Contents

Mapping Digital Media ..................................................................................................................... 4

Executive Summary ........................................................................................................................... 6

Context ............................................................................................................................................. 11

Social Indicators ............................................................................................................................... 12

Economic Indicators .......................................................................................................................... 14

1. Media Consumption: The Digital Factor .................................................................................... 15
   1.1 Digital Take-up .................................................................................................................. 15
   1.2 Media Preferences ............................................................................................................ 20
   1.3 News Providers .................................................................................................................. 25
   1.4 Assessments ...................................................................................................................... 31

2. Digital Media and Public or State-Administered Broadcasters .............................................. 32
   2.1 Public Service and State Institutions .............................................................................. 32
   2.2 Public Service Provision .................................................................................................... 38
   2.3 Assessments ...................................................................................................................... 43

3. Digital Media and Society .......................................................................................................... 44
   3.1 User-Generated Content (UGC) ....................................................................................... 44
   3.2 Digital Activism .................................................................................................................. 48
   3.3 Assessments ...................................................................................................................... 51
4. Digital Media and Journalism
   4.1 Impact on Journalists and Newsrooms
   4.2 Investigative Journalism
   4.3 Social and Cultural Diversity
   4.4 Political Diversity
   4.5 Assessments

5. Digital Media and Technology
   5.1 Broadcasