operations unsustainable; many other major classical music stations have shifted to a non-commercial model
- Classical music stations often view themselves in service of the local arts community with a mission to provide access to classical music, education and music appreciation, more consistent with a public media revenue model
- We do not believe that shifting back to an advertising model is viable for public broadcasting's classical music stations and that there is limited ad potential for music formats

Source: Station websites, interview with WNYC, The New York Times, Booz & Company analysis

News formats have higher advertising potential; they have blocks of programming carried nationwide and audiences that are younger

Example NPR News & Talk Programming Grid

Gray Shading Indicates a High Level of Carriage Across NPR News Stations

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
5:00 – 6:00	BBC World Service	Morning Edition					BBC World Service
6:00 – 7:00							Specials
7:00 – 8:00	On Being						On the Media
8:00 – 9:00	Weekend Edition Sunday						Weekend Edition Saturday
9:00 – 10:00		BBC Newshour					
10:00 – 11:00	On the Media	The Brian Lehrer Show					Car Talk
11:00 – 12:00	Studio 360						Wait Wait Don't Tell Me
12:00 – 1:00	The Sunday Show Jonathan Schwartz	The Leonard Lopate Show					The Saturday Show Jonathan Schwartz
1:00 – 2:00		Soundcheck					
2:00 – 3:00							
3:00 – 4:00		Fresh Air					
4:00 – 5:00	Wait Wait Don't Tell Me	All Things Considered					Studio 360
5:00 – 6:00	All Things Considered Sunday						All Things Considered Saturday
6:00 – 7:00	Bullseye	Marketplace					A Prairie Home Companion
7:00 – 8:00	This American Life	All Things Considered					
8:00 – 9:00	Spinning on Air	On Point					Whad'Ya Know?
9:00 – 10:00	The Splendid Table	Tell Me More					This American Life
10:00 – 11:00	On Being	Soundcheck					Selected Shorts
11:00 – 12:00	New Sounds						

Source: WNYC Programming Grid, Pubic Radio Fall 2010 Carriage Rankings, Booz & Company analysis

Our net revenue sizing assumes that advertising could be sold in news and news hybrid stations

1. **Pure music stations will continue to use an underwriting revenue model and would not add commercials** because of low revenue potential due to:
   - No national programming blocks
   - Older audiences
2. **NPR and other national producers will sell 40% of avails during drive-time programming and high-rated weekend programming; a total of 35 hours per week, they will sell 25% of avails during other programming hours** :
   - Weekdays 6 – 9AM and 4-6 PM- Morning Edition and All Things Considered
   - Saturdays 8AM – 12PM and 5PM – 8PM, Weekend Edition Saturday, All Things Considered, Car Talk, Wait, Wait Don't Tell Me and A Prairie Home Companion
   - Sunday 8AM – 10AM and 5PM – 6PM, Weekend Edition Sunday and All Things Considered
   - Target audience is Adults 25 - 64
3. **Stations will also sell advertising; though sell out is presumed to be low** given low levels of interest from many stations and challenges associated with a highly competitive market
4. To pursue this opportunity, an **ad sales capacity would need to be built at both the national and the station levels**, only a portion of these costs could be covered by existing resources, resulting in significant additional costs

Ramping up ad sales would require several years; we estimate that public radio could generate ~$210MM after full ramp up

Key Inputs & Assumptions

	Amount
# of News & Talk and Hybrid Stations	721
AQH Audience	1,027,700
AQH Peak Hours (assuming 1.5X overall AQH)	1,541,550
AQH Non-Peak (calculation)	840,031
# of Peak Hours per Week (5AM – Midnight)	35
# of Non Peak Hours per Week (5AM – Midnight)	98
% of peak avails sold by national producers	40%
% of peak avails sold by stations	60%
% of non peak avails sold by national producers	25%
% of non peak avails sold by stations	75%
% of Audience in A25-64 audience target	67%
% of national audience waste due to limited carriage	20%

Revenue Sizing

Optimistic Ramp Up Scenario

	Year 1	Year 2	Year 3	Year 4	Year 5
Sell out national	20%	30%	40%	50%	60%
Sell out local	20%	25%	30%	35%	40%
# of Avails / hour : National	8	10	12	14	16
# of Avails / hour : Local	8	9	10	11	12
CPM: National	$5.00	$6.00	$7.00	$8.00	$9.00
CPM: Local	$3.00	$4.00	$5.00	$6.00	$7.00
National Sales in $MM	$9	$21	$40	$66	$102
Local Sales in $MM	$16	$30	$50	$76	$111
Total in $MM	**$25**	**$51**	**$89**	**$143**	**$213**

Source: Pubic Radio Today, National Public Media, Arbitron, Booz & Company analysis

Station-level costs would ramp up to approximately $44MM , assuming a large part could be covered by existing resources

Estimated Incremental Station-Level Direct Costs

Numbers may not add due to rounding

Role	FTEs: Small Stations	FTEs: Mid-Sized Stations	FTEs: Large Stations	Salary: Small Stations[1]	Salary: Mid-Sized Stations[1]	Salary: Large Markets[1]	Additional Costs for Benefits, T&E (% of Salary) [2]	Cost / Station: Small	Cost / Station: Mid-Sized	Cost / Station: Large
Traffic & Operations	1	1	2	$67K	$92K	$111K	30%	$87	$119	$289
Ad Sales Agents	1	3	6	$41K	$63K	$95K	50%	$62	$282	$853
Marketing / Creative	0	1	1	$48K	$68K	$88K	30%	$0	$89	$115
Admin and Billing	0	1	2	$35K	$41K	$53K	30%	$0	$53	$137
Total Staff Costs / Station [$K]								**$149**	**$543**	**$1,394**
# of Stations[3]								103	36	24
Total Staff Costs for All Stations [$MM]								**$15**	**$20**	**$33**
% of Cost Defrayed by Redeployment of Current Resources[4]								25%	50%	75%
Total Staff Costs for All Stations – Incremental [$MM]								**$11**	**$10**	**$8**
Annual Cost of Upgraded Trafficking Software per Station [$K][5]								$72	$108	$144
Software Costs for All Stations – Incremental [$MM]								**$7**	**$4**	**$3**
Total Incremental Costs by Station Size [$MM]								**$19**	**$14**	**$12**

1): Based on Bureau of Labor Statistics data for "Radio Broadcasting", uses median salary for small stations, 75th percentile for medium stations and 90th percentile for large stations
2): Assumes 30% of salary for benefits costs, 50% for sales positions to account for benefits and travel and entertainment expenses
3): Stations segmented based on size of listening audience: 124 Radio grantees have been identified as too small (AQH < 1.5K) to invest in ad sales capacity, small stations have an AQH of 1.5K – 5K, mid-sized stations have an AQH of 5K-10K and large stations have an AQH of more than 10K, based on Arbitron Fall 2010 ratings data
4): Based on evaluation of corporate underwriting sales force in place today at stations
5): Based on interviews with broadcast operations software vendors, assumes $6K / month for small stations, $9K / month for mid-sized stations and $12K / month for large stations
Source: Bureau of Labor Statistics, interviews with broadcast operations software vendors, Booz & Company analysis

At the national level, there would be an additional $5-7MM in direct costs incurred to supplement current resources

Estimated Incremental Network-Level Direct Costs

Numbers may not add due to rounding

1. Staff Costs – Sales Team

	SVP	VP	Sales	Planners	Creative	Sales Mktg	Assistants	Total
New York	1	2	6	2	1	2	2	16
Chicago / Dallas	0	1	6	2	1	2	2	14
LA	0	1	6	2	1	2	2	14
Total FTEs	**1**	**4**	**18**	**6**	**3**	**6**	**6**	**44**
Cost / FTE (90th percentile)	$200K	$151K	$95K	$101K	$102K	$88K	$53K	-
Additional Costs (% of Salary)	50%	50%	50%	30%	30%	30%	30%	-
Total Costs [$MM]	**$0.3**	**$0.9**	**$2.6**	**$0.8**	**$0.4**	**$0.7**	**$0.4**	**$6.1**
Total Incremental Costs Assuming 50% of Cost Defrayed by Current Resources [$MM][3]								**$3.0**

2. Staff Costs - Other Functions

	Operations Mgmt	Research	Pricing / Yield Mgmt	Traffic	Total
FTEs	2	2	4	6	**14**
Cost / FTE (90th percentile)	$111K	$88K	$101K	$111K	**-**
Additional Costs (% of salary)	30%	30%	30%	30%	**-**
Total Costs [$MM]	**$0.3**	**$0.2**	**$0.5**	**$0.9**	**$1.9**
Total Incremental Costs Assuming 50% of Cost Defrayed by Current Resources [$MM][3]					**$1.0**

3. Non-Staff Costs

	Total
Trafficking Software Upgrade [$MM][4]	$0.5 - $3.0
Real Estate Costs [$MM][5]	$0.1 - $0.6
Total Non-Staff Costs [$MM]	**$0.6 - $3.6**

1): Based on Bureau of Labor Statistics data for "TV Broadcasting", uses 90th percentile benchmarks
2): Assumes 30% of salary for benefits costs, 50% for sales positions to account for benefits and travel and entertainment expenses
3): Based on evaluation of corporate underwriting sales force in place today at producing stations, National Public Media
4): Based on interviews with broadcast operations software vendors
5): Assumes 100-200 square feet per FTE, $20-55 per square foot based on Cassidy Turley US Office Trends Report, Q1 2012
Source: Bureau of Labor Statistics, interviews with broadcast operations software vendors, Cassidy Turley, Booz & Company analysis

Not unlike public TV, public radio would need to address several major issues to realize and grow this opportunity

High Quality Local Radio Content

- Today, local stations generate a high number of hours to supplement national programming blocks from producers like NPR, APM and PRI
- However, much of it is not of high production value and is likely not highly attractive to advertisers
- To capture and grow the local radio advertising opportunity, stations will need to focus on more high quality, distinctive local content that will attract advertisers

Uniform Programming Formats

- Unlike commercial radio which tends to follow programming formats throughout the day (music, news, talk, etc.), public radio stations often have a hybrid format that mixes music, talk, news, etc.
- To capture more ad dollars, stations will need to consider adopting a more traditional programming format as advertisers want to buy on a station that is the same throughout the day and reaches a similar audience

Greater Focus on Cross-Platform Ad Packages

- Traditional media like radio need to expand beyond pure media buys to capture advertising dollars; it is becoming commonplace for media companies to also include events, apps, product placement, etc.
- As in TV, while traditional media placements continue to be the most expensive element in ad packages, the additional offerings drive a disproportionate amount of focus and interest

Shift Away from On-Air Pledge Drives

- Like TV, public radio stations rely on on-air pledge drives to generate giving
- Currently, stations average 27 days of on-air pledge annually
- Blending advertising and pledge will be highly challenging both from a practical standpoint and from an ideological standpoint:
  - Listeners will be less inclined to give when they hear advertising during programming
  - Pledge and ads in the same time slots will crowd out content

Public broadcasting's revenue from licensed merchandise is in line with its investments; capturing more requires taking greater risk

- In typical licensing arrangements, rights holders receive ~5% of retail price or ~10% of wholesale price for licensed merchandise sales; retailers and manufacturers take greater risk in these arrangements and keep a larger share of revenue
- PBS is not an exclusive rights holder of the programs that it broadcasts which are created by outside producers such as Sesame Workshop or Out of the Blue Enterprises
- PBS earns licensing revenues based on negotiated agreements with its producers– ***currently, PBS collects $6.5MM/year in licensed merchandise revenues associated with its children's programming***
- The opportunity to generate licensing revenue is limited for distributors such as PBS given several dynamics:
  - ***Established properties*** face a depressed toy market, pressure from consolidating retail channels and high level of competition from other toy brands
  - **New franchises** struggle to finance production costs, attractive viewers and gain access to shelf space at retail; only relatively rare hits generate any significant licensing revenue
- Consistently identifying hit programs is challenging; investments are frequently made, by PBS and other networks, that do not yield a large financial return; e.g., Nickelodeon cannot consistently build successful brands even with its inherent advantages of high ratings, full ownership of intellectual property and greater commercial focus

Source: The Licensing Letter, September 2011, PBS Interviews

Licensing opportunities for kids 2-6 are primarily in 3 categories; this is more narrow opportunity than for older age groups

1. Toys and Games

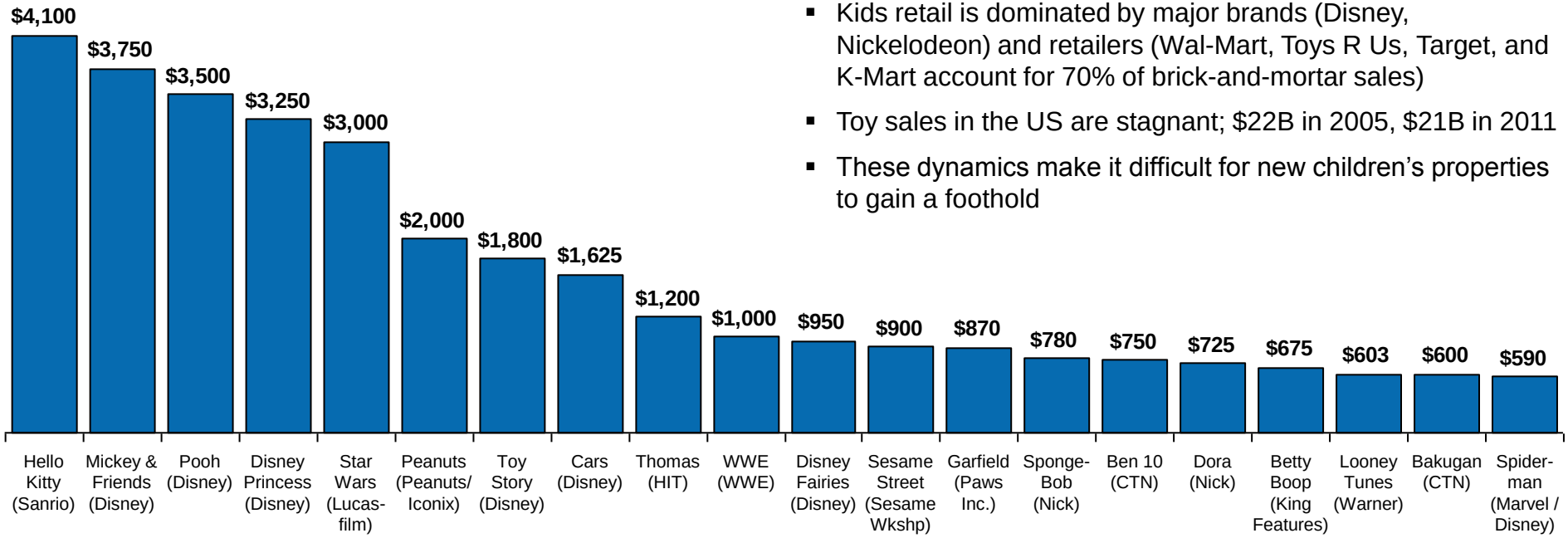
2. Books

3. Apparel

Source: Interviews with licensing professionals, Booz & Company analysis

While some hit kids TV shows generate high licensed merchandise revenues at retail, most generate very little

Global Retail Sales of Top 20 Licensed Entertainment Properties
2010; in millions of USD



- Kids retail is dominated by major brands (Disney, Nickelodeon) and retailers (Wal-Mart, Toys R Us, Target, and K-Mart account for 70% of brick-and-mortar sales)
- Toy sales in the US are stagnant; $22B in 2005, $21B in 2011
- These dynamics make it difficult for new children's properties to gain a foothold

	Hello Kitty (Sanrio)	Mickey & Friends (Disney)	Pooh (Disney)	Disney Princess (Disney)	Star Wars (Lucas-film)	Peanuts (Peanuts/ Iconix)	Toy Story (Disney)	Cars (Disney)	Thomas (HIT)	WWE (WWE)	Disney Fairies (Disney)	Sesame Street (Sesame Wkshp)	Garfield (Paws Inc.)	Sponge-Bob (Nick)	Ben 10 (CTN)	Dora (Nick)	Betty Boop (King Features)	Looney Tunes (Warner)	Bakugan (CTN)	Spider-man (Marvel / Disney)
U.S. Sales as % of Global	**18%**	**19%**	**31%**	**53%**	**47%**	**33%**	**51%**	**50%**	**38%**	**52%**	**46%**	**58%**	**45%**	**45%**	**43%**	**55%**	**33%**	**39%**	**38%**	**55%**

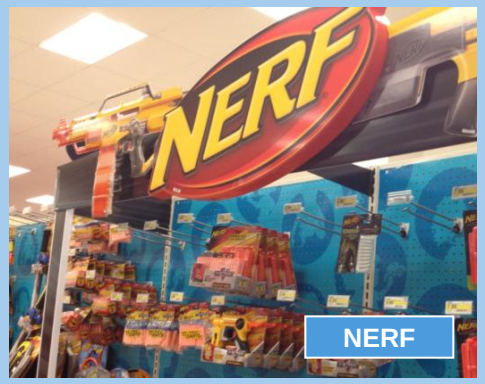
Note: CTN = Cartoon Network; Nick = Nickelodeon
Source: The Licensing Letter, September 2011, KidScreen, NPD Group, Statista (Dow Jones), Booz & Company analysis

Major brands dominate retail locations; whole suites of products are required for brands to capture shelf space

Sample Toy Shelf Space

Target in Cleveland, OH – April 15, 2012

Dora the Explorer



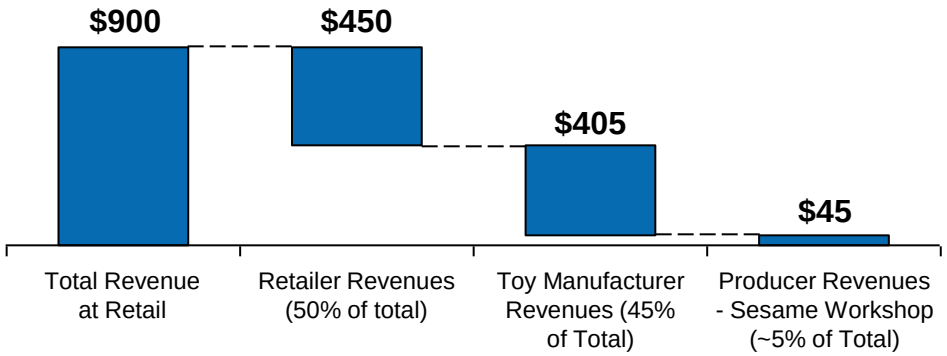
NERF

Thomas & Friends

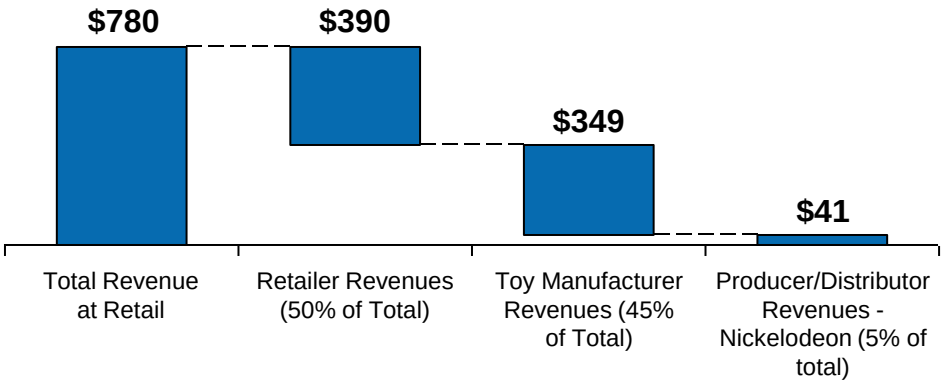
Disney Princess

In licensing arrangements, the most revenue goes to the parties who take the most financial risk

Case Study- Sesame Street
% 2010 Global Revenue Share by Stakeholder



Case Study: SpongeBob
% 2010 Global Revenue Share by Stakeholder



Case Study: Sesame Street

- In 2010, Sesame-licensed products generated $900MM in global retail sales
- Sesame Workshop collected $45 million in licensing fees (~5% of total retail sales) in 2010
- As the domestic distributor and a minority investor, PBS collects a share of Sesame Workshop's licensing revenue based on the contract in place
- This acknowledges the key role that PBS plays - however, PBS is one of many parties who contribute to generating retail sales

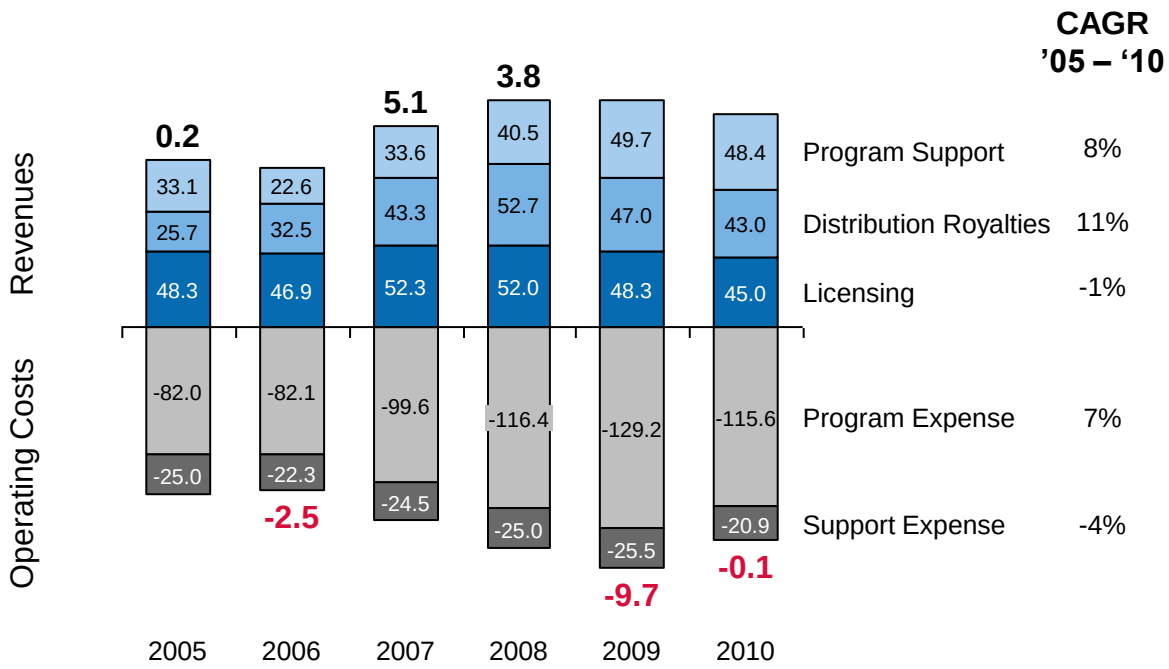
Case Study: SpongeBob SquarePants

- In 2010, Nick's SpongeBob products generated $780MM
- Stephen Hillenburg worked for Nick when he pitched the concept of SpongeBob to executives; the show debuted in 1999
- SpongeBob was developed internally by Nick's production / development team, and the company holds all rights
- As the producer and sole rights owner for SpongeBob, Nickelodeon collects roughly $40 million in licensing revenues from the $780 MM / year in merchandise revenue

Source: Sesame Workshop 2010 Financial Statements, The Licensing Letter, September 2011, Booz & Company analysis

Sesame Workshop's licensing revenues cover the high cost of programming; SW generated a net loss in 3 of the past 6 years

Sesame Workshop: Operating Revenue and Costs
2005 – 2010 ($MM)



	2005	2006	2007	2008	2009	2010
Revenue	$107	$102	$129	$145	$145	$136
Expense	$107	$104	$124	$142	$154	$136
Margin	0%	-2%	4%	3%	-7%	0%

Source: Sesame Workshop Financial Statements

Discussion

- Programs such as Sesame Street are extremely costly to produce
- As such, producers like Sesame Workshop rely on licensing revenue to cover programming costs
- Licensing makes up approximately 1/3 of Sesame Workshop's total revenue
- Without licensing revenue, Sesame Workshop would have had losses of more than $58MM in 2009 and $45MM in 2010

Only a limited number of hits generate significant licensing revenue; most franchises struggle to cover programming costs

Licensing Revenue Evaluation – Top PBS Children's Programs

Program	Primary Rights Holder / Producers	2010 Gross Merchandise Revenue ($MM)
Curious George	Universal Studios Licensing	Does not meet minimum threshold[1]
Cat in the Hat	Dr. Seuss Enterprises, L.P.	Does not meet minimum threshold[1]
SUPER WHY!	Out of the Blue Enterprises	Does not meet minimum threshold[1]
Dinosaur Train	The Jim Henson Company	Does not meet minimum threshold[1]
Thomas & Friends	Mattel	$455MM
Sesame Street	Sesame Workshop	$900MM
Arthur	WGBH/ Cookie Jar Ent./ Marc Brown	Does not meet minimum threshold[1]
Martha Speaks	WGBH/ Studio B. Prod's/ Susan Meddaugh	Does not meet minimum threshold[1]
Wild Kratts	Kratt Brothers Company / 9 Story Entertainment	Does not meet minimum threshold[1]
Sid the Science Kid	Jim Henson Company	Does not meet minimum threshold[1]

Discussion

- Most programs run on PBS Kids today do not generate any substantial licensing revenue- for PBS or producers; 8 out of 10 are less than the measurement threshold of $100MM in retail sales
- New educational programming requires large upfront investments with very few ever becoming large licensing franchises
- Licensing arrangements for new programs often stipulate that licensing revenues cover production deficits before distributors receive any revenue

1) Property appears outside the "$100M+ Properties Report", therefore $100M represents maximum possible global revenue for 2010
Source: Licensing Letter, Booz & Company analysis

Retransmission fees are a growth area for TV stations; public TV could pursue these fees though the probability of success is low

Definition & History of Retransmission Fees

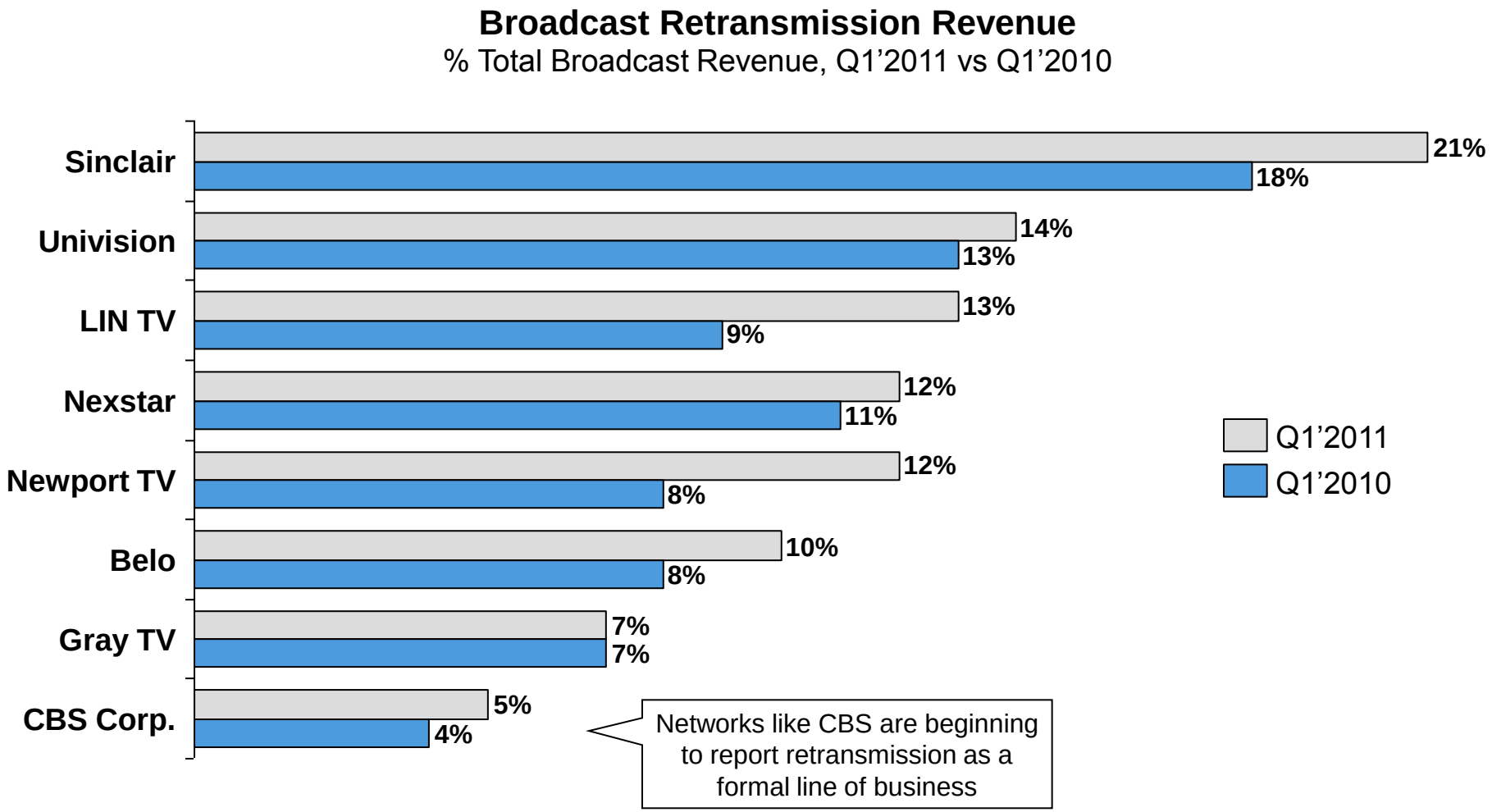
- Retransmission fees are fees paid to broadcast TV stations by cable and satellite operators for the right to retransmit the stations' content; these fees are usually paid to the stations on a per subscriber per month basis; similar to affiliate fees paid to cable networks
- The 1994 Cable Television Protection and Competition Act allows TV stations to negotiate with cable systems for the right to carry their programming
- Until 2005, most TV stations elected to be carried on cable systems on a "must-carry" basis instead of negotiating for retransmission fees – public TV negotiated must carry status to ensure full distribution
- In 2005, Nexstar began demanding retransmission fees during its negotiations with Cox Communications and Cable One
  - Eventually the sides agreed to terms but Nexstar was "off-air" for 10 months on Cox and nearly the entire year with Cable One
- Since this landmark negotiation, broadcast TV station groups have successfully negotiated retransmission fees with cable and satellite operators, adding retransmission fees as a significant new source of revenue

Retransmission Fees Today

- Retransmission fees have become an industry standard for commercial stations;
  - Since 2005, retransmission revenues have grown to more than $700MM
  - They are expected to continue to grow 15 -20% through 2016– to reach $2.6B
- TV stations value retransmission fees because of their low volatility compared to their other primary revenue source - advertising
- Pricing continues to be negotiated with typical retransmission deals lasting one to six years
- SNL Kagan reports that typical broadcast stations are signing retransmission deals with cable operators worth $0.40 - $0.60 per subscriber, per month
- The average cable network affiliate fee ranges between $0.25 - $0.30 per subscriber per month
- **Public television does not currently collect retransmission fees because it has opted for a must carry model in keeping with its universal service mission;** changing from must carry might generate revenue though this presents challenges and risks (e.g., multicast services, overlap markets)

Source: SNL Kagan

Today, TV station groups are generating increasing revenue from retransmission fees – a revenue source that did not exist 10 years ago



Source: SNL Kagan 2011, Broadcasting & Cable

If public TV were to successfully capture fees system-wide, a best case scenario would generate $32-$121MM in revenue

Approach / Methodology

- We used three different approaches to estimate the potential revenue opportunity from retransmission fees:
  - **A** ***"PTV's Share" of 2016 retransmission fees***
    - Estimates 2016 retransmission revenues
    - Calculates retransmission fee per rating point
    - Uses PTV's current ratings to calculate revenue
  - **B** **Major Network Revenue Model**
    - Uses fees being paid to major networks
    - Calculates retransmission fee per rating point
    - Uses PTV's current ratings to calculate revenue
  - **C** **Small Network Revenue Model**
    - Estimates retransmission revenues of a small network
    - Calculates retransmission revenue per rating point
    - Uses PTV's current ratings to calculate revenue
- In all three approaches, we applied an adjustment factor to the potential revenue given the low level of leverage PTV will have in negotiations with providers:
  - Limited negotiating leverage with cable and satellite providers relative to commercial networks
  - Low willingness to "go-dark"
  - Smaller audiences relative to major broadcast networks
- All three approaches estimate the potential revenue between $32MM and $121MM

Potential Retransmission Revenue: Three Approaches

A PTV's Share of 2016 Retransmission Revenue	2016 Retrans Revenue ($MM)	$2,600	
	Total Network PT Ratings[1]	24.2	
	Retrans Fee / Point ($MM)	$107	
	PTV Prime-Time Rating	1.3	
	Potential Revenue ($MM)	$140	
	Adjustment Factor	25% - 75%	**$35 - $105MM**
B Major Network Revenue Model	Typical Retrans Fee/Yr. ($MM)	$600	
	Avg. Major Network Ratings	4.8	
	Retrans Fee / Point ($MM)	$125	
	PTV Prime-Time Rating	1.3	
	Potential Revenue ($MM)	$162	
	Adjustment Factor	25% - 75%	**$40 - $121MM**
C Smaller Network Revenue Model (e.g., Univision)	Network Retrans Revenue ($MM)	$175	
	Rating Points	1.8	
	Retrans Fee / Point ($MM)	$97	
	PTV Prime-Time Rating	1.3	
	Potential Revenue ($MM)	$126	
	Adjustment Factor	25% - 75%	**$32 - $95MM**

Note: Total Network PT Ratings: CBS (6.1), ABC (4.8), NBC (4.2), Fox (4.2), Univision (1.8), PTV (1.3), CW (1.0), ION (0.8)
Source: Nielsen, SNL Kagan, Booz & Company analysis

Creating an organization to pursue retransmission will cost ~$5MM annually; start-up costs are estimated to be at least $9MM

Approach

- A central organization representing public television stations would need to be created to manage negotiations with cable and satellite operators on an ongoing basis
- Direct expenses to negotiate retransmission fees will include salaries and benefits for 21 FTEs:
  - Managers to oversee relationship with MSOs and serve as a point of contact for public television stations
  - Sales will manage relationships with MSOs; five sales people will manage a relationship with the top 10 MSOs; three sales people will manage all remaining pay-TV providers
  - Analysts will support the sales team, perform market research, benchmarking, and other analysis for use in negotiations
  - Other/Support (3) includes administrative assistants and support staff
  - This organization will also require on-going legal support
- This represents a "steady state" organization; there will be additional costs associated with PR, outreach and analysis to shift from must carry across all the impacted stations
- Start up costs for this effort would include significant legal fees to prepare for negotiations

FTE Costs

Level	FTEs	Salary	Benefits & Travel	Total [$MM]
Manager[1]	2	$200K	50%	$0.6
Sales Person	8	$113K	50%	$1.4
Analyst	8	$101K	30%	$1.1
Other	3	$70K	30%	$0.3
Total FTE Costs				**$3.3**

Legal Fees

Start-up Legal Fees [$MM] (Assuming 2 Sr. Lawyer, 4 Jr. Lawyers, 2 Para Legal, 1 Legal Sec.)	$7.2
On-Going Legal Fees [$MM] (Assuming 1 Sr. Lawyer, 2 Jr. Lawyers, 2 Para Legal, 1 Legal Sec.)	$1.9
Total Legal Fees [$MM]	**$9.1**

Other Start-up Costs

PR, Station Outreach, Analysis Start-up Costs	**$2.0**

Real Estate Costs

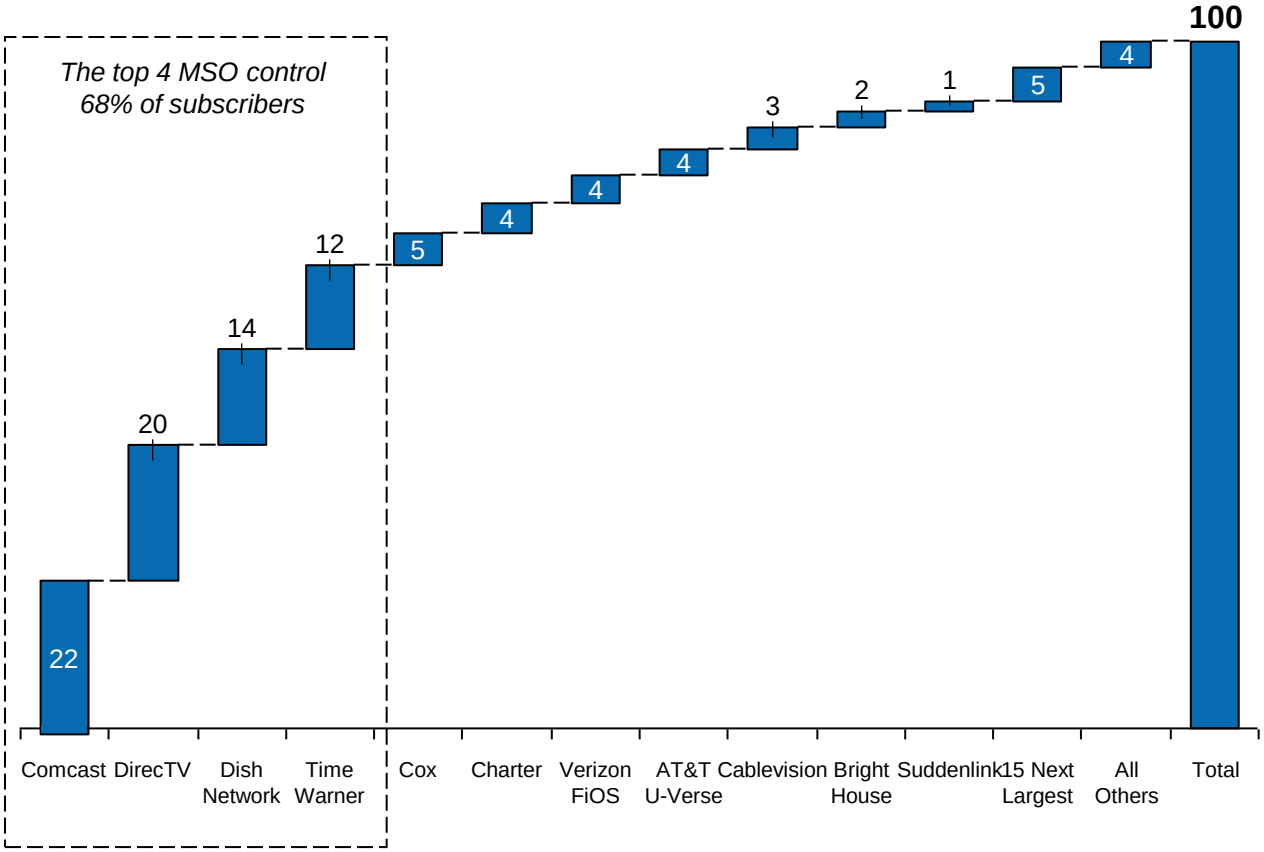
Real Estate Cost per FTE[2] (Assuming 100-200 sq. ft. per FTE, $20-$55 per sq. ft.)	$2K - $11K
Incremental Real Estate Costs [$MM] (Assuming 21 FTEs Impacted)	**$0.1**

1) "Manager" salary estimated from "Sales Managers"
2) Based on Cassidy Turley U.S. Office Trends Report Q1 2010 (New York City: $55.48, Washington, D.C.: $49.40, Minneapolis: $24.60)
Note: Salaries are from U.S. BLS 90 percentile wage estimates for Television Broadcasting (Sales Managers, Sales and Related Occupations, Market Research Analysts, Executive Secretaries)
Source: Bureau of Labor Statistics, Lawyers.com, Cassidy Turley, Booz & Company analysis

Realizing this opportunity would be very difficult and time-consuming

US Subscribers by Major MSOs/Satellite TV Companies

# of Households



Source: National Cable and Telecommunications Association, Booz & Company analysis

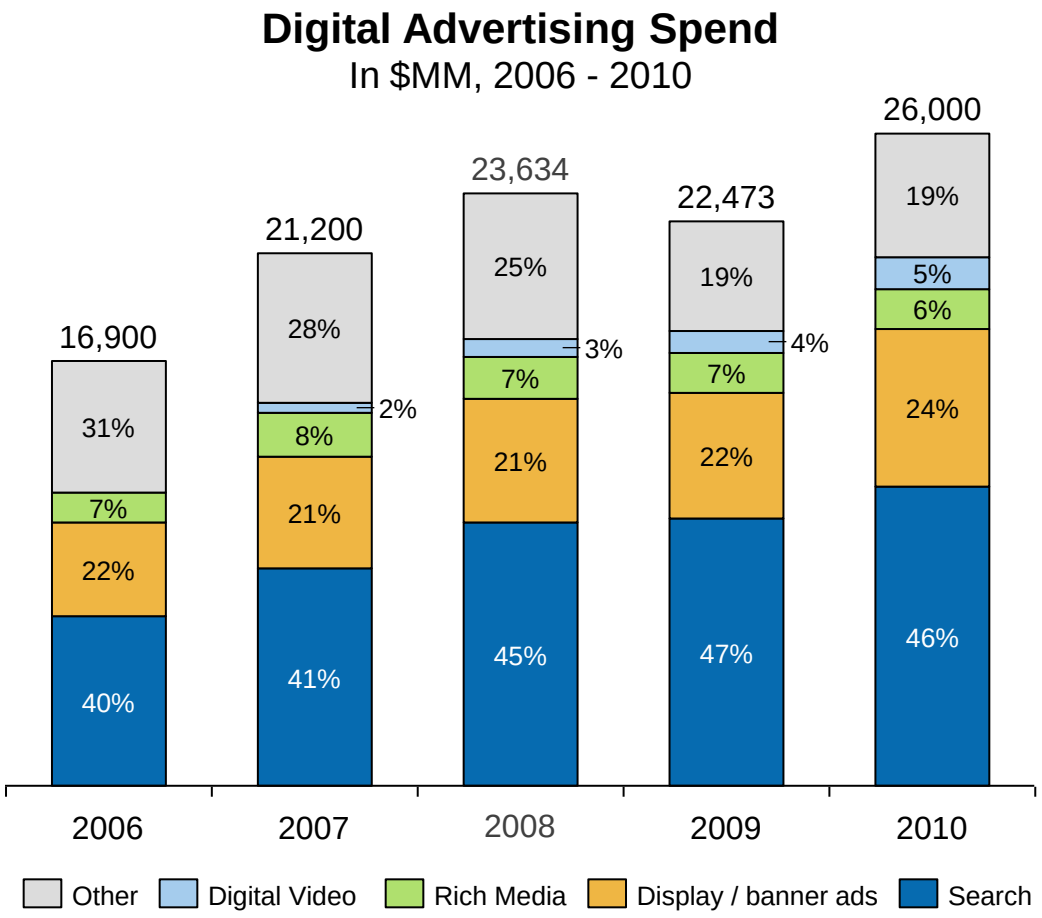
Discussion

- Large MSOs and satellite TV operators are sophisticated negotiators; capturing revenue is dependent on multiple successful negotiations with these companies
- Negotiations for retransmission fees are often contentious, sometimes resulting in networks "going dark" on cable systems when agreements cannot be reached (e.g., Cablevision-ABC 1 day in 2010, TWC and LIN TV 1 month in 2008)
- Given the mission of public television, it is starting from a difficult negotiating position; it is only negotiating on behalf of one channel and stations have little to no tolerance for "going dark"
- Given the independent ownership structure and decentralized nature of public TV , organizing to pursue this opportunity also represents a major challenge and potential risk to community relations
- Successfully negotiating retransmission fees is likely to require government involvement given these challenges

Revenue potential is growing in digital; however, the outlook is modest and inventory is currently used to support underwriting sales

- The revenue potential of digital advertising depends on the volume of traffic to sites and on the type of content offered, with high quality professional content and video inventory capturing the highest pricing
- PBS.org, PBS Kids.org, NPR.org have built up large online audiences and offer significant amounts of high quality content, including long-form video in the case of PBS.org
- Program-focused and public broadcasting station websites currently have limited traffic and limited content; potential ad revenue on these sites is small
- PBS Kids has a large site but its ad potential is limited:
  - The majority of traffic and monetization potential (~80%) are controlled by outside producers
  - The site is targeted to very young children (2-5) who are not an appealing advertising audience
- Other platforms such as streaming, apps and mobile sites also offer the potential to generate revenue, though these ad markets are still immature today
- Assuming that PBS Kids remains ad-free, gross revenue potential is approximately $28MM; after incremental costs are considered, the net revenue associated with this opportunity would be approximately $26MM
- However, much of this upside—as much as half—is already being captured today through digital and bundled underwriting sales; additional upside is limited
- In addition, there are several additional risks associated with this opportunity:
  - Digital is often used as a key selling point in larger sponsorship packages; eliminating the ability to add digital to sponsorship packages may have a negative revenue impact overall beyond digital
  - More advertising will reduce the quality of the sites overall and may lead to audience attrition
  - Pursuing the opportunity requires a long ramp up period: this model requires new models for collaboration between PBS and producing stations which is likely to prove challenging to execute

Digital advertising is growing; however, it is characterized by several unfavorable dynamics



Note: Other includes classifieds, emails, lead generation and sponsorship
Source: PWC IAB, Comscore, Booz & Company analysis

Discussion

- Almost half of digital spend is concentrated in search advertising, according to Comscore's February 2012 search engine rankings, 95% of search traffic is dominated by 3 players:
  - Google 66%
  - Microsoft 15%
  - Yahoo 14%
- High quality digital display inventory is abundant and supply exceeds demand:
  - Prices and sell through are low relative to other media
  - A large portion is sold through ad networks and exchanges
- Professional long-form video is a bright spot: it attracts higher CPMs given lower supply; user generated video inventory is plentiful and low-priced
- Traditional media companies of all types have struggled to translate digital audiences into meaningful secondary revenue streams given these dynamics (low overall spend, crowded competitive landscape, oversupply of inventory)

Public broadcasting's digital footprint spans multiple platforms and brands

Overview of Public Broadcasting Digital Landscape

Category	*# of Sites*	*Television*	*Radio*
National	3	PBS, PBS KIDS	npr, npr.org
Program (Sample Shown)	50 *Approx.*	Austin City Limits, Antiques Roadshow Insider, Keeping Score	This American Life, American Public Media, The Diane Rehm Show, PRI
Stations (Sample Shown)	500 *Approx.*	apt, KCTS9, WGBH, KQED	VPR Vermont Public Radio, KJZZ 91.5 FM, Michigan Radio
Other Platforms	N/A	Facebook, Twitter, Mobile	Podcasts, Apps

Source: Booz & Company analysis

The revenue potential of this digital footprint is constrained by several factors today

Analysis of Public Broadcasting Digital Advertising Revenue Potential

	# of Sites	Page Views / Month [MMs][1]	Comments
National Sites	**3**	PBS GA Sites: 64.40 PBS Kids Sites: 379.99 NPR: 76.79	▪ PBS controls 22% of page views on its site; remaining traffic is controlled by producers; some of this revenue would flow to producing stations, remainder would be captured by outside producers ▪ Advertising to young children is regulated and requires a high level of precaution from media owners; advertising in PBS Kids would need to be limited outside of the PBS Parents and Teachers sites ▪ NPR for the most part owns its content, but there is no opportunity to sell video advertising which generates higher CPMs than display
Program / Producer Sites	**~50**	APM: 3.56 PRI: 0.18 Other Programs: ~0.11 per site	▪ Operated and monetized by producers; these sites often offer content that is already accessible through national sites ▪ Likely to require the use of an intermediary (e.g., ad network or exchange) to monetize, depressing potential revenue
Station Sites	**~500**	Producing Stations: 1.91 Joint: 0.54 TV: 0.25 Radio: 0.35 ARGO: 0.05 LJC: 0.02	▪ Hundreds of individual sites, each with minimal traffic ▪ Likely to require the use of an intermediary (e.g., ad network or exchange) to monetize, depressing potential revenue ▪ Collaborative efforts like Local Journalism Center sites and new initiatives like Project Argo blogs have not yet been successful in generating high traffic
Other Platforms	**N/A**	N/A	▪ NPR and PBS do not have the opportunity to monetize social communities in Facebook and Twitter directly; ads are sold by the platforms themselves ▪ While growing and often a large focus for sponsorship sales, revenues generated by mobile & app advertising remain limited given low overall spend currently ▪ Advertising in podcasts has failed to take off as a media option

1) PBS & PBS Kids (Comscore); NPR (Omniture); PRI and Other Program (est. from compete.com); APM and Station (PMM)
Source: Booz & Company analysis

In order to pursue pure-play digital advertising, public broadcasting would need to use a hybrid go-to-market model

1. PBS and NPR would pursue a direct sales model

2. PBS would need to partner with producing stations which control much of the traffic on pbs.org to pursue this model

3. PBS Kids will not pursue online advertising given its audience of young children; only PBS Parents would sell ads

4. All other sites (program sites and station sites) would use ad networks or exchanges to monetize their digital traffic; these intermediaries will take an approximately 30% cut of the price paid by the advertiser. This is necessary for the following reasons:
   - Low revenue potential does not justify investment in dedicated digital ad sales staff
   - Media buyers look to sites or networks with high traffic; low traffic sites would not be considered

5. We assume that only half of local stations would opt to participate given low revenue potential, lack of interest from ad networks, and required redesign of sites to accommodate ads

Overall revenue potential of this approach is $26MM; much of this potential is already being captured through sponsorship sales

Key Inputs & Assumptions

	Value
% of traffic on PBS sites controlled by PBS	22%
% of traffic on PBS sites controlled by CPB-supported station producers	52%
% of page views on NPR sites controlled by NPR	100%
% of local stations participating in digital advertising (includes Joint, Radio, and TV station websites)	50%
# of display ad units / page	2
# of interstitial video ads / video stream	5
CPM (Display)	$8
CPM (Video)	$15
Sell-out Rate (Display)	60%
Sell-out Rate (Video)	80%
Ad Network Share of Revenue for Indirect Sales	32%

Online Advertising Revenue Potential

Numbers may not add due to rounding

Category	Sites	Display ($MM)	Video ($MM)	Total ($MM)
National Sites	PBS	$1.6	$0.4	$2.1
	Producing Stations (via PBS.org)	$3.9	$2.0	$5.9
	PBS Parents & Teachers	$0.3	$0.0	$0.3
	NPR	$8.8	$0.0	$8.8
National & Program Sites	APM	$0.3	$0.0	$0.3
	PRI	$0.0	$0.0	$0.0
	All Other Programs	$0.2	$0.0	$0.2
Stations	Producing Stations	$1.3	<$0.1	$1.4
	Joint Licensees	$1.6	$0.0	$1.6
	Radio	$4.3	$0.0	$4.3
	TV	$0.8	$0.0	$0.8
Total Revenue		***$23.3***	***$2.5***	***$25.8***

Source: PBS Traffic Dashboard (Comscore); NPR data (Omniture) four month average October 2011 – January 2012 for NPR and PBS, PMM Jan 2012 Report, Public Radio Today, compete.com as of March 2012, Booz & Company analysis

NPR and PBS also have an opportunity to monetize other platforms such as mobile sites and apps through advertising

Ad Revenue Potential for Other Digital Platforms

	NPR Apps	NPR Mobile Sites	PBS Apps[1]
Total Page Views / month [MMs]	41.4	8.8	3.4
CPM	$10	$10	$10
Ad Avails	1	1	1
Sell-out Rate	20-50%	20-50%	20-50%
Total Ad Revenue Opportunity [$MM]	**$1.0 - $2.5**	**$0.2 - $0.5**	**$0.1 - $0.2**

Discussion

- NPR and PBS have apps and mobile sites that attract significant traffic
- Monetization of these other platforms can be difficult – the mobile advertising landscape remains immature
- Currently avails on digital platforms are sold as a part of larger underwriting packages and not as independent packages to online-specific sponsors; much of this upside is already captured
- Although NPR stations have considerable online streaming, uneven measurement through the system and current sponsorship packages make it a difficult opportunity to pursue

1) Assumes kids mobile apps will not be monetized; accounts for 20% of page views – approx. 80% of apps are for kids
Source: NPR provided data (Omniture), PBS provided data on app downloads, American University article, Booz & Company analysis

This opportunity will require investments in new sales & operational support; some costs will be offset by current resources

Incremental Resources Requirements & Costs

Staff	# of PBS FTEs	# of NPR FTEs	Salary	Additional Costs (% of Salary)	Total Costs in $MM
VP	1	1	$190K	50%	$0.6MM
Sales	3	3	$127K	50%	$1.1MM
Creative	1	1	$145K	30%	$0.4MM
Sales Marketing	2	2	$125K	30%	$0.7MM
Traffic	2	2	$150K	30%	$0.8MM
Total	**9**	**9**	**-**	**-**	**$3.5MM**
% of Costs Defrayed by Redeployment of Current Resources					50%
Total Incremental Costs					**$1.8MM**

Discussion

- To pursue this opportunity will require that NPR and PBS supplement current sales teams
- Given the high demand for digital sales talent in the market, PBS and NPR will be required to pay premium salaries to attract high quality sales people
- This team will likely ramp up over time as it gains a foothold with agencies and other ad buyers
- Due to the relatively low number of additional FTEs, we assume no incremental real estate costs
- IT costs are assumed to be covered by traffic operations already in place

Source: Bureau of Labor Statistics, Booz & Company analysis

Events could provide a new revenue source for public broadcasting

Overview

- Organizations of all types are entering the events market as they seek to create new sources of revenue
- Events generate both two revenue streams: ticket revenues and sponsorship revenues
- Based on prior client experience, we estimate that successful events can generate 25-30% margin
- We believe that there are two types of events that public broadcasting could consider:
  - Local community events: town halls, panels, social events, discussion forums, etc.
  - Festivals, forums and conferences: festivals, panels, lectures, networking events
- Large scale events may not be attractive for public broadcasting because of the capabilities required, existing competition and high risks involved in the production of major events
- We anticipate that this will be led by the stations but a nationally-led event program is also possible, with the potential for local spin offs

1 Local Community Events

E.g., town halls, panels, socials, discussions, etc.

THE TEXAS TRIBUNE

- Non-profit online news service offering local events
- More than 73 events free to the public since 2009
- Raised $650k in corporate support total in 2010
- Event types: *Conversations*, *College Tours, Screenings*, and the *Texas Tribune Festival*

NJ SPOTLIGHT WHERE ISSUES MATTER

- Online news service focusing on state policy
- Media partners: WNET-TV, WNYC-FM, WHYY
- Organizes "NJ Roundtables" – free public events discussing state policy (50-100 Attendees)
- Revenue generated through site & event sponsors

2 Festivals, Forums & Conferences

E.g., festivals, panels, lectures, networking events, etc.

THE NEW YORKER

- The New Yorker Festival is a 3-day event series
- Involves writers, actors, politicians, musicians
- Tickets: $30-$125 per event; 80% sold out in 1st day
- 2009 Attendance: 2,150; 2010 # of Events: 46

THE TEXAS TRIBUNE

- Texas Tribune festival generated $500k in 2011
- 1,300 attended; 100 Texas thought leaders
- Ticket price: $125 per attendee

The Economist Group

- Over 100 events worldwide in 2011
- Delegate-led model
- Participant fee normally over $1,000
- Focus on finance and the "ideas economy"

Source: Veronis Suhler Stevenson, IEG, Booz & Company analysis

We estimate that net revenue could range from $7 - $12MM if many stations/national organizations opted to organize events

	Community Events		Festivals, Forums & Conferences	
	Value	Rationale	Value	Rationale
# of Markets	67	Unique DMAs with a population over 500k	9	Unique DMAs with a population over 5MM
# of Events	6	Bi-Monthly (i.e., Texas Tribune "Conversations", NJ Spotlight Roundtables)	2	2 events per year in a unique DMA (1 festival and 1 forum / conference)
# of Sponsors	1-3	Texas Tribune sponsorship	8-12	New Yorker Festival had 8 sponsors in 2011
Sponsorship Price	$2K	Texas Tribune sponsorship	$250K (Top 2-3) $125K (Other 6-9)	Texas Tribune Festival sponsorships begin at $125k
Sponsorship Rev [$MM]	**$0.8 – $2.4**		**$22.5 – $33.8**	
Avg. # of Attendees	50-100	NJ Spotlight Roundtable "Future of NJ Solar Policy" had 100 attendees	1,775	Texas Tribune Festival: 1,300 attendees New Yorker Festival 2,250 attendees
Ticket Price [$]	$0	Free to the public	$90-$125	Texas Tribune Festival $125/ticket New Yorker Festival $30/event
Ticket Revenue [$MM]	**--**		**$2.9 – $4.0**	
Total Revenue [$MM]	**$0.8 – $2.4**		**$25.4 – $37.8**	
Estimated Profit [$MM]	**$0.2 – $0.7**		**$6.3 – $11.3**	

Source: Booz & Company analysis and client experience, NJ Spotlight, Texas Tribune, New Yorker Festival

However, success is not guaranteed; the conferences and events market is crowded

Music Events

WOODSTOCK

CHICAGO SYMPHONY ORCHESTRA

NEW YORK PHILHARMONIC

Lollapalooza

COACHELLA
COACHELLA VALLEY MUSIC AND ARTS FESTIVAL

SXSW MUSIC
MARCH 12-16, 2008 · AUSTIN TX

Cultural & Community Events

THE NEW YORKER FESTIVAL
SEPT 30 + OCT 1-2 2011

THE TEXAS TRIBUNE Festival
September 24 & 25

The New York Times

NEW YORK MAGAZINE

Film Events

Cinema/Chicago presents
THE CHICAGO INTERNATIONAL FILM FESTIVAL

SUNDANCE FILM FESTIVAL

TRIBECA FILM FESTIVAL

NY20 FF11
THE 49TH NEW YORK FILM FESTIVAL
SEPTEMBER 30 - OCTOBER 16, 2011

FILM
san francisco international film festival

MIAMI INTERNATIONAL FILM FESTIVAL

LA FILM FEST

News, Policy, and Business Events

NJ SPOTLIGHT
WHERE ISSUES MATTER

AtlanticLIVE

The Economist Group

Bloomberg

BARRON'S

THE WALL STREET JOURNAL.

Pursuing this opportunity also requires a new set of capabilities and risk taking, which will not be appealing to all stations

Requirements for Success
▪ **Large market** – we assume that only stations in high population DMAs will have a large enough local audience and potential sponsors to drive sufficient attendance ▪ **Event staff** –staff (full time or outsourced) to cover logistics, programming, marketing, ticketing, sponsorship sales, etc. ▪ **Local networks** – necessary for talent and sponsor acquisition ▪ **Risk tolerance –** large events have several risk factors related to talent, venue, attendance, and sponsorship

Conclusions
1. Benefits will be captured by large stations; opportunity for smaller stations is limited 2. New capabilities will have be developed by stations in order to organize both community and larger events; the executional complexity of this undertaking is high and may distract from other more critical mission-oriented priorities 3. On a per station level, the opportunity on an absolute basis is relatively limited for all but the largest stations 4. As a result, many stations will opt not to pursue this opportunity, limiting the revenue potential overall for public broadcasting

Paid digital subscriptions should be pursued in the context of encouraging membership and giving

- Given the challenging dynamics of paid content, the potential of public broadcasting's current digital assets to create a paid digital subscription model is low
- The New York Times represents a true best case scenario; other news brands have failed to generate significant paying audiences online; NY Times also has exclusive rights on all of its content and is not required to share revenue with producers
- For public broadcasting, the issue of consumers already paying for memberships further complicates this strategy and reduces the revenue potential:
  - Granting free access to existing members who visit the website reduces the pool of potential paying customers
  - Asking current members to pay for digital content will reduce individual giving to stations
- Marketing messaging would be complex given the current public broadcasting revenue model and public service mission. Putting the core programming service behind a pay wall will be considered by many to be incompatible with the mission of public broadcasting
- However, "conditional access" to extra content, previews or pledge-free programming can be used as a powerful tool to encourage individual donations in the same way that merchandise has been used in the past by public broadcasters. Stations are already experimenting with these models

Paid subscription models is an area of interest for media companies. The strongest brands can generate revenue streams

Landscape & Trends

- Increasingly, digital content owners recognize that the revenue potential of online ads is not sufficient to support a viable business given the high cost of content
- As such, they are exploring the potential of paid subscription models; examples include:
  - The NY Times introduced a metered pay model in March 2011, as of March 2012 and has more than 450K paying digital subscribers
  - Hulu introduced Hulu Plus - a paid subscription service – in June 2010; today Hulu Plus has 1.5MM subscribers
  - In 2009, ESPN merged ESPN the Magazine's site into its paid ESPN Insider service
- While consumers do not pay for much of the content they use, there are indications that they are becoming accustomed to paying online as concerns about privacy decline and user friendly payment models emerge (iTunes)
- In both the news and kids spaces, there are existing paid subscription models which suggest that there are opportunities for leading content players in paid digital subscription businesses

The New York Times Company

- Analysts estimate that the digital subscription model is generating $80- $100MM annually for the NY Times Company:
- However, risk and costs are considerable:
  - Traffic to news websites has dropped, reducing ad sales
  - In 2011, the NY Times Co. spent $12MM in promotional costs for digital subscriptions
  - In April 2012, the number of free articles will be reduced from 20 to 10 to push more readers to pay for subscriptions

Disney Club Penguin

- Club Penguin is a "virtual world" where kids pretend to be penguins, acquired by Disney in 2006 for $350MM; in 2008, DFC Intelligence estimated that Club Penguin generated between $50-$150 million
  - Kids can use CP for free but the free version contains ads
  - In its ad-free version, Club Penguin generates revenue from premium subscriptions, and prepaid game cards
- However, app-based products for kids are increasingly taking share from web-based offerings, CP targets kids older than 6
- Disney's rationale for buying CP was revenue and technology capabilities that could be leveraged in other offerings

Source: New York Times Company financial statements and press releases, DFC Intelligence, Disney, Booz & Company analysis

According to analysts, "monetizable content " has at least one of four characteristics

Characteristics of "Monetizable Content"

Characteristic	Description	Examples
1. Supports a job or career	Content or functionality that helps people advance their careers	Premium Accounts; Paid Digital Subscriptions
2. Enhances serious hobbies	Content that "prosumers" who are seriously invested in their hobbies	Paid Unlimited Photo Storing & Archiving; Paid Sports Enthusiast Content
3. Provides substantial entertainment or value	Highly produced entertainment content: games, music and filmed entertainment, highly valued news or information	Filmed Entertainment; Games
4. Differentiates the delivery experience	Seamless transaction experience makes acquiring and paying for content frictionless	Micro-transactions; Kindle 1 Click to Buy

Source: Modified from Forrester *Eight Models for Monetizing Digital Content,* Booz & Company analysis

Based on these criteria, public media does not have any clearly high-potential platforms on which to launch a paid content offering

Discussion & Rationale

- On the four characteristics of monetizable content, public media content scores low
- In addition, individual stations do not have sufficient volumes of content to support a paid content strategy on their own; coordinating across multiple stations would be extremely challenging
- PBS does not have exclusive rights to its long form video content:
  - Rights are shared with producers who may not want their content in a paid platform and / or share a substantial portion of revenue
  - Individual commercial TV networks have not created pay walls, opting instead to monetize online video viewing through advertising
  - Paid content for pre-school age children is increasingly focused on apps instead of web-based platforms
- NPR's news and entertainment-focused website could opt to follow a NY Times-style model; however, given lower volumes of web traffic, revenue potential is limited; general news content is difficult to monetize given multitude of free high quality news sources available

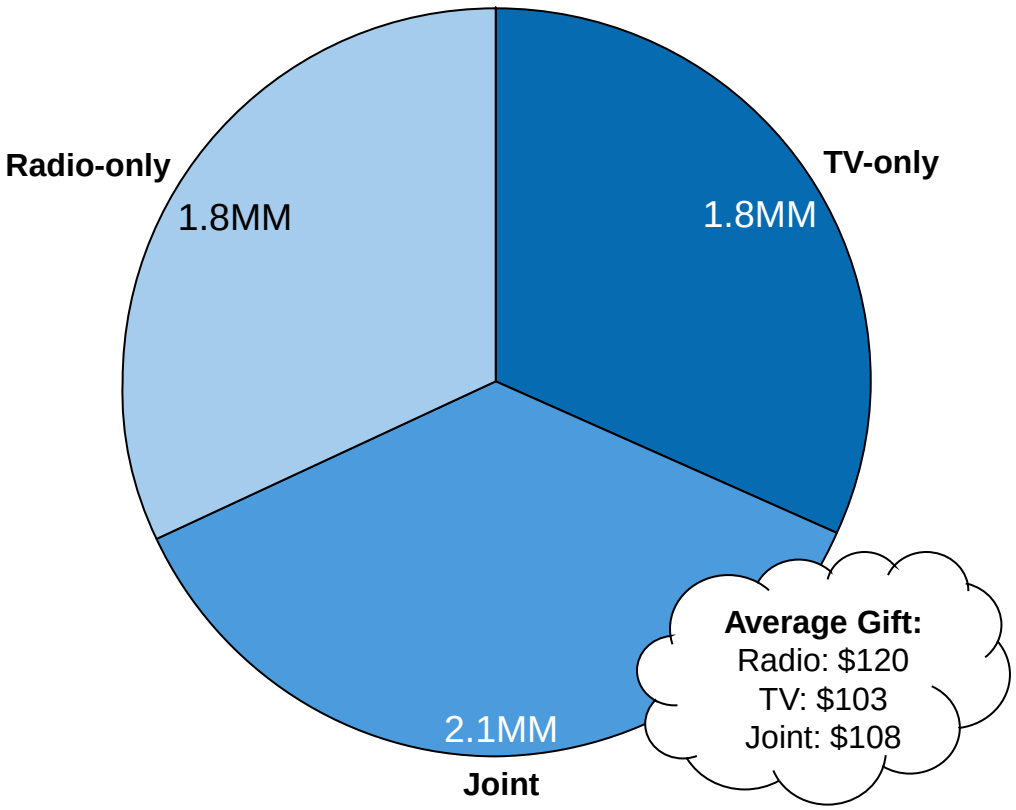
Net Revenue Sizing: NPR as a Paid Content Offering

Description	Amount
NY Times Digital Sub Revenue (estimated)	$90MM
NY Times.com monthly unique visitors 2011	16,647
NPR.org monthly unique visitors 2011	5,389
NPR.org traffic as a % of NYTimes.com traffic	32%
Revenue assuming NPR.org could capture 25-50% of revenue / unique of NYTimes.com	**$7.3 - $14.6MM**
Marketing & Promotions (assuming 25% of NYT 2011 marketing spend for paid subs of $12MM)	$3MM
Administration, customer service, billing (assuming 10% of revenue)	$0.7 - $1.5MM
Web design & maintenance (assuming 10% of revenues)	$0.7 - $1.5MM
Incremental music licensing costs	$0.05 - $0.1MM
Net Income Estimate	**$2.8 - $8.6MM**

Source: New York Times Company financial statements & press releases, Nielsen as reported by Pew's State of the News Media 2012, Booz & Company analysis

In addition, avid consumers of public broadcasting already pay for content through station memberships

Public Broadcasting Individual Contributions
N = 5.7 million



- Today, public broadcasting's most dedicated viewers and listeners pay for content through individual contributions to their local stations
- These same consumers will be reluctant to pay for digital content from PBS or NPR as well; most consumers do not distinguish between the national organizations and their local station
- Introducing paid digital content will have a negative impact on individual membership revenues collected by local stations; consumers likely to view this as being "double charged" for the same content

Source: AFR 2010 and FSR 2010

There is potential for public broadcasting stations to generate revenue from their donor lists but the risks are considerable

Station Mailing List Sizing

- 2010 donor totals included:
  - 2.6 MM TV donors
  - 3.1 MM Radio donors
- Both radio and TV stations undoubtedly maintain contact information for additional donors from prior years
- Assuming that 10% of donors in any given year are new, and the organizations have 10 years of records, the overall list size is:
  - 5.2 MM TV donors
  - 6.2 MM Radio donors
- Assuming 10-25% of these donors are shared, total list size is estimated at 8.6MM – 10.3MM names

Source: AFR 2010 and FSR 2010, Booz & Company analysis

Potential for Incremental Revenue

- Stations maintain lists of members who have disposable income and a demonstrated willingness and interest in philanthropy and community engagement
- Such a database has commercial value for direct marketing; we estimate that providing lists to direct marketing companies could generate ~$1 per name per year or $8.6 - $10.3MM per year in revenue with few costs, based on Booz client experience
- There are multiple vendors with broad offerings in list management who could help ensure that:
  - Select advertisers and causes who value the list and whose mailings will be acceptable to members
  - Ensures that only “the right” communications at the right frequency
  - Limit distribution of the list
- However, past scandals associated with the distribution of donor lists may limit interest in this opportunity

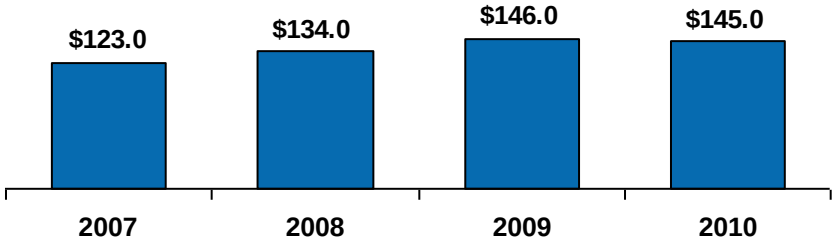
Leasing towers can provide a stable flow of income to stations but most who own towers are already pursuing this opportunity

- TV and radio stations use communication towers to transmit signals – broadcasters either own their tower or lease space on a tower through a tower management company (e.g., American Tower)
- Frequently, communication tower owners lease unused portions of their towers to other entities to derive lease revenue
- The value of the revenue stream is based on:
  – Tower location and height
  – Available space on tower
  – Amount of equipment on tower
  – Ground space required by tenant
  – Availability of other towers
- Lease agreements generally last 5+ years and include automatic, annual cost increases of 3% - 5% – resulting in relatively stable revenue flows for lessors
- In general, it is the responsibility of the lessee to pay for the installation and maintenance of all of their communication equipment, there is minimal cost to the owner of the tower
- American Tower, a leader in broadcast tower leasing, expanded its tower count by 5% in 2010, half through new construction

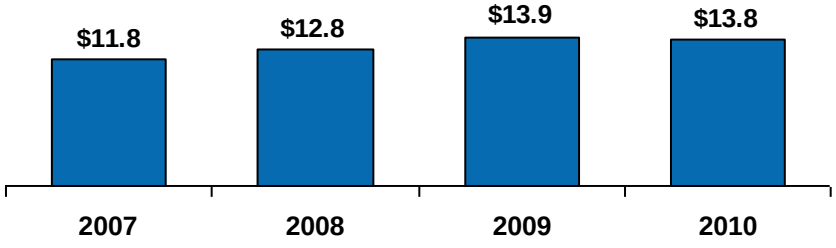
Source: Industry interviews, American Tower annual report, Booz & Company analysis

Most television stations already earn tower leasing revenues - incremental net revenue opportunity is low

Average Tower Leasing Revenue per Active Installation
2007 – 2010, TV Stations, $K



Total Tower Leasing Revenue for Public TV Stations
2007 – 2010 in $MM



Category	# Stations (2010)
Leasing TV Tower space to others	96
Do not have a TV Tower	61
Have a TV Tower, but not renting space to others	15
Total:	171

Assumes 50% of Joint Stations with both leasing revenue and leasing cost obtain that revenue from a radio tower

Source: SABS, Booz & Company analysis

Discussion

- 96 public broadcasting TV stations (50%) earn revenue by leasing TV tower capacity
- An additional 61 of stations lease TV Tower space from a third party but do not derive any TV Tower leasing revenues – implying these stations do not have their own TV tower
- Only 15 TV stations had no tower leasing revenue or expense in 2010, indicating a potential incremental opportunity for additional leasing
- Given the high existing level of participation (almost 80% of those with towers), it is unlikely that the number of stations leasing capacity will increase

Additional radio tower leasing revenue might range from $2MM - $3MM

Radio Tower Leasing Opportunity
Assuming Differing Levels of Participation

Title	100%	10%	20%	30%	40%
# Towers being Leased	**245**	25	50	74	98
Annual Net Revenue/ Tower	**$36K-$60K**	$36K-$60K	$36K-$60K	$36K-$60K	$36K-$60K
Total Net Revenue	**$8.8-$14.7 MM**	**$0.9 - $1.5 MM**	$1.8-$3.0 MM	$2.7-$4.5 MM	$3.6-$6.0 MM

Discussion

- Radio stations that own and operate a broadcasting tower also have the opportunity to gain revenue from Tower Leasing
- Overall revenue will be driven by the extent of tower ownership and the rate of participation
- For existing arrangements, earnings for leasing radio towers can range from $36K-$60K/year
- We estimate that there are 245 owned radio towers based on the following assumptions:
  - 75% of rural stations have radio towers - 122
  - 50% of non-rural stations have towers (lower, because there are more leasing opportunities) – 123
- Interviews with industry representatives indicate that most stations who have towers would already be leasing them
- Therefore, assuming an opportunity to increase participation by 20% of the overall tower number, an additional $1.8 MM - $3.0 MM may be available
- Costs associated with capturing such an opportunity are minimal

Source: Booz & Company analysis, AFS data

Five types of production services opportunities have been assessed

Sized

Not considered viable

	Type of Service[1]	Description of Service
Facility & Equipment	Facility & Equipment Rental	▪ Revenue generated from rentals/leasing of production facilities and production equipment ▪ Many grantees are not able to capitalize on opportunity due to the limitations of current facilities ▪ Revenue potential for leasing of radio production facilities is limited; TV only evaluated
Facility & Equipment	Production Truck Rentals	▪ Rental of production trucks to external entities; opportunity not considered viable due to: – High upfront investment costs – trucks can cost as much as $7MM for an HD unit – High annual maintenance costs (approximately $0.5MM/year in truck maintenance for WYES) – Presence of large national players who will bring trucks from across the country – Failure of some stations to make this business profitable in the past
Content Delivery & Distribution[2]	Instructional TV Fixed Service (ITFS) (known today as EBS)	▪ ITFS serves as a means for educational institutions to deliver or pre-record instructional television to multiple sites within school districts and to higher education brand campuses ▪ Revenues generated from lease of excess capacity of alternative transmission services
Content Delivery & Distribution[2]	Teleconferencing / Uplink Services	▪ Lease of excess capacity in teleconferencing services to external parties ▪ Only TV and Joint grantees considered in opportunity, as video transmission capabilities would be needed
Content Delivery & Distribution[2]	Datacasting Services	▪ Datacasting services provide broadcasting of data over a wide area via radio waves that often refers to supplemental information sent by television stations along with digital television; also may apply to radio ▪ Joint, TV and Radio grantees considered

1) Tower Leasing opportunity evaluated separately
2) CD&D Network / Internet Connectivity services have not been considered due to low interest and limited opportunity; only 7 TV grantees currently monetize this service; only one (KAMU-TV) generates significant revenue;

Source: Booz & co. Analysis, Station interviews, AFR/FSR

We estimate that there is ~$5-7MM in incremental net revenue

Revenue from Facility/Equipment Rental
TV grantees; based on SABS TV 2010

Category	Value
# of Grantees with Production Facilities/Equipment[1]	139
# of Grantees Currently Monetizing Facility/Equipment[2]	38
# of Additional Grantees that Could Monetize Facility / Equipment (excluding 5 special cases outlined below)	96
# of Additional Grantees that Can Pursue Opportunity, assuming 50-75% participation	48-72
Avg. Grantee Revenue from Facility/Equipment Rental	$46K
Potential Incremental Gross Revenue	**$2.2–3.3 MM**
Incremental FTEs Required per Grantee[3] (Avg. salary of $45K plus 30% benefits, $58.5K total / FTE)	0.25
Total Incremental FTE Costs	$0.7-1.1MM
Potential Incremental Net Revenue	**$1.5-2.3MM**

- Stations reported a total 2010 Revenue of $8.7MM from Facility/Equipment Rental according to SABS TV 2010
- Only 5 stations reported over $500K in revenue and a total of $6.9MM from Facility/Equipment Rental

1) Count based on reporting "Facilities Maintenance" costs in SABS
2) 5 stations have been removed from analysis: WNET relocated facilities since 2010, NJN is no longer in operation, KCET sold its facilities in 2011, Vermont PTV provides a niche service to educational institutions for live diamond screen viewing at events & KCPT possesses extensive facilities and provide services nationally to major commercial players
3) Based on interviews with stations currently or looking to pursue this opportunity
Source: SABS TV 2010, AFR 2010, Booz & Company analysis

Revenue from Content Distribution & Delivery Services
TV and Radio grantees; based on SABS TV 2010

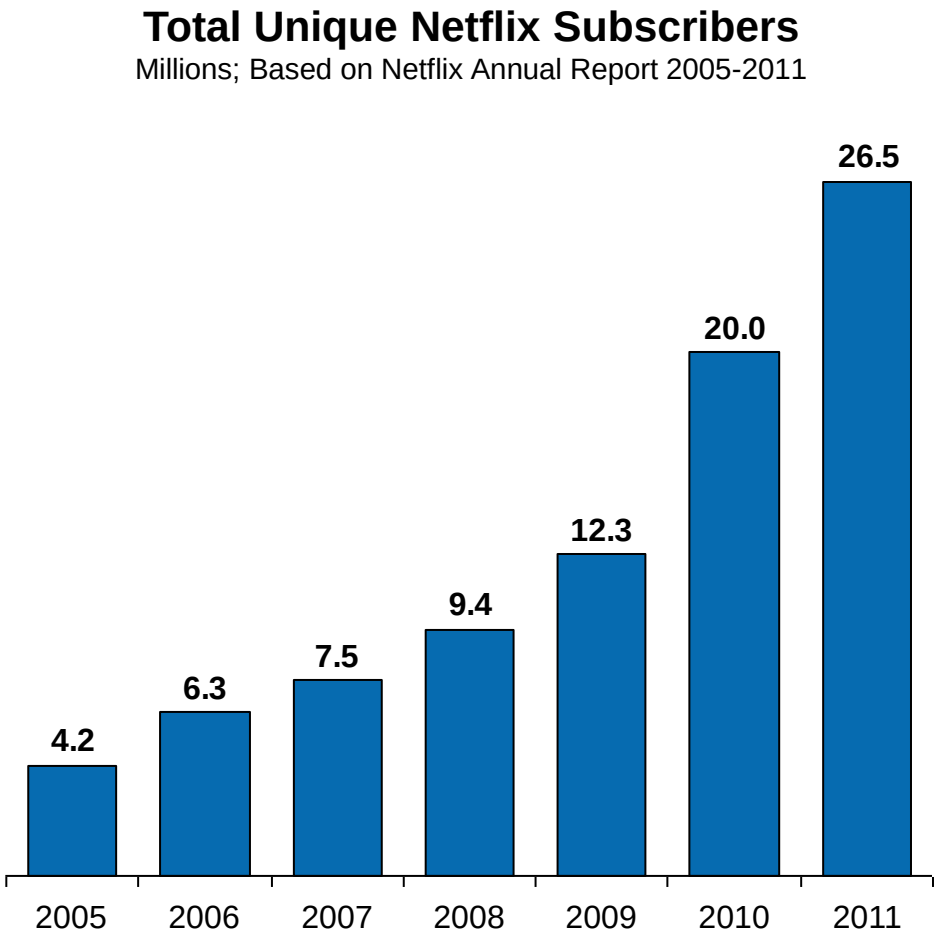
Service	Category	Value
EBS (formerly ITFS)	# of Current TV Grantees[4]	39
	Avg. Grantee Rev. from service	$248K
	# of Incr. Grantees (TV only)[5]	10-15
	Potential Incr. Gross Revenue	**$2.5-3.7MM**
Teleconferencing Services	# of Current TV Grantees[4]	35
	Avg. Grantee Rev. from service	$117K
	# of Incr. Grantees (TV only)[5]	10-15
	Potential Incr. Gross Revenue	**$1.2-1.8MM**
Datacasting	# of Current Grantees[4]	43
	Avg. Grantee Rev. from service	$5K
	# of Incr. Grantees (TV & Radio)[5]	34-51
	Potential Incr. Gross Revenue	**$0.17-0.2MM**
Total Potential Incremental Gross Revenue		***$3.8-5.7MM***
Incremental FTEs per Grantee (Avg. salary of $45K plus 30% benefits, $58.5K total / FTE)		0.25
Incremental FTE Costs[6]		**$0.4-0.6MM**
Potential Incremental Net Revenue		**$3.4-5.1MM**

4) Based on stations reporting specific CD&D service revenues in SABS TV 2010
5) Incremental grantees estimated and ranged considering various barriers to opportunity including outdated equipment, low demand, and existing market competition
6) Adjusted for grantees pursuing >1 CD&D service opportunity- assumes 50% overlap
Source: SABS TV 2010, AFR 2010, Booz & Company analysis

Public broadcasting is already tapping into on-demand distribution revenues so additional upside is limited

- PBS has maximized revenue opportunities for distribution of content to on-demand video channels:
  - Content already widely distributed
    - Top public broadcasting properties are already present on Netflix. Recent deals in 2011 have made content available on other channels including Hulu and Amazon
    - PBS content is free to cable subscribers, limiting any VOD opportunity
    - PBS content is also available for free via the PBS.org website, as well as mobile & tablet apps
  - PBS does not own rights to the content – it keeps 50% of gross revenue from on-demand channels and pays 50% back to the content provider
  - PBS's content does not align with the demographic & interests of the on-demand audience:
    - The average on-demand subscriber is in his mid-30s; the average age of PBS viewers is in the early 60's
    - On-demand channels focus on genres such as drama and comedy, not documentary and cultural performances
  - Online consumption of content will also cannibalize CD, DVD sales and other channels / formats
- On Demand distribution of audio content also appears maximized
  - Deal in place with Sirius XM
  - Podcasts are distributed for free throughout the industry
  - Online music streaming opportunities limited as NPR does not own music

On-demand video services are growing rapidly



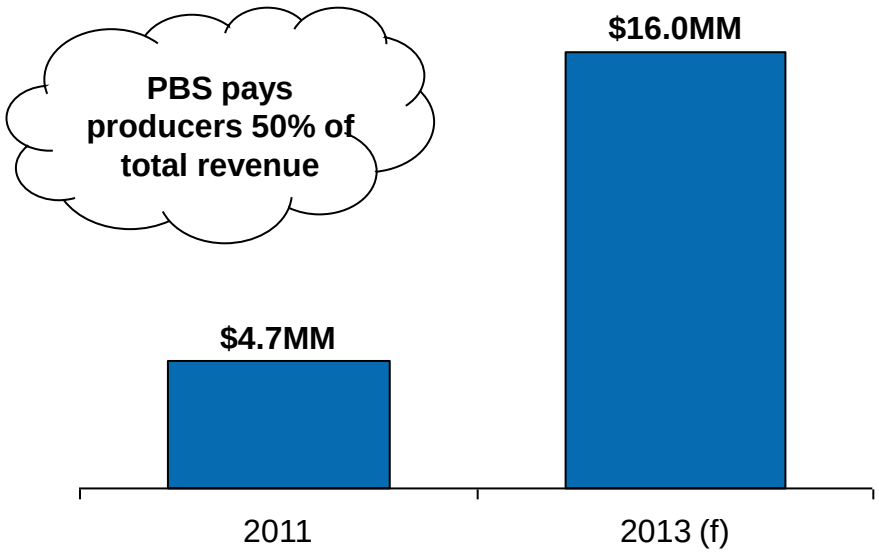
Source: Netflix Annual Reports

Discussion

- There are four categories of on-demand video distribution channels:
  - Subscription VOD (SVOD) , where licensed content is streamed for subscribers (e.g. Netflix, Hulu Plus)
  - Electronic Sell-Through (EST), where content owners are paid a portion of revenue for each download (e.g. Apple iTunes)
  - Video On Demand (VOD) – where licensed content is streamed for a single use fee (e.g. Comcast)
  - Free – licensed content is streamed to generate advertising revenue (e.g. Hulu)
- Netflix, the largest on-demand channel, has 27MM (2010) subscribers
- Netflix acquires content by establishing licensing agreements with content owners:
  - "*We obtain content through streaming content license agreements, DVD direct purchases and DVD revenue sharing agreements*"
  - "*For streaming content, we typically enter into multi-year licenses with studios*"

PBS has licensing arrangements with the major on-demand video channels and upside is limited by revenue sharing arrangements

On-Demand Distribution Gross Revenue
PBS, FY2011 (actual) & FY2013 (forecast)



PBS Revenue	$2.35MM	$8.0MM

Increase due to new contracts being negotiated.
$8MM of revenue likely for the foreseeable future

Source: PBS Distribution

PBS Deals with Online On-Demand Providers

- **Netflix (2008)**
  - PBS is paid license fees
  - Approximately 1000 PBS-broadcast shows/ episodes are on Netflix
- **Hulu Plus (2011)**
  - PBS is paid license fees
  - Recently added approx. 200 additional PBS episodes increasing the total episodes and films to 1000
- **Amazon Prime Instant Videos (2011)**
  - PBS is paid license fees
  - Offer 1000 PBS shows, including *NOVA, Antique Roadshow, and Frontline*
- **iTunes (2006) and Amazon Instant Videos (2011)** – PBS is paid 70% of the gross revenue for individual downloads of content; ½ of that is paid to the creator
  - Gross Revenue: 70% to PBS; 30% to Apple/ Amazon

With few exceptions, these deals include access to PBS' top programs in Netflix…

General Programming on Netflix

Streaming Only, Based on Review of Programming Site, March 2012

Programs	NETFLIX	# of Eps.	Seasons	Films
Masterpiece Classic (excl. Downton Abbey)	✓	19	2	1
Masterpiece Contemporary	✓	12	3	--
Ken Burns	✓	70	7	-
Nova	✓	35	-	-
Nature	✓	3	-	-
Frontline	✓	41	-	-
American Experience	✓	20	17	2
Art 21	✓	20	5	-
Carrier	✓	10	1	-
God in America	✓	6	1	-
Ground War	✓	4	1	-
This Emotional Life	✓	3	1	-

Kids Programming on Netflix

Streaming Only, Based on Review of Programming Site, March 2012

Program	NETFLIX	# of Eps.	Seasons	Films
Calliou	✓	55	-	-
SUPER WHY!	✓	64	-	--
Dinosaur Train	✓	40	1	-
Curious George	✓	70	4	1
Thomas & Friends	✓	38	-	-
Sesame Street	✓	96	7	-
Arthur	✓	20	2	-
Cat in the Hat	✓	46	3	-
Martha Speaks	✓	8	-	-
WordGirl	✓	8	-	-
Barney & Friends	✓	62	-	-
The Electric Co.	✓	36	3	-
Angelina Ballerina	✓	20	-	-
Bob the Builder	✓	53	-	-
Cyberchase	✓	5		

Drama | History/Documentary/Science | Art & Culture | Comedy | Reality | Kids

PBS only maintains distribution rights for some public broadcast titles

Note: While most of PBS' top programs are available on Netflix, *Wild Kratts*, *Sid the Science Kid, Antiques Roadshow* and *American Masters* are not available
Source: Netflix, Booz & Company analysis

… and Hulu, suggesting minimal upside in the foreseeable future

General Programming on Hulu

Based on Survey of PBS Hulu Site March 2012

Programs	h	Titles
American Experience	✓	35
Art21	✓	16
Between the Folds	✓	1
Blue Gold	✓	1
The Buddha	✓	1
The Calling	✓	4
Carrier	✓	10
Circus	✓	6
Degrassi High	✓	28
Degrassi Junior High	✓	41
Design: e2	✓	12
Empires	✓	17
Energy: e2	✓	6
The English Surgeon	✓	1
Frontline	✓	33
God in America	✓	6
Gourmet's Diary of a Foodie	✓	10
Ground War	✓	4
History Detectives	✓	10
The Human Spark	✓	3

Programs	h	Titles
I.O.U.S.A	✓	1
Journey into Buddhism	✓	3
Ken Burns	✓	83
Latin Music USA	✓	8
The Longoria Affair	✓	1
Made in Spain	✓	13
Masterpiece/Contemporary	✓	28
Nature	✓	6
Nova	✓	54
Nova ScienceNOW	✓	14
The Parking Lot Movie	✓	1
PBS Indies	✓	65
PBS Specials	✓	33
Rock Prophecies	✓	1
Scientific American Frontiers	✓	18
Secrets of the Dead	✓	6
The Story of India	✓	6
This Emotional Life	✓	3
Transport: e2	✓	6
Wired Science	✓	10

Drama History/Documentary/Science Art & Culture Comedy Reality Kids

Kids Programming on Hulu

Based on Survey of PBS Kids Hulu Site March 2012

Program	hulu	Titles
Arthur	✓	50
Caillou (incl. Spanish)	✓	57
Cyberchase (incl. Spanish)	✓	54
Wild Kratts	✓	31
Super Why!	✓	40
Mister Rogers' Neighborhood	✓	30
Martha Speaks	✓	30
Dinosaur Train	✓	40

PBS only maintains distribution rights for some public broadcast titles

Note: Antiques Roadshow on Hulu links back to PBS.org site, not shown in PBS programming channel on Hulu, unlike other programming which is streamed on Hulu.com

Source: Netflix, Booz & Company analysis

Audio on-demand distribution channels also provide minimal opportunity for public broadcasting

Product	Major Players	Description	Opportunity
Online Streaming	PANDORA internet radio Spotify	▪ Online radio channel that uses automated music recommendation technology to select songs similar to user interest & feedback ▪ Streaming service allows users to select from a music library ▪ Format is music-based and not conducive to NPR and station owned content, which revolves around news & talk ▪ NPR does not own music, but distributes it	**Limited to No Revenue Opportunity**
Podcasts		▪ Digital media consisting of episodic series of files subscribed to and downloaded though web syndication or streamed online to computer or mobile devices ▪ An avg. of 28MM NPR podcasts are downloaded each month ▪ Charging for podcasts is not a common model – the top 100 podcasts in the iTunes store are free as of April 2012	**Limited to No Revenue Opportunity**
Satellite Radio	SiriusXM SATELLITE RADIO	▪ Analogue or digital radio relayed via satellite, allowing for a much wider geographical reach ▪ Users subscribe to the service and Sirius XM licenses content ▪ NPR already has a channel, NPR Now 122, and features programs including *Tell Me More, Car Talk, Fresh Air, Talk of the Nation, Marketplace,* and *A Prairie Home companion*	**Opportunity Already Pursued**

Source: NPR, Booz & Company research

Content licensing does not represent a significant incremental revenue opportunity given several factors

Content Licensing Opportunity Overview

By Media & Geography

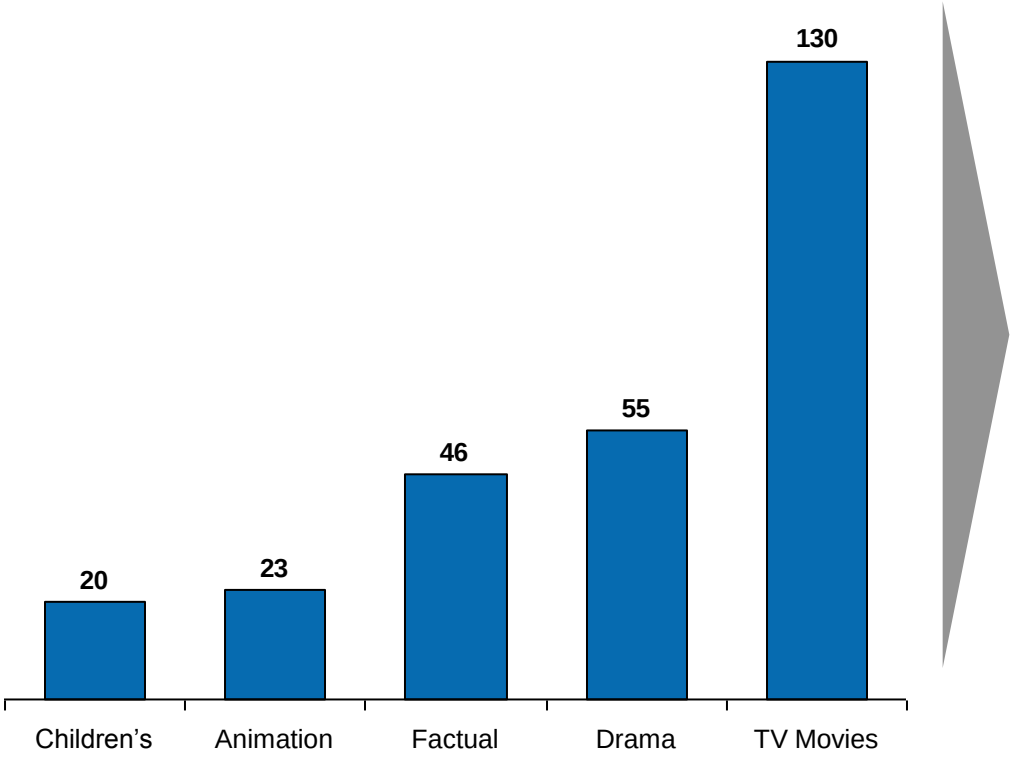
	Domestic	International
TV	• PBS does not typically own rights to PBS member station produced shows • News and public affairs programming has limited shelf life and therefore limited potential for post first run licensing revenue • Creates an issue for stations; licensing of PBS content to commercial broadcasters fragments their audiences by introducing competition	• PBS Distribution (PBSd) – a joint venture of PBS and WGBH, already licenses content internationally in instances where it controls international licensing rights, generating $5-$6MM annually on programs such as Frontline, NOVA, Fetch and Antiques Roadshow • PBS International, has access only to PBS member station-produced shows or some limited rights in exceptional situations, limiting the offering size. Other content is owned by outside producers • The typical genre of these shows limits their marketability internationally: - Children's television and documentaries capture lower prices than genres such as movies or drama - News and public affairs programming is US-focused and has limited shelf life and therefore limited potential for post first run licensing revenue - Americana-focused content has limited international appeal • The creation of PBS UK essentially eliminates further license opportunity in the United Kingdom
Radio	• Unlike television where there are mature markets for programs after their first run, demand for licensed radio content is limited • In addition, public radio content tends to be news and public affairs oriented, giving it a limited shelf-life after its first run • Radio content is widely available for free, online and through on-demand channels; this is standard practice for public radio broadcasting worldwide (i.e. top 100 Podcasts on iTunes are available for free) • Revenue opportunity negligible	

Source: PBS International, MIPTV Newsletter

Incremental opportunity for PBS to license content is limited by the nature of the content and limited ownership

Content Licensing Rates

Midpoint of Canadian quoted prices in $K USD/Half Hour, Nov 2011

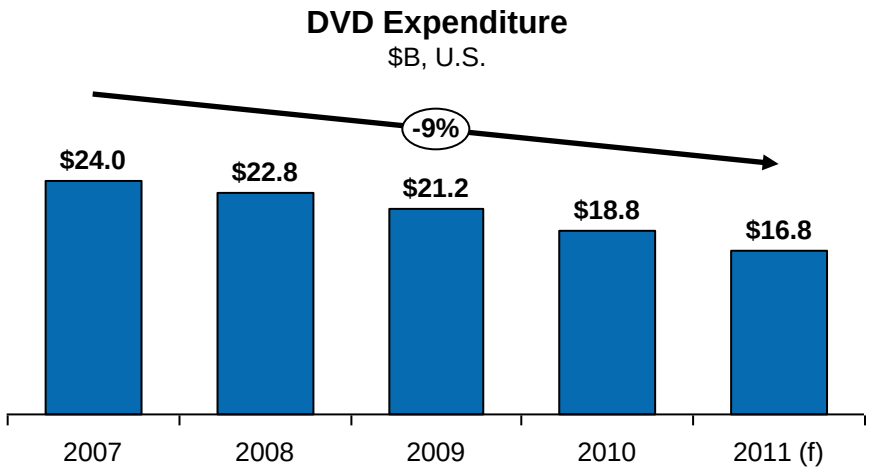


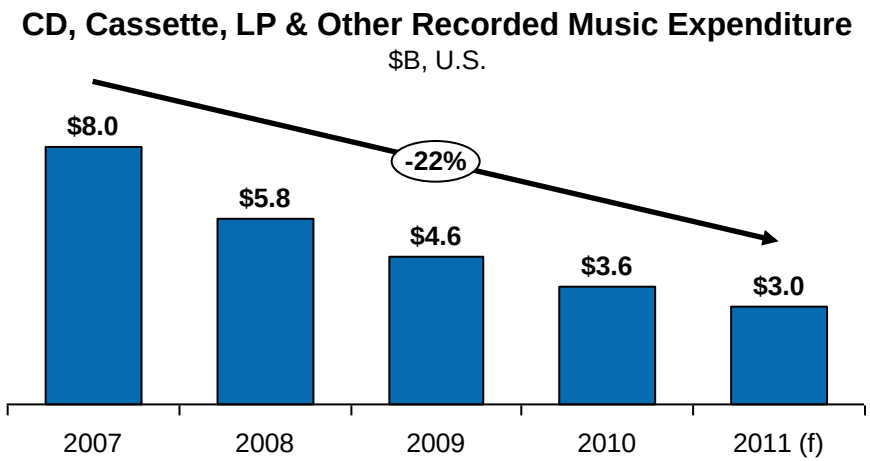
Discussion

- The primary PBS entity for licensing TV content internationally is PBS International, its offerings include:
  - Arts and Culture (e.g., Gilbert and Sullivan's HMS Pinafore, Antiques Roadshow)
  - Children's content (e.g., Fetch)
  - Current affairs (e.g., Murdoch's Scandal)
  - Frontline
  - Lifestyle (e.g., This Old House)
  - Science (e.g., NOVA)
- PBS International was re-named from WGBH International at the beginning of 2009 - a division of PBS Distribution (or "PBSd"), which is jointly owned by PBS and WGBH, and includes WGBH/Boston Video and PBS Video
- This represents the bulk of all content for which PBS is the sole or primary producer
- These categories tend to sell for lower price points than other genres such as TV movies
- PBS Distribution recently launched a PBS UK channel on BSkyB that will air PBS-distributed content in the UK

Source: PBS International, Television Business International, PBS.org

Public broadcasting's DVD & CD sales are likely to follow trends and decline over time; therefore no revenue upside is anticipated





Source: PBS, Veronis Suhler, Booz & Company analysis

Discussion

- DVD and CD expenditure in the U.S. has declined substantially as digital distribution of content continues to cannibalize physical media sales
- PBS Distribution reports 3MM DVD units shipped annually
- Given market trends, we anticipate that this volume will drop to 2.1MM by 2015
- These sales will be replaced by online and on-demand services, however this shift is likely to result in lower overall profitability
- The declining use of DVDs and CDs may also have a negative impact on pledge drives as they are frequently the gifts offered to incent giving

Today, PBS & NPR generate very modest revenue streams from merchandise sales and almost no profit

Current Online Merchandise Offering

Overview

- The PBS.org shop products are largely DVDs, Blu-rays, and CDs of programming aired on PBS
- Proprietary PBS products in the online store are limited to PBS logo-branded t-shirts and caps
- The PBSkids.org shop offers more categories of PBS proprietary products including Toys, Games, Party Supplies, School Supplies, Décor, and Apparel
- The NPR.org website has more proprietary products including DVDs/CDs, utensils, bags, t-shirts, calendars, mugs, etc.
- NPR reported that its shop operated at essentially a break even capacity in FY2011 with a revenue of $1.1MM; expected to be the same for FY2012
- Products in NPR shop serve more to build the NPR brand and support fundraising efforts of stations
- In addition to logo branded items, NPR products includes limited merchandise for programs produced or co-produced by NPR, including *Wait, Wait Don't Tell Me*, *All Things Considered*, and *Morning Edition*

Source: NPR, PBS.org, PBSkids.org, NPR.org

This is not dissimilar from major networks which also have minimal success at generating revenue from merchandise sales

- Online store sells program-branded t-shirts, mugs, DVDs, and other merchandised products
- Bravo announced in April 2009 it would develop products based on its popular programs. They worked with other companies to create themed products: Koopa handbags designed by contestants on *The Fashion Show*; *Top Chef*-themed knives from Master Cutlery; and jewellery from *Real Housewives*
- Focus of initiative is on brand building, not revenue generation
- BravoTV.com has ~1.2MM unique visitors/month, but online shop only has ~25K unique visitors/month

- History Channel owns rights to much of its programming and sells show-based products in its online shop
- Products include "souvenir" goods, such as t-shirts, as well as "hobbyist" items, including collector coins and model planes based on their popular shows
- Both "souvenir" and "hobbyist" products drive band building for program viewers and fans
- Merchandising angle on programs has not generated substantial revenue; online-only sales of products limit revenue potential and success of new models (e.g., "contextual" product placement) has yet to be determined

Source: NY Times, Compete.com Booz & Company analysis

The opportunity for merchandising sales is minimal due to limited rights ownership, small margins, and an unproven revenue model

- **Rights Owned by Producers:** PBS does not have the rights necessary to create program-themed products (including kids) and they must share revenue with content producers on products sold through its online store

- **Opportunity Limited for Radio**: NPR owns more program rights (e.g., *All Things Considered* and *Morning Edition*), but there are few clear product categories where NPR could create NPR-branded products

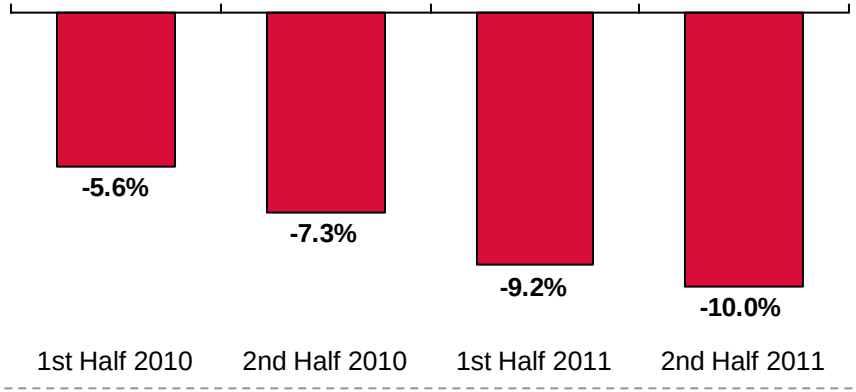
- **Low Margins:** Products proprietary to PBS and NPR are mainly "souvenir" goods, such as PBS-branded t-shirts, mugs and caps, for which profit margins are low; NPR shop operated on a break even capacity in FY2011 with a revenue of $1.1MM

- **Brand Building & Unsuccessful Revenue Model:** Major networks have more aggressively pursued the merchandising angle on programming but have yet to generate significant revenue; instead, they have focused on using merchandising for brand building of popular shows

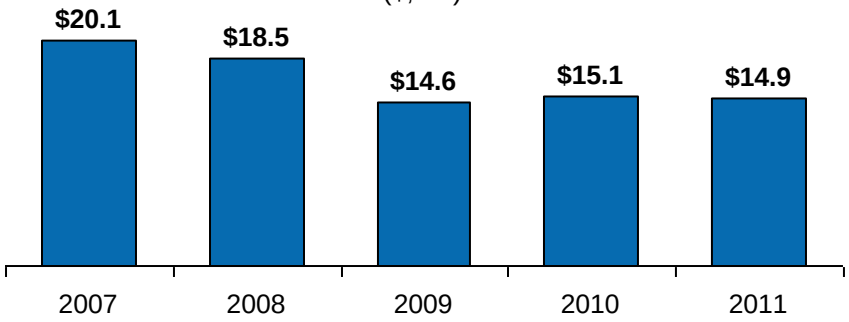
- **Reach Limited by Online-only**: Most viewers are unlikely to visit online stores – web traffic to TV sites is limited with only a small percentage of click-throughs to the online shop

Magazines are declining in terms of consumption and ad sales; public broadcasting has moved away from magazines over time

Magazine Newsstand Sales Growth
(Consumer Magazine Single Copy Sales, % vs. Prior Year)



US Consumer Magazine Ad Spending
($, Bn)



Discussion

- As consumers shift towards digital platforms, both of the magazines industry's traditional sources of revenue are strained (advertising and paid circulation)
- Total sales of magazines are declining; the Audit Bureau of Circulations reports that total paid & verified circulation decrease of 1% in the 2nd half of 2011; more profitable newsstand sales dropped more sharply
- Print magazine ad spending is also declining; unlike other ad categories which rebounded after the recession, magazine ad spending has not, suggesting a more lasting shift away from print media
- While many stations had local magazines in the past, most were shuttered with only a handful remaining
- Experiments with national magazines (e.g., Dial Magazine) were unsuccessful and generated significant losses

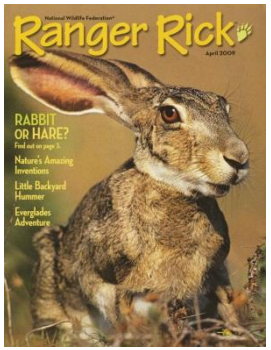
Source: Audit Bureau of Circulations (ABC), Zenith Optimedia

On the national level, categories where PBS or NPR might play are not attractive or are heavily competed

Children's Magazines

- The children's magazine category is declining as youth reading declines and video games grow
- *Nickelodeon* magazine discontinued in 2009 due to poor performance
- Children's Television Magazine published *Sesame Street Workshop* monthly from 1970 until 2002, when it became an insert in *Parenting* mag; in 2008 inserts stopped, and the publication became purely digital
- Children's magazines tend to target older audiences than those that watch PBS Kids programming 6-12 vs. 2-5

Ranger Rick



- Monthly nature magazine published by National Wildlife Fed.
- Circ. of 525,000
- Sub. price ranges from $24-$40 Intended audience 7-12 year olds

Phineas & Ferb

- Bimonthly, launched in 2011 by Disney, based on TV show
- Single copy in stores priced at $4.99, annual subscription for $23.95
- Intended audience 6-12

Adult Interest Magazines

- Aside from AARP, general interest titles for adult audiences are few; in part because of limited appeal to advertisers; AARP built its model around free circulation to members
- In more niche categories of interest to public broadcasting audiences (food, public affairs, arts & culture, technology), many national magazines already exist
- The national magazine market remains highly competitive for both consumer spend/attention and advertising; breaking into this market will be difficult

AARP

- Bimonthly focused on wellness and lifestyle
- Largest circ. magazine in the US, base rate of 22MM
- However, 196th in ad pages in 2010; $131MM in ad sales

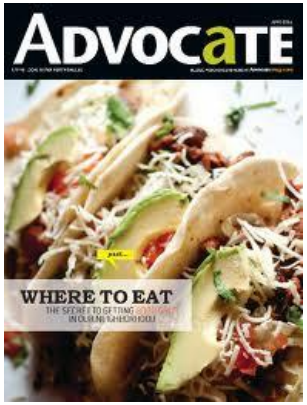
Smithsonian

- Monthly focused arts & culture, science, history
- Total paid circulation of 2.1 million,
- Subscriptions can be as low as $12 for 11 issues
- Ranks 170h for ad pages; $55MM in ad sales

Source: New York Times, magazine media kits, Booz & Company analysis, Publishers Information Bureau

On the local level, revenue potential is limited given low circulation, a shrinking ad market and high levels of competition

Survey of Middle Market Local Interest Magazines



- Advocate Media publishes free magazine for upscale Dallas neighborhoods
- Revenues of $3.5MM
- 23 employees
- Circulation of 25,000

- Monthly local interest magazine
- $14.95 / 1 year subscription
- Circulation of 50,000

- Monthly local interest magazine
- $24/1 yr. subscription
- Circulation of 45,000

Discussion

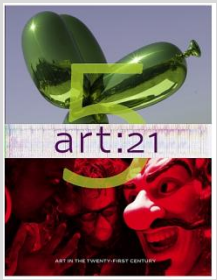
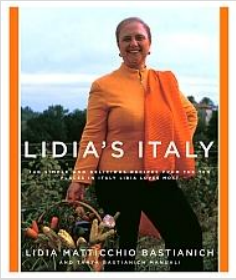
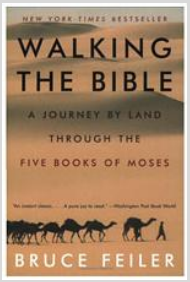
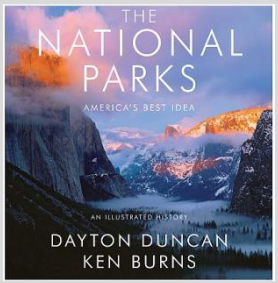
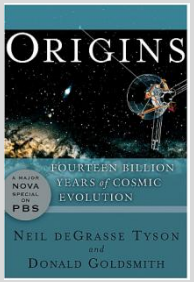
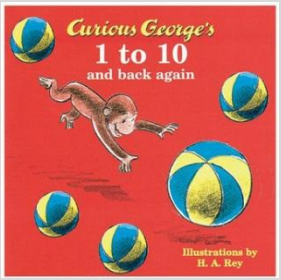
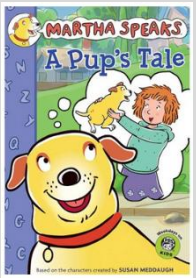
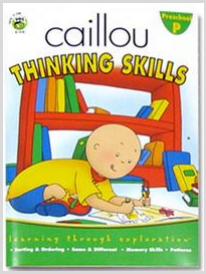
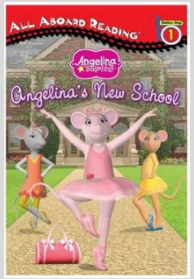
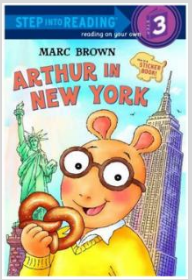
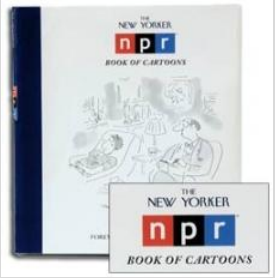
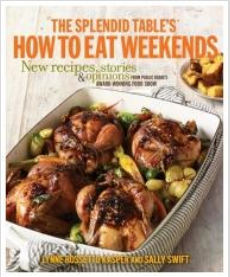
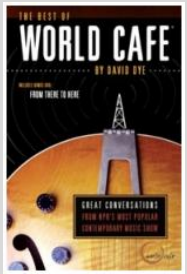
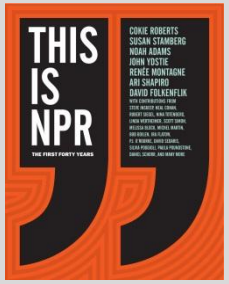
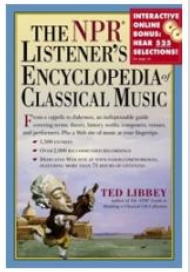
- Large markets (e.g., New York, Chicago, LA) have large and established local magazines; no opportunity for stations to enter this market
- Very small markets also do not have an opportunity given low population
- In mid-sized US cities, stations might have a limited opportunity to enter the market but the revenue upside is limited
- Middle-market local interest magazines tend to have circulation of less than 50K and some are distributed for free
- Even in these mid-sized markets, competition from other magazines and other local advertising media is intense
- The economics of magazine publishing favor high circulation given high fixed editorial costs; middle market magazine circulation is low

Source: Magazine media kits, Inc. Magazines, Booz & Company analysis

We do not believe that book publishing provides any upside for public broadcasting

- **Book publishing is a hits business**: public broadcasting lacks the ability to produce thousands of titles a year without in-house publishing operations
- **Rights are owned by others:** program and program-based rights are owned largely by outside producers, personalities and publishers
- **Fiction is most profitable and popular genre**: majority of public broadcasting books fall into the non-fiction genre, which has limited revenue potential; *Masterpiece* rights are owned mostly by external producers
- **High competition in distribution**: PBS and NPR currently distribute non-public broadcasting titles in limited availability; however, players like Amazon and B&N currently dominate the distribution space
- **Book sales and engagement is flat:** overall book sales are expected to remain flat or grow slightly, while time spend is being cannibalized by other media platforms; children's book sales are also declining
- **Uncertain landscape:** growth in popularity of e-books and other non-print platforms have destabilized the book publishing industry

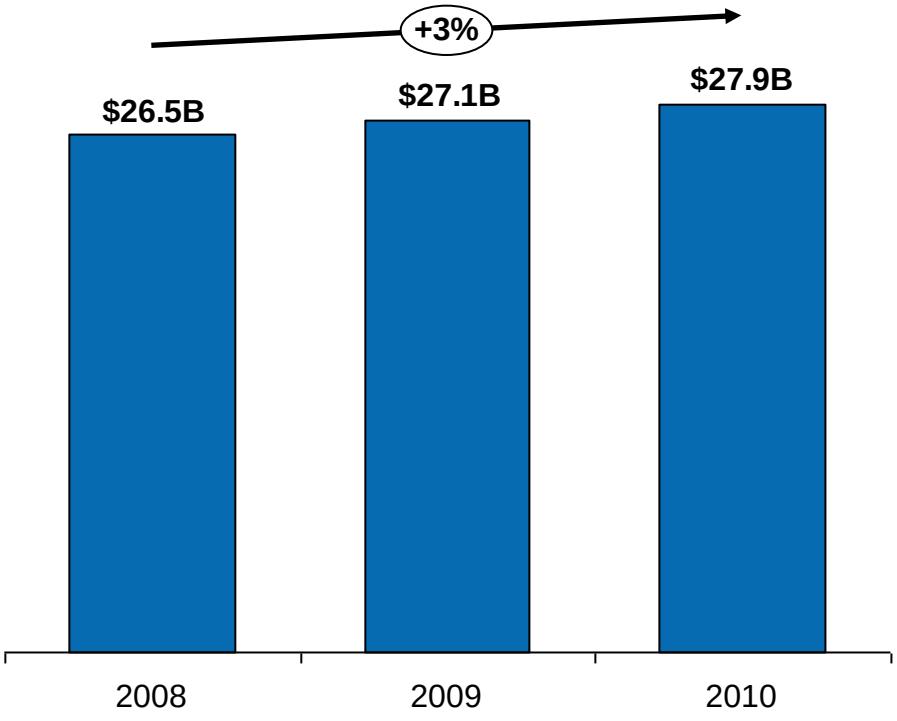
Today, PBS and NPR publish a limited number of books, often in partnership with content creators and based on programming

Online Site	# of Books Available	Sample Books in Online Shops
PBS Shop	534	    
PBS Kids Shop	86	    
NPR Shop	63	    

Note: Book counts as of April 2012

Overall, the book publishing business is challenging as consumer time is shifting towards other entertainment platforms

Publisher's Net Sales Revenue
$B; 2008-2010; Based on BookStats



Discussion

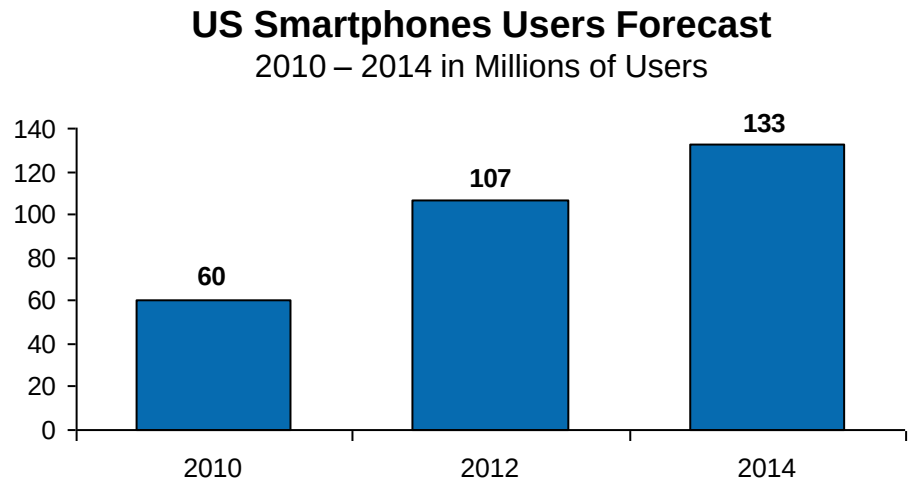
- Book publishing is a "hits" driven business; book publishers produce many titles in hopes of creating a hit
  - Major publishers produce hundreds of titles per year: 1.5K HarperCollins, 2.5K Random House
  - The vast majority of titles sell few copies and generate limited profit
- Generating hits is becoming more difficult as consumer time is fragmenting away from books and toward internet and mobile media
  - Internet and Mobile time spend account for roughly 4 hours/day; nearly 6X more than reading
- Children's book sales fell by almost 7% in 2010: 190MM in 2009 to 177MM in 2010, the third successive fall for the children's market since 2007

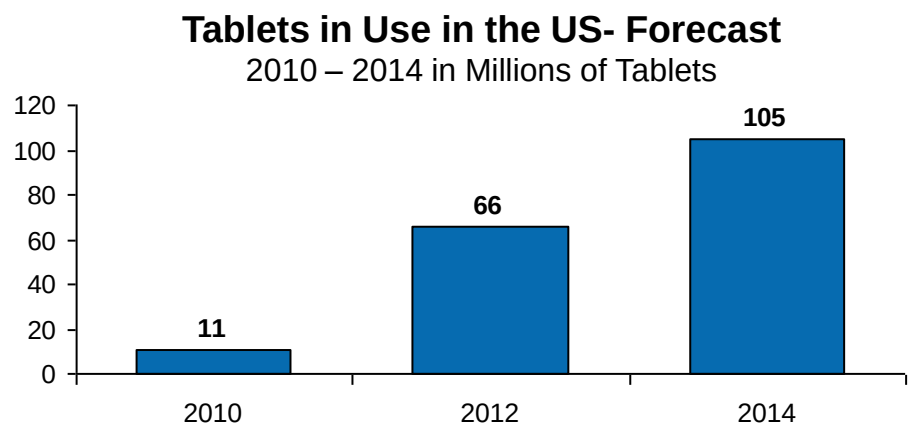
Source: BookStats, Publisher's Weekly, Association of American Publishers, eMarketer, Publisher's Association, Booz & Company analysis

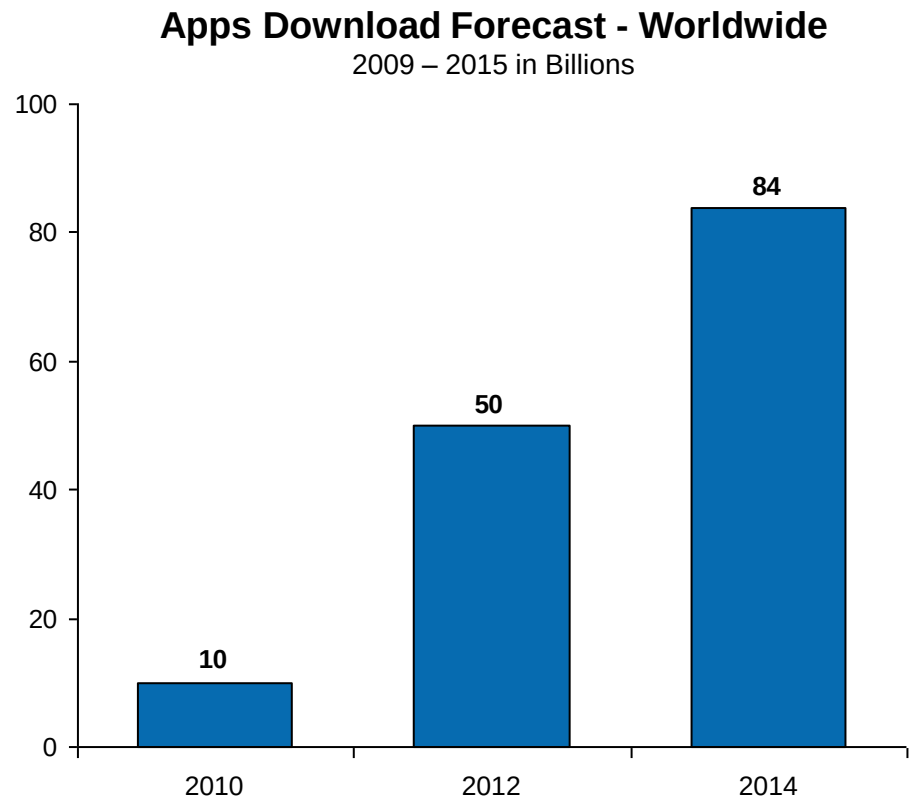
This opportunity is also limited for public broadcasting by several additional factors

Limiting Factor	Description
No Existing In-House Publishing Operations	▪ Public broadcasting does not have any existing in-house publishing operations ▪ They rely on partnerships with external book publishers to handle functions such as printing and distribution ▪ Given this arrangement, only a percentage of the retail price flows back to NPR or PBS; publishers and distributors also take a significant percentage of sales
Niche Content Categories	▪ Majority of public broadcasting books are based on existing programming, which plays in niche, non-fiction categories such as documentaries, history and science programming, and information and news services ▪ Fiction is the most popular adult genre and is increasing share at the expense of non-fiction: Fiction climbed from 67% of titles in 2007 to 78% in 2011 (USA Today 2011 Top 150) ▪ Rights to most PBS fiction dramas, including the *Masterpiece* titles, cannot be exploited
Limited Ownership of IP	▪ Most of public broadcasting titles are TV program-based; PBS holds limited publishing rights to these programs as they are not produced by CPB-funded stations ▪ Several public broadcasting personalities write and publish books which they promote on their programs; however, IP is owned by the personalities and publishers and is not monetized by the stations, PBS, or NPR ▪ The PBS online shop has 534 books listed and NPR shop has 63 listed, but the majority of titles are published and owned by external parties; PBS & NPR largely serve a distribution role and play a more limited role in content creation or publishing

The growth of apps is being fueled by the growth of smartphone and tablet penetration



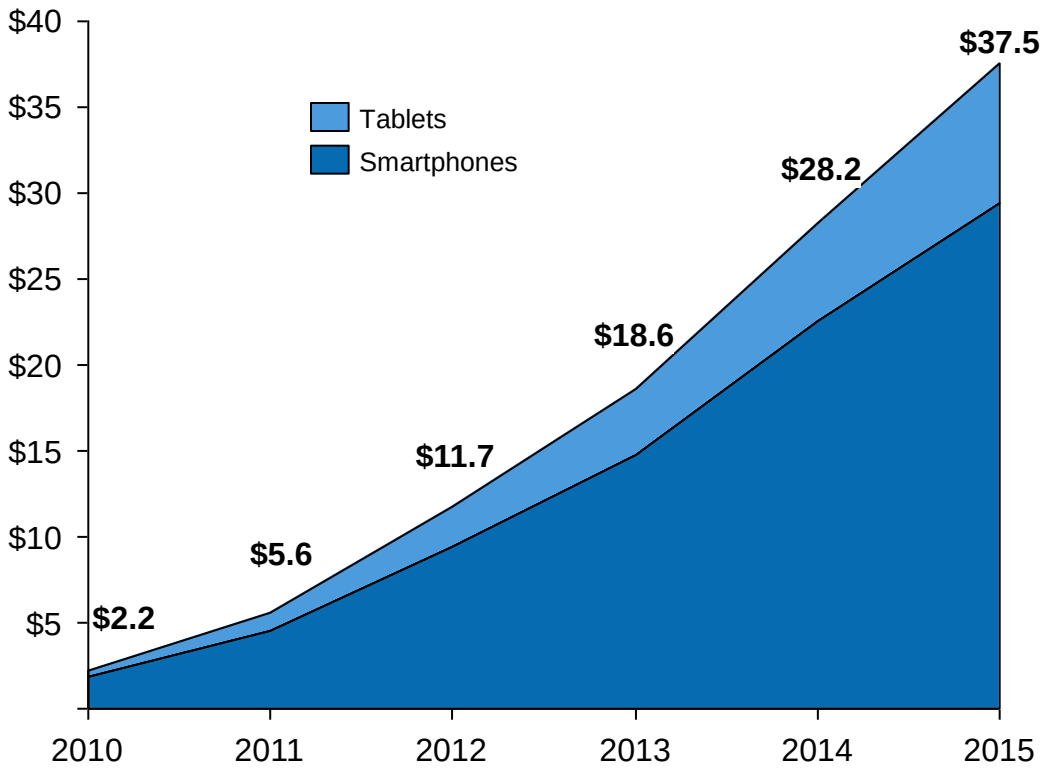




Source: Forrester research, eMarketer, Berg Insight "The Mobile Application Market"

Analysts expect app monetization to grow significantly over time

App Revenues Forecast by Device Platform
Global Revenues, 2010 – 2015, in $B



Source: Forrester research, eMarketer

Discussion

- Fueled by increased consumer device penetration and a growing number of apps, Forrester anticipates that app downloads will generate $37.5B by 2015 across smartphones and tablets
- In addition, in-app advertising spend is expected to grow; mobile advertising (including both app and mobile web-based) is anticipated to grow from $1.2B in 2011 to $4.4B in 2015
- Multiple revenue models are emerging including in-app purchases, freemium, subscriptions in addition to pay per download models

However, app revenue will be shared with apps stores as well as across thousands of individual app developers

# of apps available as of March 2012	550,000	450,000
Downloads since launch of app store	25B *as of March 2012*	11B *as of January 2012*
Estimated # of app developers	145,000	100,000
% of paid app price retained by app store	30%	30%
Estimated % of paid apps	50%	32%

Note: Android Marketplace rebranded in March 2012, now known as Google Play
Source: Apple press release March 5, 2012, Distimo, About Google Play site accessed March 19, 2012, 148 Apps, Booz & Company analysis

As a result, the vast majority of apps generate very little revenue

Analysis of Developer Monetization in Apple's App Store

Description	Input
Amount paid to developers, as reported by Apple, 3/5/2012	$4.00B
Amount paid to developers, as reported by Apple, 7/7/2011	$2.50B
Imputed amount paid to developers from 7/2011 – 2/2012	$1.50B
Annualized revenue paid to developers (estimate)	$2.25B
# of downloads July 2011 – February 2012	10B
Annualized number of downloads (estimate)	15B
# of iOS developers	145,000
Average # of apps in the app store over the time period	500,000
# of paid apps	250,000
% of paid downloads (estimated)	10%
Average revenue per download (paid apps only)	$1.50
Average number of downloads per paid app	6,000
Annual Revenue per paid app	$9,000
Annual revenue per developer (assumes mix of paid & free)	$15,517

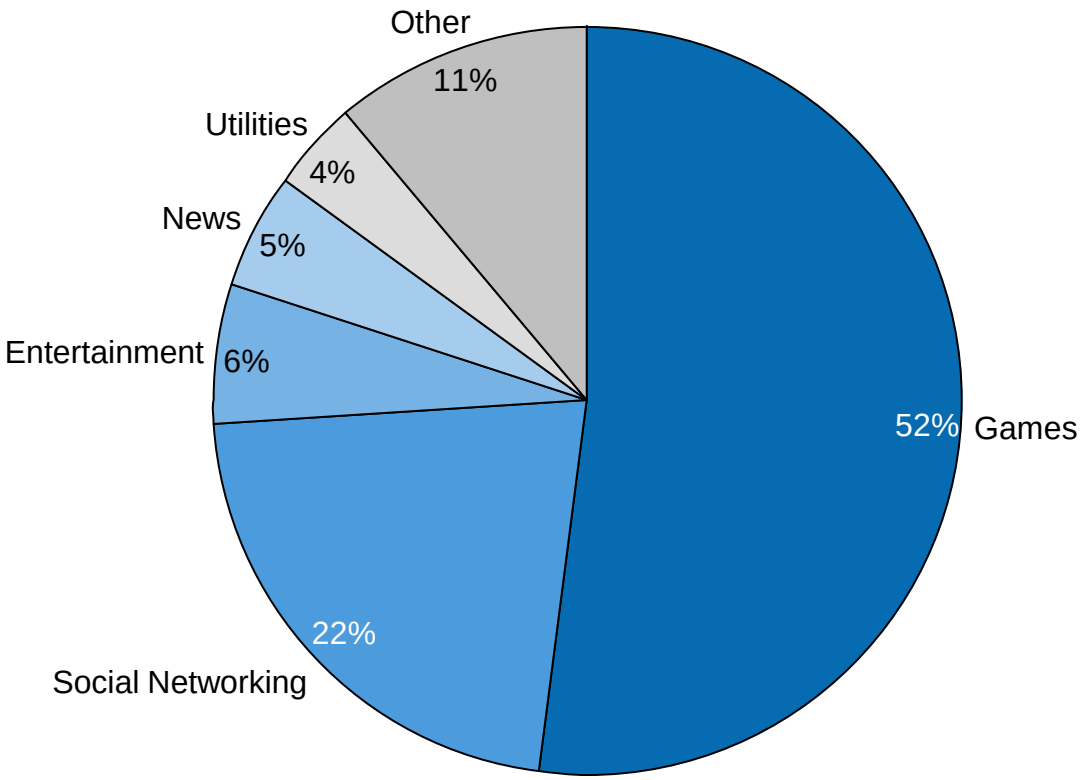
Discussion

- Apple's app store is by far the most robust monetization platform among app stores
  - Google Play is estimated to deliver ¼ to 1/3 the rate of monetization to developers[1]
  - Other apps stores are far smaller than Google Play or the Apple App Store
- Given the difficulty of discovery, a handful from the hundreds of thousands of apps will generate significant revenues while most generate almost none
- Other revenue models (in-app purchases, freemium, subscriptions and ad-supported models) are largely experimental today and suffer from the same dynamics as paid apps

1): Flurry Analytics
Source: Apple press releases, 148 Apps, Distimo, Booz & Company analysis

Gaming dominates the app landscape today; other app categories struggle to attract fragmented consumer time and spend

Worldwide Sessions by Category
Jan – February 2012, n = 64 billion sessions



Discussion

- Consumers spent more than half of their app time with games, especially casual and social games
- Consumers are more likely to be willing to pay for gaming apps than for other types of apps
- Categories such as news or entertainment are relatively small today despite significant investments from entertainment brands in apps
- Educational apps are currently a very niche category and do not yet represent mainstream use cases for apps

Source: Flurry Analytics February 2012

Apps like Angry Birds represent the top hits- they are extreme outliers in terms of use and monetization

- Angry Birds by Finnish game developer Rovio had been downloaded over 500MM times worldwide as of November 2011
- Rovio is estimated to have generated over $100MM since its release in December 2009, an annualized revenue of about $50MM
- This total includes an estimated ~$1MM per month from in-app advertising in their Android version of Angry Birds, which is free given Google's restrictions on payments
- Rovio has also expanded the franchise to merchandising and feature films, based on the popularity of the Angry Birds game
- However, this case represents the one in a million scenario- the vast majority of Apple's 550k apps and Androids 450K apps have very modest numbers of downloads, and limited monetization

Source: Rovio press releases

The revenue potential of news or educational apps is far more modest

THE DAILY

- The Daily, a digital-only news source published by News Corporation, was the #1 paid news app in Apple's app store in 2011
- News Corp has made substantial investments to create original content for this web-only news source
- By February 2012, one year after launch, The Daily reported having 100,000 subscribers
- Roughly half of the 100,000 subscribers pay a $0.99/week subscription fee, while the other half pay $39.99/year
- With weekly subscription revenues annualized, less Apple's 30% cut, The Daily generates approximately $3.2 million in revenue

sesameworkshop®

- Sesame Workshop recently conducted an analysis on the education category and children's apps in Apple's App Store
- Results found the space to be growing in viability though still far from lucrative:
  - The average price of a children's app rose $1.01 from 2009 to 2011, up to $2.14, though still lags the average price of adult apps at $3.56
  - In 2011, a "Top 50" Education app could expect to receive ~100-200 downloads/day
  - At an average price of $2.14, and less Apple's 30% cut, this would yield revenue of ~$55,000-$110,000/year

Source: Mashable, The Daily website, Joan Ganz Cooney Center at Sesame Workshop, Booz & Company analysis

Premium publishers like PBS & NPR will be challenged to generate incremental net revenues from paid apps

Current State

- NPR offers 4 free apps (2 for iPhone; 2 for iPad) that are music and news aggregation apps in the Apple App Store
  - NPR News iPhone & iPad app: Over 4.8MM downloads
  - NPR Music iPhone app: 721k downloads
  - NPR News Android app: Over 1MM downloads
- PBS's mobile app portfolio includes 27 iPhone and iPad titles available in the Apple App Store:
  - 16 paid apps (all children's program-based games)
  - 11 free apps (6 aggregator, 5 games)
  - 2.7MM downloads, 370k of which were paid
- Assuming a retail price point of $2.99 on PBS' paid apps, 370K downloads would generate:
  - $1.1MM in gross revenue
  - $0.8MM after a 30% cut to Apple or Google
  - $0.4MM after a 50% share to the IP owner
  - This equals ~$50K per app
- Development costs are between $50-$150K for smaller apps and as high as $350-$500K for larger app projects – additional maintenance costs are approx. 10% of dev. costs
- Today, apps are offered largely as a service to the public, not as a revenue generation opportunity though NPR has had some success with app sponsorships

Outlook

- Even as app revenues grow overall, we do not anticipate a significant net revenue opportunity given multiple dynamics:
  1. Consumer time and spend in apps is dominated by gaming that is not educational in nature; monetization of news and educational apps is limited
  2. Given low barriers to entry, apps stores are crowded with tens of thousands of developers and hundreds of thousands of apps, all vying for a relatively small pool of consumer and advertiser spending and attention
  3. IP owners are capturing the most benefit; distributors (e.g. PBS) share revenues both with IP owners and apps stores and are challenged to generate revenues to cover development costs on a consistent basis
  4. Public broadcasting has no existing competency in IP or software development; both required to capture the most upside from apps
  5. Like all hit-driven businesses, the risks are high and pay-outs uncertain; development costs are high
  6. Monetization models are still immature; e.g. small pools of ad spending
  7. Paid app revenue model does not create a continuing revenue stream after a one-time purchase however costs are on-going

Source: iTunes, PBS, NPR, Booz & Company analysis

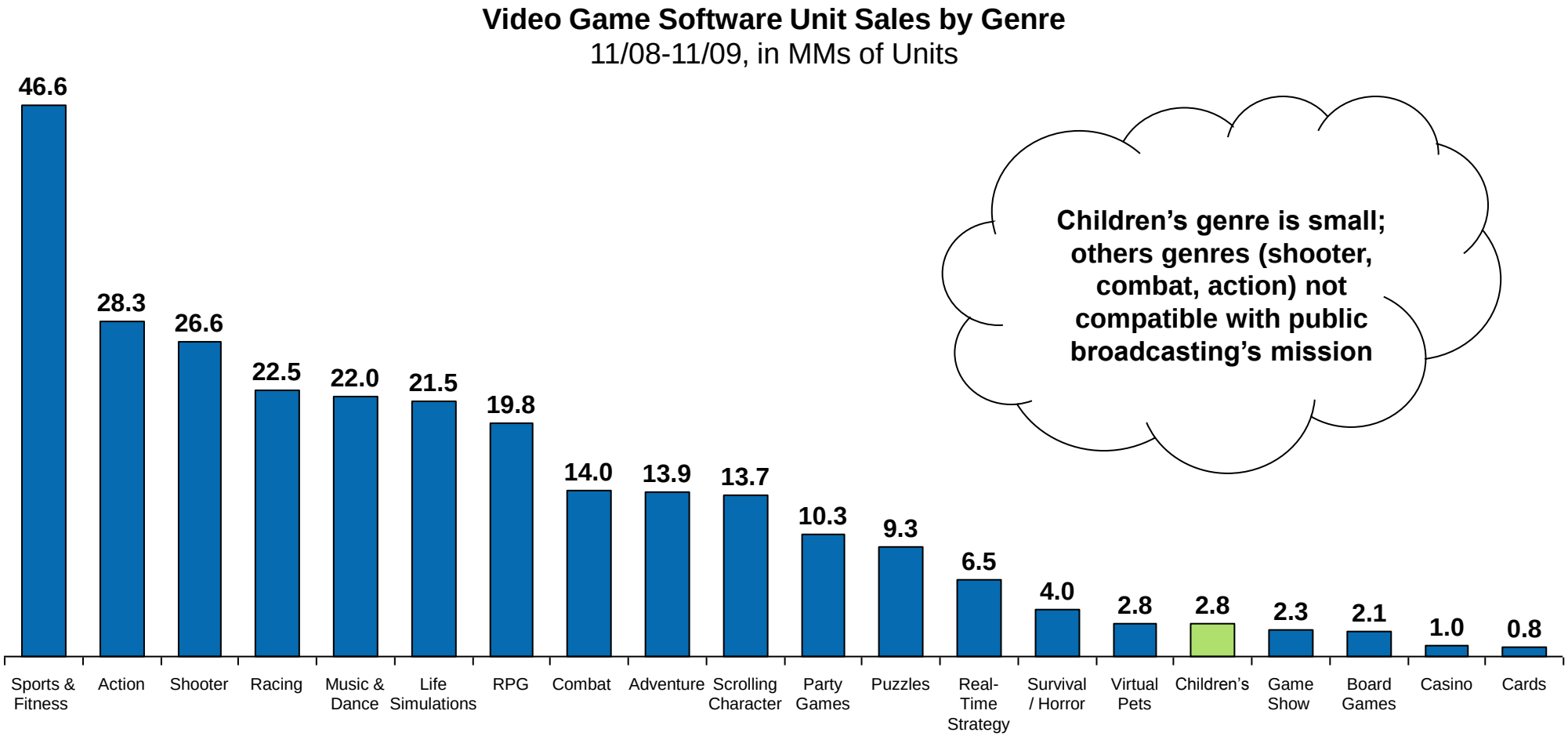
Gaming does not appear to be an attractive revenue opportunity given public broadcasting's audiences…

Revenue Potential Evaluation of Gaming Platforms for Public Broadcasting

Platform	Description & Examples	Evaluation of Fit with Public Broadcasting Audience
Console	▪ Games played on console and handheld platforms ▪ Action, Sports, Racing, Shooters, and Roll Playing games account for 75% of console game titles ▪ Popular consoles include Wii, PS3, and Xbox 360 ▪ Major developers include Activision and EA with game titles like Call of Duty and Madden NFL	▪ Educational & children's genres not popular on consoles ▪ Public broadcast audience is too young – the average age of a console gamer is 32 years old according to NPD Group ▪ Console gaming being cannibalized by and converging around mobile ▪ Development costs for games are high and likelihood of a hit is low
Social	▪ Online games that connect players through social networks such as Facebook ▪ Mobile devices and social networks are driving the rapid growth of "social gamers" ▪ Market currently dominated by Zynga: creator of Words with Friends, Farmville and Cityville	▪ Although the social gaming market is growing, public broadcasting's audience is too young to participate ▪ Social games are largely casual games – not compatible with mission ▪ High capital requirements – after adjusting for one-time stock-based compensation for its IPO, Zynga reported $352MM in 2011 in R&D expenses
PC	▪ Games played on computers with major offline gameplay – commonly includes online multiplayer ▪ Massive multiplayer online games (MMOGs) are popular on PC platforms ▪ World of Warcraft is the dominant MMOG ~10MM subscribers (though WofW subs declined in 2011)	▪ PC games, and particularly MMOGs, are played by more serious gamers and do not fit the demographic of public broadcasting audience ▪ PC gaming market is declining steadily as adopters opt for new platforms like mobile and social ▪ Educational and children's games are not popular on PC platform – about 50% of PC games fall into the strategy & role playing categories
Browser	▪ Games played online using web browser ▪ Browser gaming websites are popular channels ▪ Popular sites: Yahoo! Games and Newsground ▪ Notable games: Robot Unicorn Attack, Snood	▪ Games are casual and have limited educational functionality ▪ Browser-based games are being cannibalized by mobile app gaming ▪ Many current browser based games rely on Flash, which is not supported by popular mobile and tablet devices (i.e., iPhone, iPad)

Source: NPD Group, Zynga financial statements, Booz & Company analysis

…and educational mission



Source: NPD

Several specific case examples illustrate how public broadcasters provide educational services

ideastream (Cleveland)

- Provide instruction for Cleveland, state of Ohio and some out of state school systems and students
- Cost base of $1.5 MM has decreased from $3.5MM, due to cuts in funding from the state
- At present, almost 75% of funding comes from government sources
- Other organizations have entered the space increasing competition – universities, other arts organizations (e.g., Rock and Roll Hall of Fame) and private vendors
- Do not anticipate making a profit in these services – projected to lose over 10% on case base

KLVX Public Television (Las Vegas)

- Have 4 programs:
  - "Ready to Learn" teaching 95K kids/year through community events
  - Licensing of online content
  - PBS Teacher Line
  - Online high school used by 7/17 school districts in the state
- $4 MM/year in funding, provided by the state and school districts, but general station funds are needed to break even
- Audited by the state each year, and note that the state expects the service to remain non-profit and would reduce funding if a profit were generated

AETN (Arkansas Educational Television Network)

- Education is the forefront of the station's mission – it provides a number of educational services:
  - Internet delivered education for Arkansas schools
  - Free classroom-ready material
  - Adult and career educational services
- Rely heavily on strong and longstanding relationships with the state and governor's office – receive 40% of general operations funding directly from the state
- Receive an additional $3-$4MM/year to provide educators with on-line courses toward credits – service is free & operated on state funds

Source: Station Interviews

Introduction & Summary

Analyses by Area

Station Viability Analysis (Hamilton Place Update)

Executive Summary

- Hamilton Place Strategies (HPS) created a Station Viability model (SVM) that estimates station revenues & costs and assesses a station's risk level in the event of the elimination of federal appropriations in 2010 – in this model, high risk stations were defined as those with revenues less than $2.0MM (TV) and $0.3MM (Radio)
  - The data inputs to the model include station financial reports (e.g., AFR, FSR, SABS)
  - The model estimates future revenues / costs by calculating them off the most recent year's results

- Booz & Company has been asked to **verify, validate and update** the SVM for 2011; Booz has:
  - Thoroughly reviewed the model and have found no major issues with its structural integrity
  - Fully updated the model with 2010 station financial performance and worked with CPB to make a set of tactical changes that will make it easier to use going forward
  - Established new approaches around minimum operating cost threshold and station profitability in order to inform the number of stations at risk over a five-year period given a cut to CPB funding

- During our review and update of the model, we identified a set of important findings:
  - The model's forward-looking revenue assumptions were overly optimistic – assumption: 12%, actual growth: 6%
  - The model's assumptions around station risk and cost thresholds were set too low; we considered what it means to be a viable and productive station – minimum operating cost for a radio station is $315k and $2.6MM for a TV station
  - We also believe the model can be more useful by incorporating long-range planning and revenue/cost assumptions – beyond one year
  - Finally, we believe that examining the profitability of stations in conjunction with minimum operating cost threshold will help to inform the perspective on risk

Steps Taken for Model Update

In order to complete the validation, verification, and update of the Station Viability Model (SVM) from 2010 to 2011, we identified and accomplished the following steps:

- ✓ Understand the SVM and methodology via HPS documents, interviews with CPB, and extensive use of model
- ✓ Perform maintenance on the SVM via correction of broken links to remote source files
- ✓ Acquire and clean source data used in the model
- ✓ Identify, acquire, and clean necessary 2010 data sources and aggregate all relevant source data into single file
- ✓ Update model to include 2010 historical revenue and cost data using the following reports: 2010 AFR (Schedule A & E), 2010 FSR, 2010 TV SABS, 2010 Radio SAS, 2010 NPR Dues, and Fall 2010 Ethnicity by Grant Code
- ✓ Estimate new 2011 financial outlook per station using HPS approaches
- ✓ Highlight mechanical improvements of the model and work with CPB to implement agreed-upon changes
- ✓ Understand, evaluate, and improve minimum operating cost structures through new segmentations:
  - ✓ Minimum operating cost for TV stations that have at least 1 hour of local production a week
  - ✓ Minimum operating cost for radio stations that reach LI and CFSI goals
  - ✓ Minimum operating costs for TV and radio stations that broke even
- ✓ Evaluate, and improve projected revenue & cost changes and financial outlook (optimistic and pessimistic scenarios) to identify stations at risk
  - ✓ Utilize longer time period for analysis of historical revenue & costs in order to average out fluctuations
  - ✓ Incorporate effects of long-term factors such as revenue and cost trends, inflation, etc.
- ✓ Assess profitability per station and identify additional stations with poor year to year operating sustainability

Illustrative Overview of the Station Viability Model (SVM)

Data Source Files

- AFR Schedule A
- AFR Schedule E
- FSR
- TV SABS
- Radio SAS
- NPR Dues
- Arbitron Cume Data
- TV & Radio CSG Grantee Transmitter and Basic Info
- Radio Grantee Classification

Financial Model

- Pro forma for both rev & cost
- Data at the station level
- Separates revenue and costs into sub-categories
- Data derived largely from AFR & FSR reports

Expected Financial Performance

- Inputs and minimum operating costs by HPS analyzed and improved
- Based on historical performance and other long-term factors

Output

- Revenue and cost growth %s based on historical data used to calculate new financial outlook
- Identifies new high risk stations based on revised station min. operating cost

Go Forward Revenue & Cost Assumptions

From HPS

Cost Changes

Source	Change %	Stations Affected
Staff	-10%	All
Program	-10%	All
Tech	0%	All
Fund.		

From HPS

Revenue Changes

Source	Change %	Subgroup
Individual	5%	TV
	2%	Radio
Corporate	7%	TV
	6%	Radio
Other	2%	Only >0
University	-5%	All
State/Local	-5%	High-risk states
	-5%	Other states
Foundations	0%	State/Univ lic.
	0%	Comm/local
Recovery	12%	All

Minimum Station Requirements

From HPS

Cost Thresholds

Risk Levels	TV	Radio
High risk	$2.0 MM	$0.3 MM
Medium risk	$3.0 MM	$0.5 MM
Low risk	>$3.0 MM	>$0.5 MM

Logic of Station Viability Model

Category	Description	Booz Perspective
Structure	▪ Station-specific revenue and cost model ▪ Covers all TV and radio – independent and joint licensees ▪ Excel-based layout populated by station-specific financial and audience data ▪ Based on historical, audited data for base case with point estimate for future ▪ Model is short-term and does not account for cost inflation ▪ Model only provides one-year revenue and costs outlook estimates	▪ Develop a longer term financial model that incorporates factors such as inflation, long-term revenue trends, etc. ▪ Reorganize revenue and costs buckets in order to more accurately reflect current non-CPB funding/revenue – e.g., currently major gifts and capital gains revenue are not called out even though they remain a significant sources of total revenue
Historical Revenue	▪ Uses 10 buckets of revenue – e.g., CPB funding, Corporate, Fundraising, etc. ▪ Based on historical values from 2005 to 2010 ▪ "Other Revenue" calculated by subtracting highlighted buckets from total revenue – bucket includes capital gains, gifts and bequests, endowment, etc. ▪ "Other Federal Funding" includes funding from government agencies ▪ "Individual Revenue" only includes revenue from "memberships and subscriptions" – does not include rev from major and planned gifts, bequests	▪ Ensure model has mutually exclusive revenue buckets without overlap or double-counting ▪ "Major and planned giving, gifts and bequests" can be potentially separated from "Other Revenue" into its own category or can be incorporated into "Individual Revenue" ▪ Potentially isolate "Endowment Revenue" and "Gains from Investments" from "Other Revenue" bucket
Historical Costs	▪ Uses 8 buckets of costs – e.g., Programming & Production, SG&A, etc. ▪ Based on historical values with point estimates for future costs ▪ "Other Costs" calculated by subtracting highlighted buckets from total costs ▪ Cost inflation not accounted for due to short-term outlook for model – only provides one-year cost outlooks ▪ Local production costs are being double-counted in "Local Production" and "Programming and Production" buckets; same for "Program Acquisition/Dues" ▪ Local production costs for radio stations not included in the model – only TV	▪ Ensure model has mutually exclusive cost buckets ▪ Re-evaluate what is included in "Programming and Production" bucket –isolate "Local Production" and "Program Acquisition/Dues" ▪ Identify reason driving several "Other Cost" totals to be negative as the overlap of expenses caused by the usage of non-exclusive buckets
Revenue & Cost Estimates	▪ Uses 8 revenue changes – e.g., State/Local, Corporate, etc. ▪ Uses 3 cost changes – i.e., Staff, Programming, and Technology ▪ Revenue and costs point estimates for the future are based on prior studies and estimated changes to previous year revenues and costs ▪ Revenue and cost change percentages are informed by projections by historical analyses and prior reports	▪ Use historical financial data from a longer time period in order to average out fluctuations ▪ Develop a longer term financial model that incorporates factors such as inflation and revenue & cost trends to project medium and long-term financial viability of stations
Station Risk Profile	▪ Classifies stations into three risk buckets – low, medium, high ▪ For TV stations, risk levels are defined as: – High risk: less than $2MM in annual revenue – Medium risk: less than $3MM in annual revenue – Low Risk: greater than $3MM in annual revenue ▪ For radio stations, risk levels are defined as: – High risk: less than $0.3MM in annual revenue – Medium risk: less than $0.5MM in annual revenue – Low Risk: greater than $0.5MM in annual revenue	▪ Stations at risk should be determined by assessing: – Which cannot produce the minimum required amount of revenue – Which will suffer from poor profitability ▪ Minimum acceptable revenue levels should be determined as follows: – Historical financial performance (2001-2010) – Ability to meet LI and CFSI goals – Community involvement – local production hours vs. total costs ▪ Incorporating factors such as inflation, revenue and cost trends, and investment outlook will help depict minimum operating costs for a longer-term understanding of financial viability

Improvement Areas and Proposed Changes

Improvement Areas	Description of Improvement Areas
Revenue & Cost Inputs	▪ Use longer-term financial performance from (select periods in the last decade) to account for fluctuations ▪ Understand revenue and cost trends and drivers, inflation, and other long-term factors that may affect revenue and change percentages determined by analysis of historical financial performance ▪ Establish revised revenue and cost input changes in order to categorize stations into new risk levels
Risk Designation	▪ Establish groupings in order to evaluate minimum operating costs based on station characteristics, including local production hours, specific revenue and cost buckets, and break even (EBITDA) ▪ Understand and incorporate licensee types (e.g., community, university, etc.) and station characteristics (e.g., minority, rural, etc.) ▪ Determine the impact of lost CPB funding on profitability, and thereby viability and performance
Tactical Changes	▪ HPS used a different version of SABS 2008 data source for model; inconsistency affects “Program Acquisition” and “Local Production” costs but not overall “Programming & Production” cost bucket ▪ “Rev. from Other PBS station” mistitled–change to “Production Rev from other public broadcast stations” ▪ Several stations have changed call letters in the past few years – call letters often differ across reports ▪ Several stations vary between reporting AFR and FSR between years ▪ “Local Production” and “Program Acquisition/Dues” costs double counted in HPS model – both already included in “Program & Production,” which causes “Other Costs” to be negative in several instances ▪ “Other Revenue” bucket includes two sources over $100MM in revenue in 2010 data: “Capital Fund Contributions” and “Gifts and bequests from major individual donors”

Recreation of HPS methodologies using updated 2010 data

- We have recreated the following key HPS analysis methodologies using the updated model:

  ✓Revenue allocation – Radio

  ✓Revenue allocation – TV

  ✓Risk levels by station characteristics

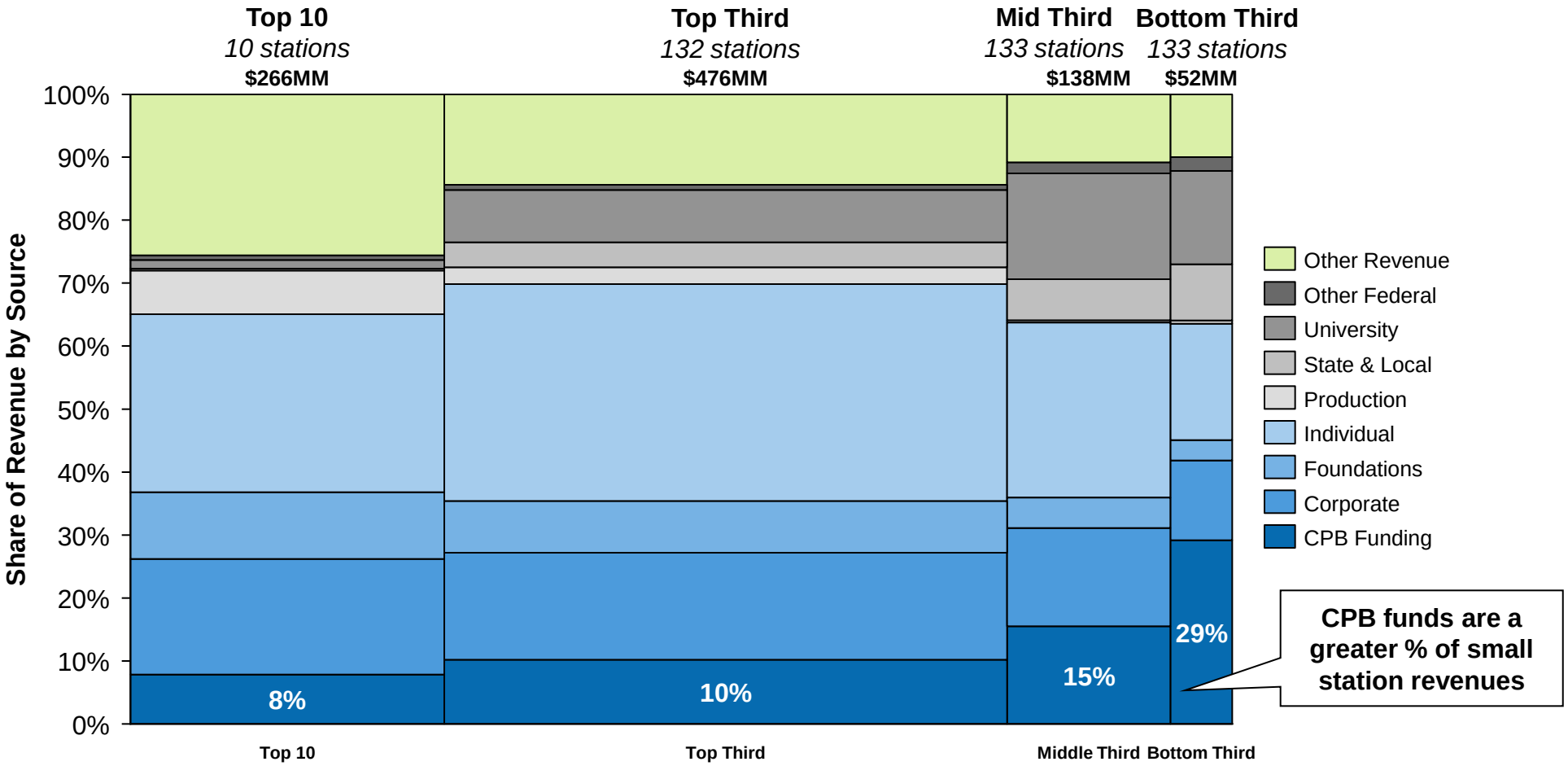
- We used the following data reports in order to complete the update and recreate these analyses: *AFR, FSR, SABS TV, SAS Radio, NPR Dues, Ethnicity by Grant Code, Radio Grantee Classification*

Revenue Allocation by Station Size and Revenue Source - Radio

Total Revenues for Radio: $0.9 billion

Based on HPS Methodology

Radio – Share of Revenue by Station Size (2010)



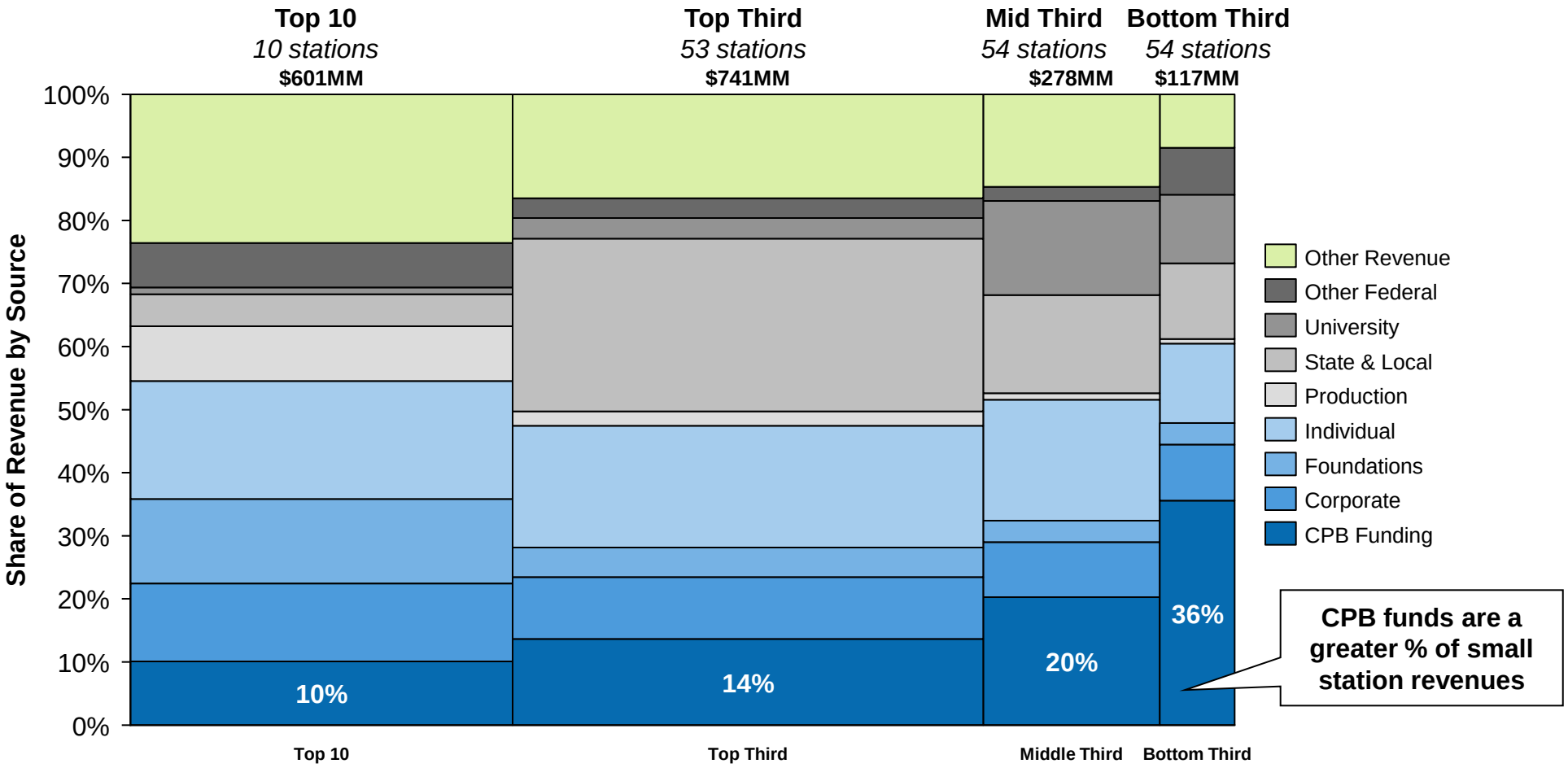
Source: AFR 2010, FSR 2010, HPS Study, Booz & Company analysis

Revenue Allocation by Station Size and Revenue Source - TV

Total Revenues for TV: $1.7 billion

Based on HPS Methodology

TV – Share of Revenue by Station Size (2010)



Source: AFR 2010, FSR 2010, HPS Study, Booz & Company analysis

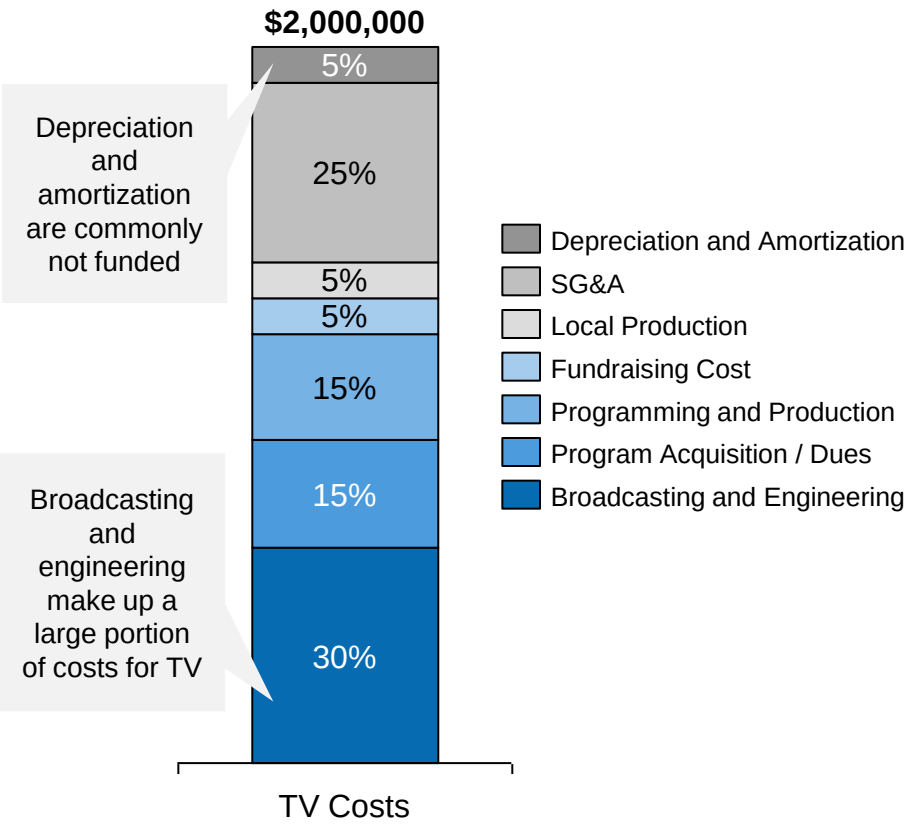
Station Viability Model: Revenue Projection Update for 2011

Revenue Category		2009 Rev Actuals [$MM]	SVM 2010 (based on HPS April 2011 work)		2010 Rev Actuals [$MM]	SVM 2011 (w/ HPS April 2011 growth rates)	
			Growth [%]	2010 Proj. Rev [$MM]		Growth [%]	2011 Proj. Rev [$MM]
Individual	Radio	$277	2.0%	$283	$287	2.0%	$293
	TV	$332	5.0%	$348	$324	5.0%	$340
Corporate	Radio	$160	6.0%	$170	$158	6.0%	$168
	TV	$209	7.0%	$223	$181	7.0%	$194
Foundation	Radio	$76	0.0%	$76	$75	0.0%	$75
	TV	$131	0.0%	$131	$129	0.0%	$129
State / Local	Radio	$39	-5.0%	$37	$33	-5.0%	$32
	TV	$343	-5.0%	$326	$290	-5.0%	$276
University	Radio	$77	-5.0%	$73	$74	-5.0%	$71
	TV	$88	-5.0%	$84	$85	-5.0%	$81
Other	Radio	$114	2.0%	$116	$156	2.0%	$159
	TV	$200	2.0%	$204	$315	2.0%	$321
Production Revenue	Radio	$36	0.0%	$36	$32	0.0%	$32
	TV	$122	0.0%	$122	$73	0.0%	$73
Other Federal	Radio	$7	0.0%	$7	$9	0.0%	$9
	TV	$73	0.0%	$73	$81	0.0%	$81
One-time Incr. Recovery	Radio	$0	12.0%	$103	$0	0.0%	$0
	TV	$0	12.0%	$207	$0	0.0%	$0
SUBTOTAL	Radio	$786	14.6%	$901	$824	1.8%	$839
	TV	$1,498	14.7%	$1,718	$1,478	1.2%	$1,495
CPB	Radio	$79	-100.0%	$0	$106	-100.0%	$0
	TV	$277	-100.0%	$0	$260	-100.0%	$0
TOTAL	Radio	$865	4.2%	$901	$930	-9.8%	$839
	TV	$1,775	-3.2%	$1,718	$1,738	-14.0%	$1,495

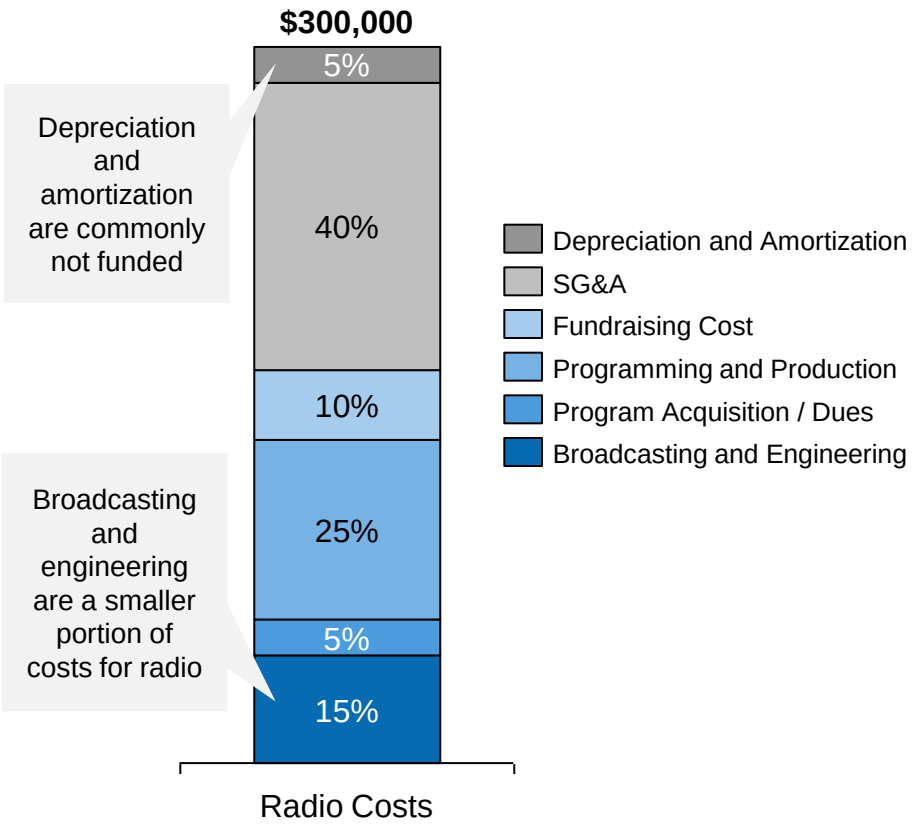
Note: Station Viability Model 2010 revenue estimates are calculated using HPS growth percentages from April 2011 work
Station Viability Model 2011 estimates use HPS's April 2011 growth percentages
Source: AFR, FSR, HPS Study, Booz & Company analysis

HPS Methodology for Minimum Operating Cost Structure – TV & Radio

Minimum Operating Costs – TV



Minimum Operating Costs – Radio



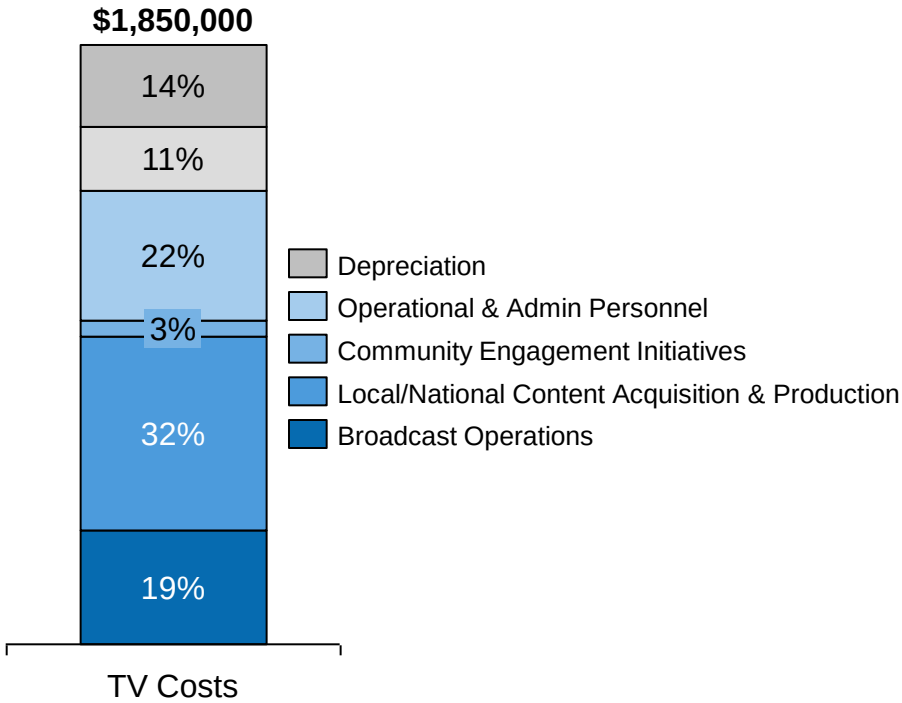
Note: Local production for radio is included in the Programming and Production budget
Source: SABS, AFR & FSR Statements, interviews

Internal CPB Methodology for Minimum Operating Cost Structure – TV Only

CPB Internal Analysis – TV only

Category	Min. Cost	% of Stations Greater than Minimum
Broadcast Operations	$350K	93%
Local/National Content Acquisition & Production	$600K	95%
Community Engagement Initiatives	$50K	92%
Operational & Admin Personnel	$400K	94%
Development/Underwriting	$200K	94%
Total Operational Costs	$1,600K	97%
Depreciation	$250K	-
Total Cost	$1,850K	96%
Estimated Station personnel	17	96%

Minimum Operating Costs – TV



- Internal CPB analysis is largely based on current state of "most stations" and depicts "what is needed to maintain current state"
- Analysis is noted as not including qualitative factors
- Majority of "local/national content acquisition and production costs " lies in content acquisition from PBS – only ~$100K allotted is necessary for local production of content in a year according to analysis
- Estimated cost for a station to acquire one hour of PBS national content is only ~$100, while cost per hour for local production is well over $1,000
- Internal CPB analysis of minimum operating costs for radio stations has not been performed

Source: CPB

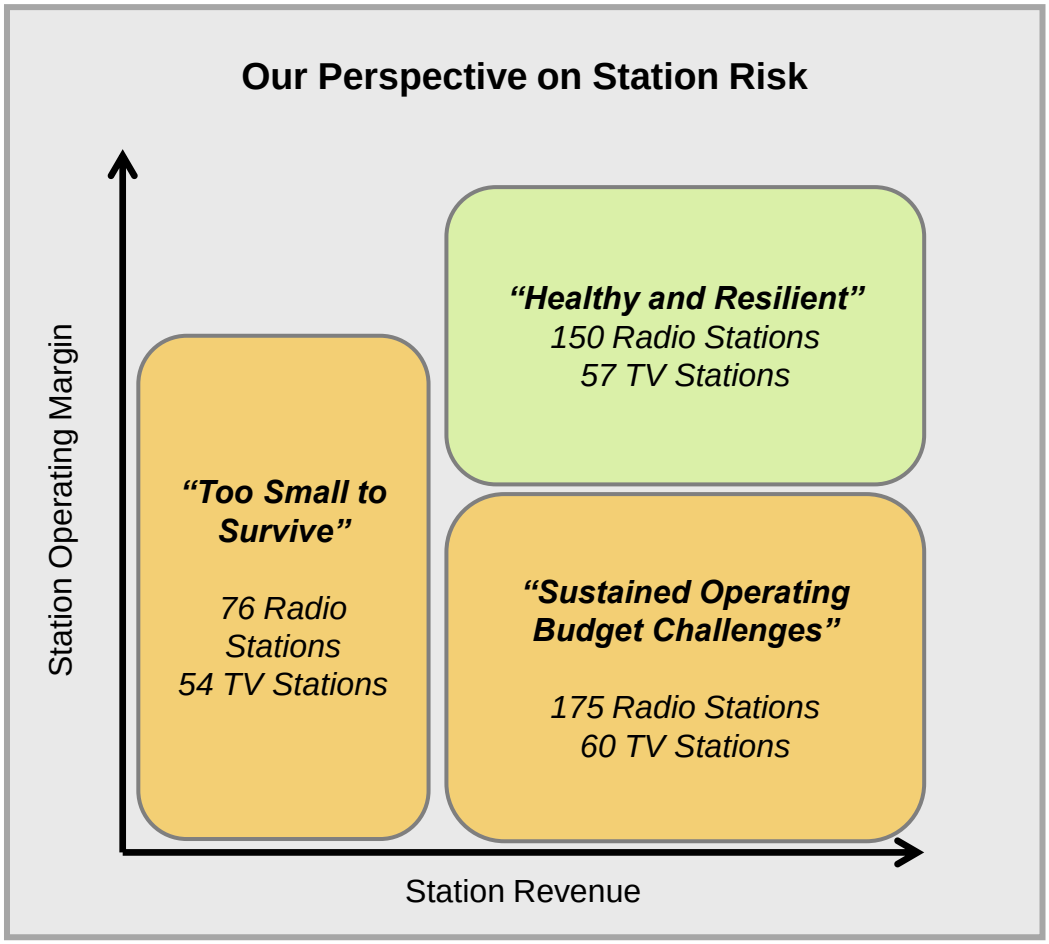
Station Viability Model Output – Analysis of Stations at Risk Due to Low Revenue

This table shows the number of stations at each risk level for 2010 and 2011 using HPS assumptions

	Stations by Risk Level – 2010 and 2011					
	Revenue Critically Low *TV: Less than $2.0 MM* *Radio: Less than $0.3 MM*		**Revenue Challenged** *TV: $2.0 MM - $3.0 MM* *Radio: $0.3 MM - $0.5 MM*		**Revenue "Sufficient"** *TV: Greater than $3.0 MM* *Radio: Greater than $0.5 MM*	
Projected Year	**2011** (Based on 2010 Financial Data)	**2010** (Based on 2009 Financial Data)	**2011** (Based on 2010 Financial Data)	**2010** (Based on 2009 Financial Data)	**2011** (Based on 2010 Financial Data)	**2010** (Based on 2009 Financial Data)
Total Stations	**97**	**99**	**71**	**74**	**410**	**414**
Rural (Radio Only)	34	43	33	23	95	97
Minority (Radio Only)	28	28	14	11	32	36
Sole Service (Radio Only)	10	11	2	3	2	0
Other	25	15	22	37	281	281
TV	38	33	18	22	115	118
Radio	59	66	53	52	295	296
Total Viewers (TV)	1.6MM	1.5MM	1.4MM	1.6MM	38.0MM	42.7MM
Local Hours Produced (TV)	7K	6K	3.23K	3K	35K	33K
Local Hours Produced (Radio)	77K	300K	83K	253k	581K	1.1MM
Individual Revenue	$10.7MM	$8MM	$12.1MM	$16MM	$588.4MM	$586MM
Total Non-CPB Revenue	$52.4MM	$46.6MM	$55.2MM	$64.8MM	$2.2B	$2.2B

Source: AFR, FSR, HPS Study, Booz & Company analysis

We have assessed station risk in the event of a hypothetical elimination of CPB funding by focusing on sustainability and size



Discussion

- Station viability, in the context of public broadcasting's mission, relies upon:
  - Being able to fund a minimal level of operating costs
  - Being profitable enough over the long term to offer quality programming, including local programming/ community engagement
- In this context, Booz & Co has adjusted the SVM approach in the following manner:
  1. Adjusted the threshold for minimum operating cost
  2. Assessed station viability given this minimum operating cost for an extended period
  3. Reviewed station profitability to identify those stations who would be particularly challenged to adjust given the loss of CPB funding

Source: Booz & Company analysis

Updated Approach for Minimum Operating Costs for Station Viability

- The earlier analysis focused on the economic viability of station; our analysis also incorporates consideration of what is necessary to advance the mission of public broadcasting at the local level

- Given the difficulty of evaluating the contribution of stations, we used multiple approaches to develop our perspective

- In our analysis of minimum operating costs, we incorporated three additional factors:

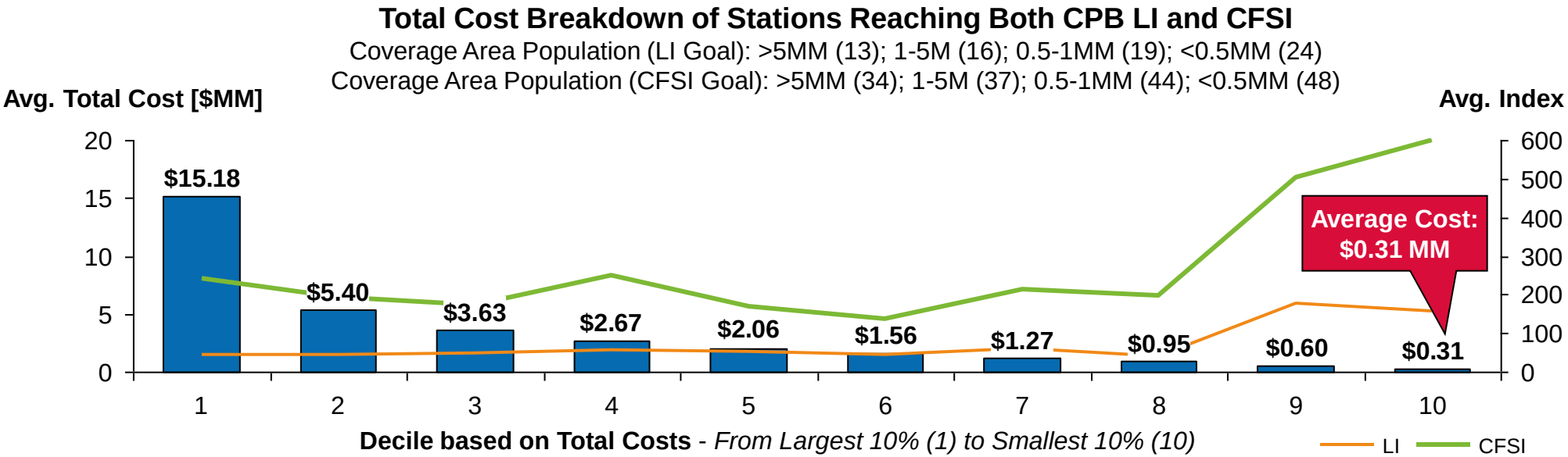
  1. Local Production Hours vs. Total Costs (TV)

  2. Total Cost of Stations that Achieve CPB's LI and CFSI Goals (Radio)

  3. Total Cost vs. Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) (TV & Radio)

- The minimum operating costs are based on empirical evidence of the current cost structure of stations; it does not consider restructuring of station operations into joint operating groups to reduce costs

Total Cost of Stations that Reach both the LI and CFSI - Radio

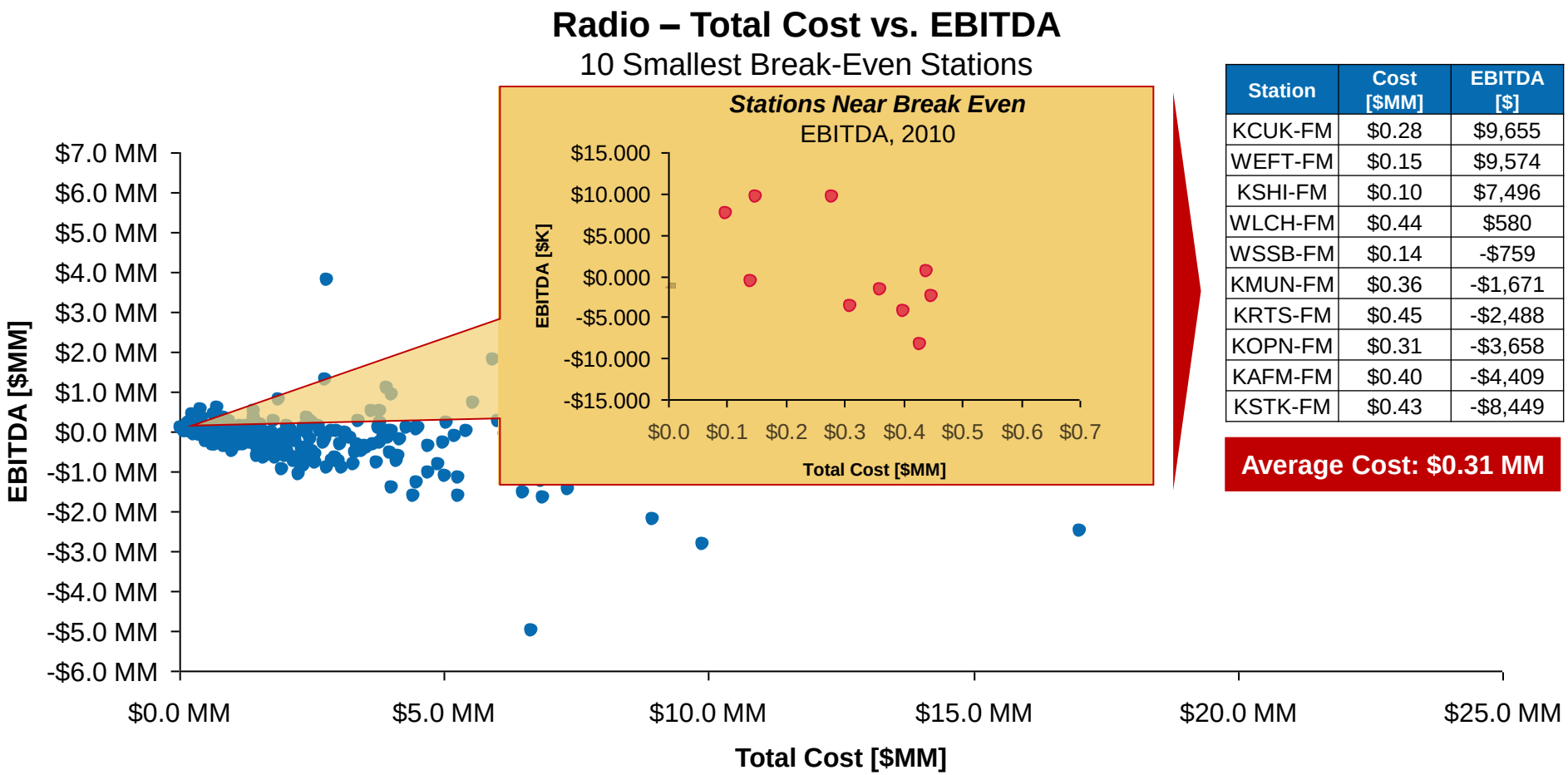


# of Stations	24	24	24	24	24	24	24	24	24	**25**
Avg. Total Costs ($M)	$15.18	$5.40	$3.63	$2.67	$2.06	$1.56	$1.27	$0.95	$0.60	**$0.31**
Max. Total Cost ($M)	$57.18	$6.85	$4.03	$3.02	$2.41	$1.69	$1.45	$1.08	$0.75	**$0.47**
Min. Total Cost ($M)	$6.88	$4.03	$3.05	$2.42	$1.69	$1.46	$1.09	$0.77	$0.48	**$0.13**
Min. Total Cost Station	WHRV-FM	WXXI-FM	WOI-FM	WJCT-FM	WYSO-FM	WTEB-FM	KIWR-FM	KAXE-FM	KDNK-FM	**KZMU-FM**

Note: Stations that did not have AQH (Arbitron) or Coverage Area Population reported were not included in this analysis; CFSI includes revenue from foundations, corporate, individual, auction, etc.
CPB also allows "minority" stations to only meet ½ of applicable index – this qualification has not been included in this analysis
Community Financial Support includes revenue from foundations, corporate, memberships & subscriptions, major & planned giving, friends groups, auction, and special fundraising activities

Source: AQH Build & Comp, CAP Build & Comp, Station Financial Data (AFR 2010 and FSR 2010), Booz & Company analysis

Total Cost vs. EBITDA - Radio



Station	Cost [$MM]	EBITDA [$]
KCUK-FM	$0.28	$9,655
WEFT-FM	$0.15	$9,574
KSHI-FM	$0.10	$7,496
WLCH-FM	$0.44	$580
WSSB-FM	$0.14	-$759
KMUN-FM	$0.36	-$1,671
KRTS-FM	$0.45	-$2,488
KOPN-FM	$0.31	-$3,658
KAFM-FM	$0.40	-$4,409
KSTK-FM	$0.43	-$8,449

Average Cost: $0.31 MM

Note: WNYC-FM (Cost: 47.7MM, EBITDA: +$6.3MM) and KSJN-FM (Cost: $57.2MM, EBITDA: -$1.4 MM) have been identified as outliers and not included in the larger graph
Selected stations include the ten smallest stations for whom EBITDA was within $10K of break even in 2010
Source: AFR Schedule A 2010, AFR Schedule E 2010, FSR 2010, Booz & Company analysis

Local Production Hours vs. Total Costs – TV

TV - Local Production Hours per week vs. Total Costs

Percentile based on local production hours per station, 2010

		Weekly Local Production Hrs					Licensee Type				Grantee Classification				
Decile	Stations *Total: 171*	Avg. [hrs]	Max [hrs]	Min [hrs]	Avg. Total Cost [$MM]	Min. Total Cost [$MM]	Comm.	Local Authority	State	Univ.	Rural	Sole Provider	Minority	HBCU	Native
10%	17	22.7	92.6	9.6	$15.8	$1.8	7	2	5	3	0	0	0	0	0
20%	17	8.1	9.2	7.1	$12.0	$1.4	7	1	4	5	0	0	0	0	0
30%	17	6.1	7.0	5.2	$17.6	$2.0	9	1	2	5	0	0	0	0	0
40%	17	4.6	5.1	3.9	$9.3	$1.5	9	1	2	5	0	0	0	0	0
50%	17	3.3	3.8	2.7	$7.3	$1.9	7	1	2	7	0	0	0	0	0
60%	17	2.4	2.6	2.3	$7.2	$1.7	10	0	0	7	0	0	0	0	0
70%	17	1.9	2.2	1.7	$5.9	$2.0	7	1	2	7	0	0	0	0	0
80%	17	1.5	1.7	1.2	$17.0	$2.4	11	1	1	4	0	0	0	0	0
90%	17	1.0	1.2	0.7	$7.8	$1.8	12	0	0	5	0	0	0	0	0
100%	18	0.4	0.7	0.0	$10.2	$1.0	8	0	1	9	0	1	0	0	0

The average local production cost per hour is $4,000[2]

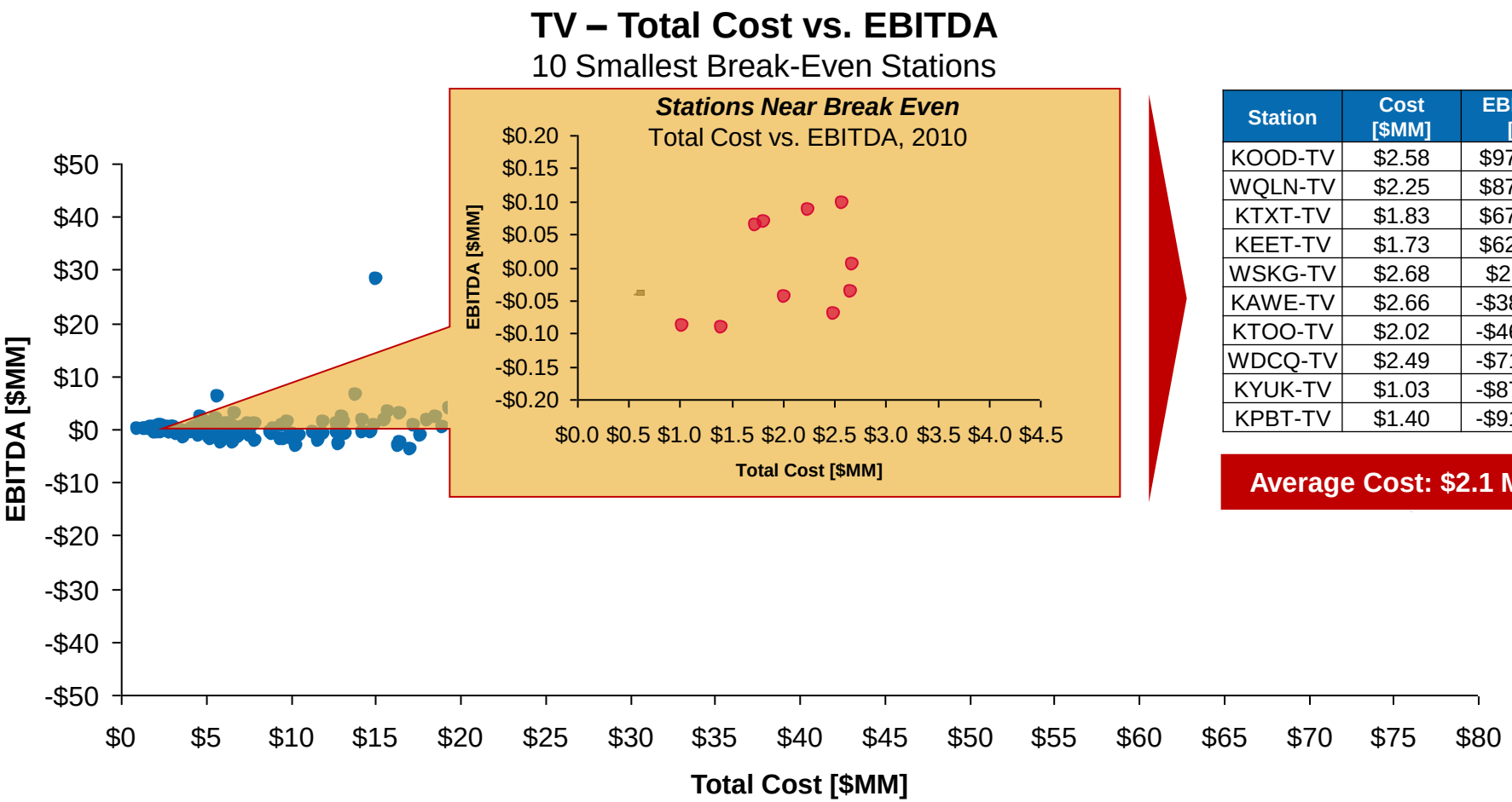
Stations that Produce at least 1 Hr. of Local Content per Week

KOZK-TV	Total Cost: $2.8 MM	Hrs/yr: 52
WBCC-TV	Total Cost: $2.9 MM	Hrs/yr: 57
KWCM-TV	Total Cost: $2.4 MM	Hrs/yr: 63
KOOD-TV	Total Cost: $2.6 MM	Hrs/yr: 88
KRSC-TV	Total Cost: $2.2 MM	Hrs/yr: 90

Average Cost: $2.6 MM[1]

1) Estimate calculated by taking the average the total cost of TV stations with the lowest costs that reported between 50 to 90 hours of 2010 local production
2) Average of middle 50% of local production cost/hour used in calculation; top 25% and bottom 25% removed from consideration
Source: SABS TV 2010, AFR Schedule E 2010, FSR 2010, Booz & Company analysis

Total Cost vs. EBITDA - TV



Station	Cost [$MM]	EBITDA [$]
KOOD-TV	$2.58	$97,398
WQLN-TV	$2.25	$87,462
KTXT-TV	$1.83	$67,698
KEET-TV	$1.73	$62,785
WSKG-TV	$2.68	$2,839
KAWE-TV	$2.66	-$38,080
KTOO-TV	$2.02	-$46,073
WDCQ-TV	$2.49	-$71,878
KYUK-TV	$1.03	-$87,763
KPBT-TV	$1.40	-$91,726

Average Cost: $2.1 MM

Note: WGBH-TV (Total Cost: $173.4MM; EBITDA:-$42.4MM) and WNET-TV (Total Cost: $155.4MM; EBITDA: -$1.6MM) have been identified as outliers and not included in the larger graph
Selected stations include the ten smallest stations for whom EBITDA was within $100K of break even in 2010

Source: AFR Schedule A 2010, AFR Schedule E 2010, FSR 2010, Booz & Company analysis

Summary: Minimum Operating Costs Analysis

Radio – Minimum Operating Costs

HPS and Booz Estimates

Methodology	Minimum Operating Costs [$MM]
Hamilton Place Strategies	$0.30 MM
CPB Internal	N/A[1]
Minimum total costs with stations that reach LI and CFSI goals	$0.31 MM
Minimum revenue for break even stations	$0.31 MM

Booz Radio Minimum Operating Cost Estimate (2010):
$0.31 MM

TV – Minimum Operating Costs

HPS, CPB, and Booz Estimates

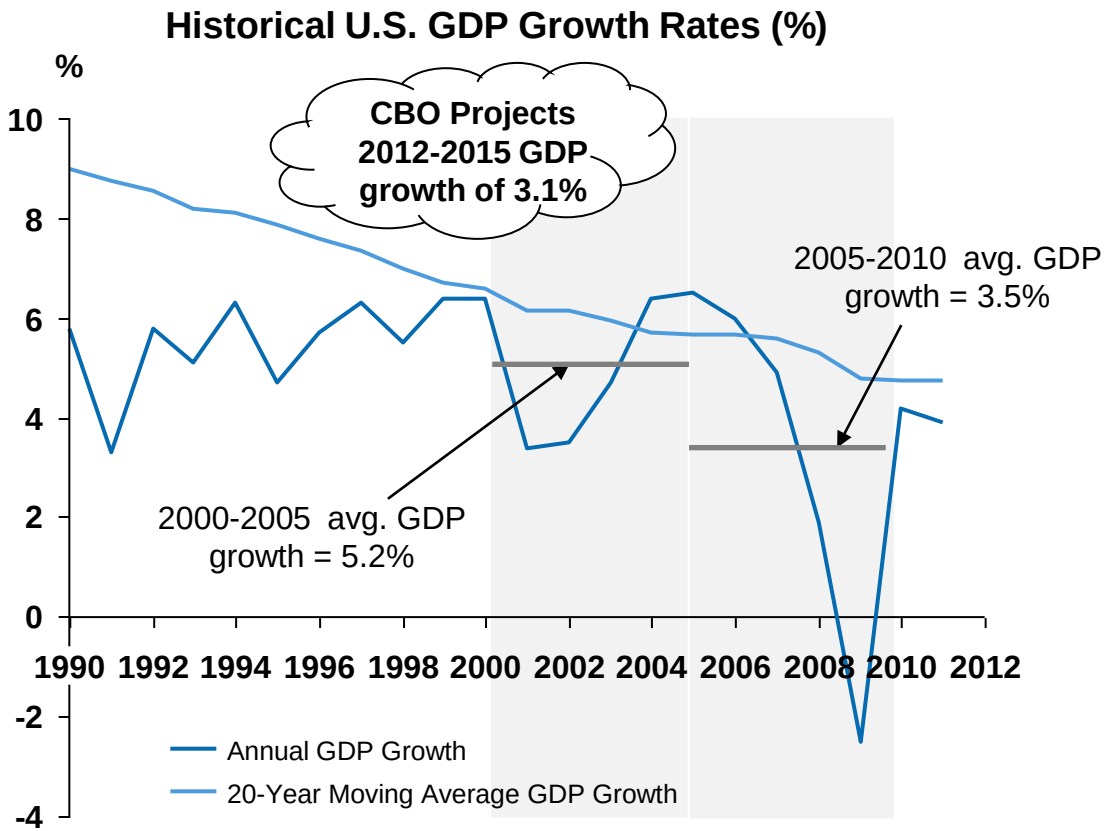
Methodology	Minimum Operating Costs [$MM]
Hamilton Place Strategies	$2.0 MM
CPB Internal	$1.85 MM
Minimum total costs with at least one hour of local programming	$2.6 MM
Minimum revenue for break even stations	$2.1 MM

Booz TV Minimum Operating Cost Estimate (2010):
$2.35 MM

2011-2015 minimum operating costs are based on 2010 analysis and adjusted for expected cost increases

1) An internal CPB estimate for Minimum Operating Costs of radio stations was not calculated along with that for TV stations
Source: CPB, HPS, Booz & Company analysis

Selection of Comparable Historical Periods for Longer Term Projections



Discussion

- Long-term projection of station viability requires that station-level financials be assessed using projected revenue and cost changes
- An overview of the historical U.S. GDP growth rates reveals suitable proxies for optimistic and pessimistic 2011-2015 revenue growth projections:
  - **Optimistic:** 2000-2005 CPB revenue CAGRs = 2.2% (5.1% for radio and 0.5% for TV)
  - **Pessimistic:** 2000-2005 CPB revenue CAGRs = 0.4% (2.3% for radio and -0.8% for TV)
- Costs are less volatile and more controllable, therefore the same cost projection has been used in both scenarios, representing the overall period of 2000-2010
- Costs for CPB-supported stations grew by an average of 2.7% (1.1% for TV and 5.8% for radio) in 2000-2010

Source: U.S. Bureau of Economic Analysis, Booz & Company analysis

Station Viability Model: Revenue Projection Update for 2011

Revenue Category		2009 Rev Actuals [$MM]	SVM 2010 (based on HPS April 2011 work)		2010 Rev Actuals [$MM]	SVM 2011 (w/ HPS April 2011 growth rates)	
			Growth [%]	2010 Proj. Rev [$MM]		Growth [%]	2011 Proj. Rev [$MM]
Individual	Radio	$277	2.0%	$283	$287	2.0%	$293
	TV	$332	5.0%	$348	$324	5.0%	$340
Corporate	Radio	$160	6.0%	$170	$158	6.0%	$168
	TV	$209	7.0%	$223	$181	7.0%	$194
Foundation	Radio	$76	0.0%	$76	$75	0.0%	$75
	TV	$131	0.0%	$131	$129	0.0%	$129
State / Local	Radio	$39	-5.0%	$37	$33	-5.0%	$32
	TV	$343	-5.0%	$326	$290	-5.0%	$276
University	Radio	$77	-5.0%	$73	$74	-5.0%	$71
	TV	$88	-5.0%	$84	$85	-5.0%	$81
Other	Radio	$114	2.0%	$116	$156	2.0%	$159
	TV	$200	2.0%	$204	$315	2.0%	$321
Production Revenue	Radio	$36	0.0%	$36	$32	0.0%	$32
	TV	$122	0.0%	$122	$73	0.0%	$73
Other Federal	Radio	$7	0.0%	$7	$9	0.0%	$9
	TV	$73	0.0%	$73	$81	0.0%	$81
One-time Incr. Recovery	Radio	$0	12.0%	$103	$0	0.0%	$0
	TV	$0	12.0%	$207	$0	0.0%	$0
SUBTOTAL	Radio	$786	14.6%	$901	$824	1.8%	$839
	TV	$1,498	14.7%	$1,718	$1,478	1.2%	$1,495
CPB	Radio	$79	-100.0%	$0	$106	-100.0%	$0
	TV	$277	-100.0%	$0	$260	-100.0%	$0
TOTAL	Radio	$865	4.2%	$901	$930	-9.8%	$839
	TV	$1,775	-3.2%	$1,718	$1,738	-14.0%	$1,495

Note: SVM 2010 revenue estimates are calculated using HPS growth percentages from April 2011 work
SVM 2011 estimates use HPS's April 2011 growth percentages
Source: AFR, FSR, HPS Study, Booz & Company analysis

Revenue Projection Scenarios – 2011 through 2015

Revenue Projections – 2011-2015

					Optimistic Scenario				Pessimistic Scenario			
		'00-'05 CAGR [%]	'05-'10 CAGR [%]	Est. '11 Rev [$MM]	2012 [$MM]	2013 [$MM]	2014 [$MM]	2015 [$MM]	2012 [$MM]	2013 [$MM]	2014 [$MM]	2015 [$MM]
Individual	Radio	7.8%	1.5%	$302	$326	$351	$378	$408	$306	$311	$315	$320
	TV	0.3%	-2.6%	$328	$329	$330	$330	$331	$319	$311	$303	$295
Corporate	Radio	5.4%	0.9%	$169	$178	$188	$198	$209	$171	$172	$174	$176
	TV	-2.9%	-5.0%	$173	$168	$163	$158	$154	$164	$156	$148	$141
Foundation	Radio	10.2%	5.7%	$82	$90	$99	$109	$120	$86	$91	$96	$102
	TV	5.3%	3.4%	$118	$124	$131	$138	$145	$122	$126	$130	$135
State / Local	Radio	3.4%	-2.3%	$35	$36	$37	$39	$40	$34	$33	$33	$32
	TV	0.4%	-2.0%	$268	$269	$270	$271	$272	$263	$257	$252	$247
University	Radio	4.1%	-2.4%	$62	$65	$68	$70	$73	$61	$59	$58	$57
	TV	-1.3%	-1.2%	$64	$63	$62	$62	$61	$63	$63	$62	$61
Other	Radio	2.2%	13.5%	$152	$156	$159	$163	$166	$173	$196	$223	$253
	TV	-1.8%	3.3%	$276	$271	$266	$261	$257	$285	$294	$304	$314
Production	Radio	11.3%	7.1%	$40	$44	$49	$55	$61	$43	$46	$49	$53
	TV	3.3%	-5.3%	$94	$97	$100	$104	$107	$89	$84	$80	$76
Investment	Radio	3.6%	-2.0%	$41	$43	$45	$47	$50	$43	$45	$47	$50
	TV	1.0%	9.9%	$67	$71	$74	$78	$82	$71	$74	$78	$82
Other Federal	Radio	12.9%	5.8%	$10	$11	$13	$14	$16	$10	$11	$12	$12
	TV	6.6%	6.2%	$98	$104	$111	$118	$126	$104	$110	$117	$124
CPB	Radio	7.6%	1.5%	$102	$0	$0	$0	$0	$0	$0	$0	$0
	TV	6.6%	3.1%	$247	$0	$0	$0	$0	$0	$0	$0	$0
Total	Radio	6.3%	3.0%	$994	$949	$1,009	$1,074	$1,143	$927	$965	$1,007	$1,053
	TV	0.7%	-0.5%	$1,732	$1,496	$1,507	$1,520	$1,534	$1,479	$1,476	$1,474	$1,474

2010-2011 Revenue calculated using available station financial data, with the exception of investment (~85% of total stations reported)

Calculated using 2000-2005 revenue CAGRs (with the exception of investment)

Calculated using 2005-2010 revenue CAGRs (with the exception of investment)

Note: Investment CAGRs assumed to be 5% for both radio and TV for the years 2011 through 2015

Source: AFR, FSR, Booz & Company analysis

Optimistic View – Analysis of Stations that Would Not Meet Minimum Revenue Thresholds if CPB Funding is Lost

This table shows the number of high-risk stations using updated assumptions

	2011 to 2015 Risk Analysis					
	HPS 2011	Booz 2011	Booz 2012	Booz 2013	Booz 2014	Booz 2015
High Risk Threshold - TV	***<$2.0MM***	***<$2.38MM***	***<$2.40MM***	***<$2.43MM***	***<$2.45MM***	***<$2.48MM***
High Risk Threshold - Radio	***<$0.30MM***	***<$0.33MM***	***>$0.35MM***	***>$0.37MM***	***>$0.39MM***	***>$0.41MM***
Total Stations	**97**	**130**	**131**	**131**	**134**	**135**
Rural (Radio Only)	34	45	46	46	47	47
Minority (Radio Only)	28	33	33	33	34	34
Sole Service (Radio Only)	10	11	11	11	11	11
Other	25	41	41	41	42	43
TV	38	54	54	54	56	57
Radio	59	76	77	77	78	78
Total Viewers (TV) - [MM]	1.6	2.7	2.7	2.7	3.0	3.0
Total Listeners (Radio) - [MM]	0.1	0.2	0.2	0.2	0.2	0.2
Local Hours at Risk (TV) - [000s]	7.4	10.5	10.5	10.5	10.7	10.9
Local Hours at Risk (Radio) - [000s]	77.1	99.3	99.9	99.9	101.7	101.7

Minimum Operating Cost Est. for 2010
TV: $2.35 MM; Radio: $0.31 MM
2011-2015 minimum operating costs are based on 2010 baseline and adjusted for cost increase by using the weighted cost CAGR of overall costs from 2000-2010

Source: AFR, FSR, Radio & TV Grantee Classification, Booz & Company analysis

Pessimistic View – Analysis of Stations that Would Not Meet Minimum Revenue Thresholds if CPB Funding is Lost

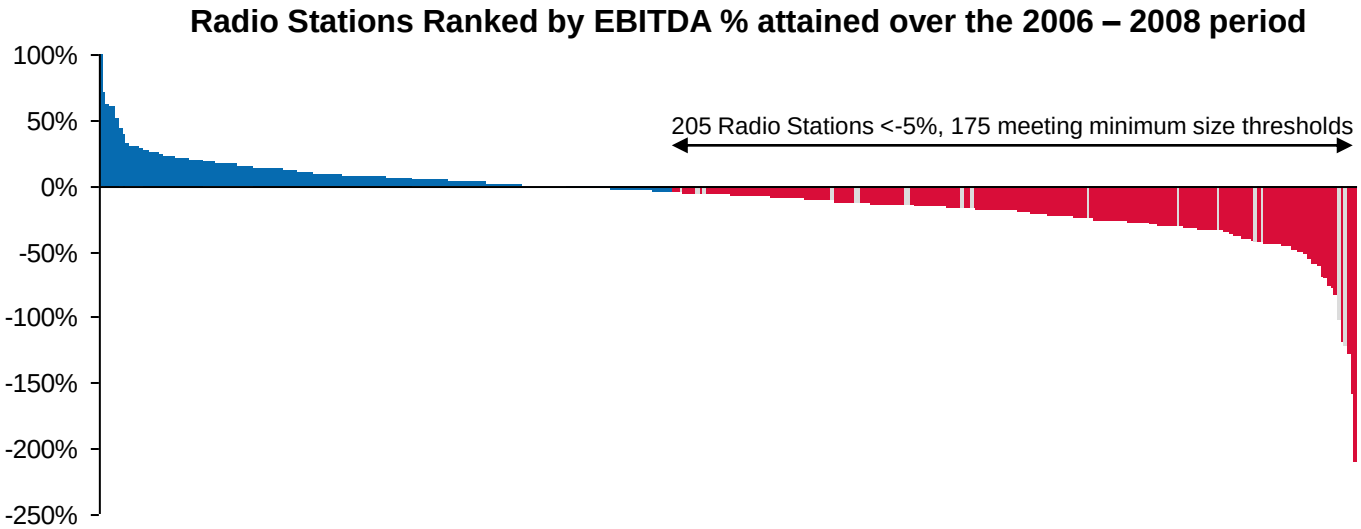
This table shows the number of high-risk stations using updated assumptions

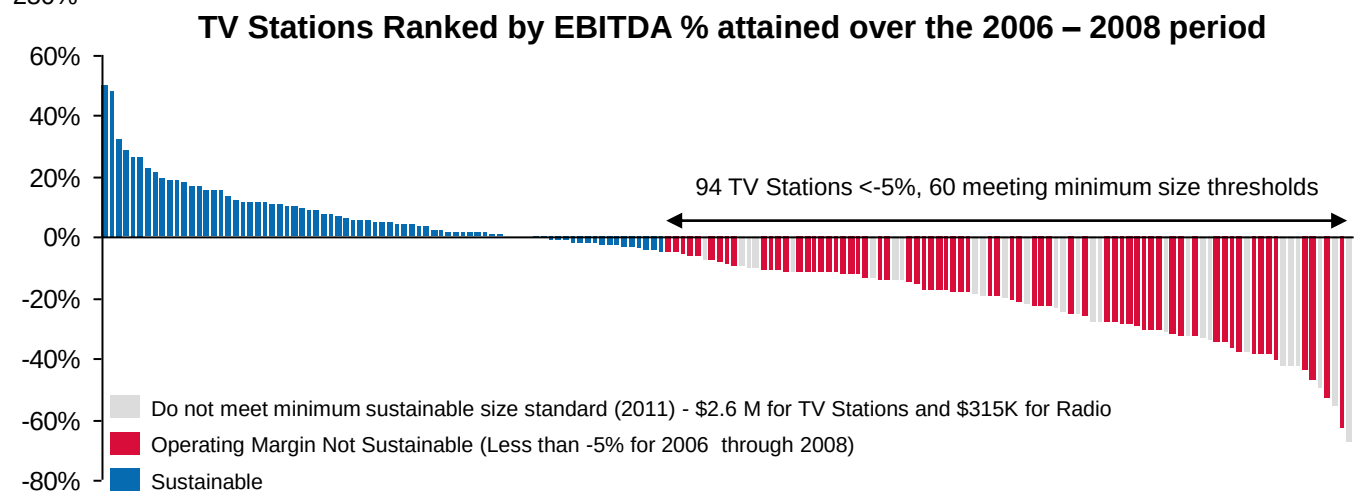
	2011 to 2015 Risk Analysis					
	HPS 2011	Booz 2011	Booz 2012	Booz 2013	Booz 2014	Booz 2015
High Risk Threshold - TV	***<$2.0MM***	***<$2.38MM***	***<$2.40MM***	***<$2.43MM***	***<$2.45MM***	***<$2.48MM***
High Risk Threshold - Radio	***<$0.30MM***	***<$0.33MM***	***>$0.35MM***	***>$0.37MM***	***>$0.39MM***	***>$0.41MM***
Total Stations	**97**	**130**	**133**	**143**	**147**	**152**
Rural (Radio Only)	34	45	47	51	51	55
Minority (Radio Only)	28	33	34	36	36	36
Sole Service (Radio Only)	10	11	11	11	11	11
Other	25	41	41	45	49	50
TV	38	54	54	58	58	59
Radio	59	76	79	85	89	93
Total Viewers (TV) - [MM]	1.6	2.7	2.7	3.1	3.1	3.2
Total Listeners (Radio) - [MM]	0.1	0.2	0.2	0.2	0.4	0.4
Local Hours at Risk (TV) - [000s]	7.4	10.5	10.5	10.7	10.7	10.9
Local Hours at Risk (Radio) - [000s]	77.1	99.3	101.7	106.1	117.2	124.8

Minimum Operating Cost Est. for 2010
TV: $2.35 MM; Radio: $0.31 MM
2011-2015 minimum operating costs are based on 2010 baseline and adjusted for cost increase by using the weighted cost CAGR of overall costs from 2000-2010

Source: AFR, FSR, Radio & TV Grantee Classification, Booz & Company analysis

There are a large number of additional stations that face sustained operating budget challenges, irrespective of their size



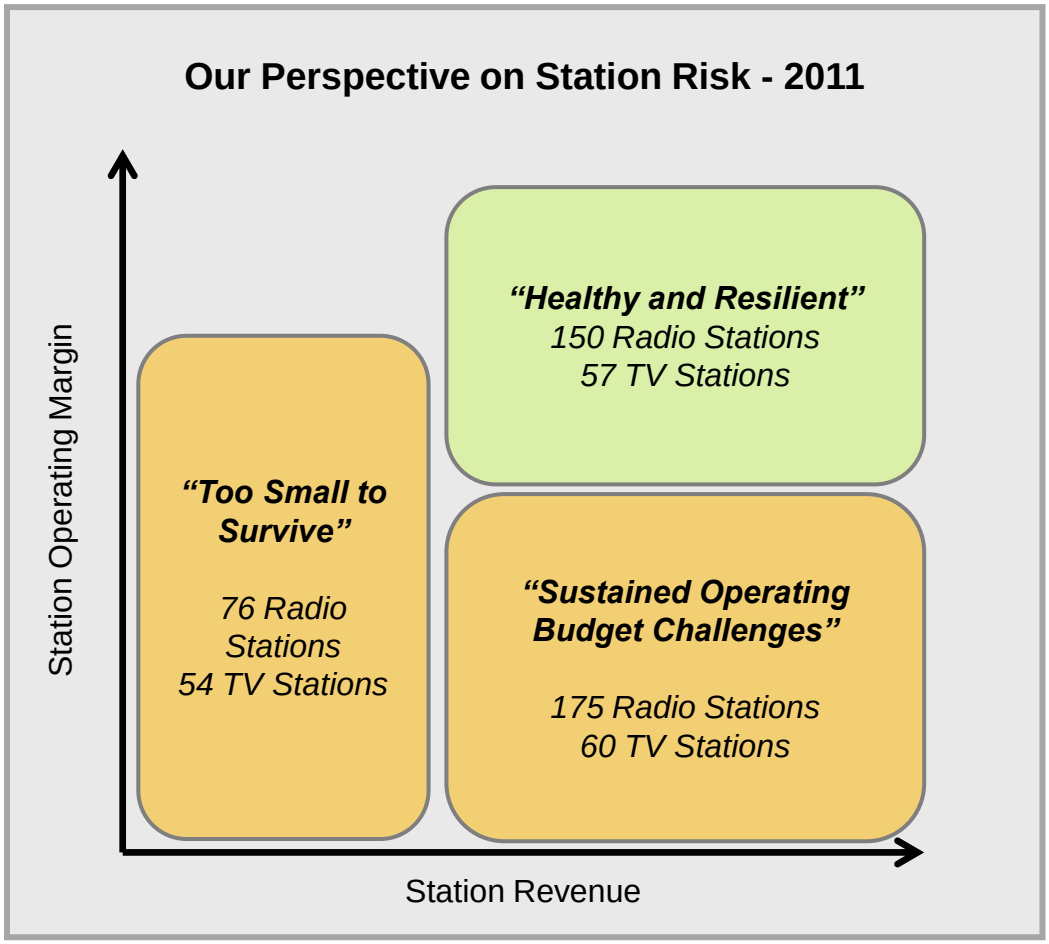


Source: AFR, FSR, Booz & Company analysis

Discussion

- Radio and TV stations with sustained annual budget challenges demonstrate an inability to either raise additional funds or cut costs further
- Irrespective of their size, the effectiveness of such stations would be significantly damaged if CPB funding were cut – local programming would have to be dramatically reduced or the station may have to shut down
- 94 TV stations and 205 Radio stations sustained overall operating deficits of more than 5% over the 2006 through 2008 period
- Of these, 60 TV stations and 175 radio stations meet the minimum size thresholds
- Therefore, these stations represent additional potential impacts of CPB budget reduction or elimination

In summary, CPB funding cuts could result in closure or significantly reduced effectiveness for two thirds of funded stations



Summary of Results

- A reduction or elimination of CPB funding will put a 63% (251) of radio stations and 67% (114) of television stations in the public broadcasting system at risk:
  - 19% (76) of radio stations and 32% (54) of TV Stations that currently operate at a minimum practical cost level, and would be at a high risk of closing
  - 44% (175) of radio stations and 35% (60) of TV stations have a history of operating deficits and would suffer reduced effectiveness or closure under increased financial pressure
- These numbers are expected to increase over time:
  - Under an **optimistic** scenario, an additional 3 TV stations and 2 radio stations would not be able to cover minimum practical costs in 2015
  - Under a **pessimistic** scenario, an additional 5 TV stations and 17 radio stations would not be able to cover minimum practical costs in 2015

Source: AFR, FSR, Booz & Company analysis

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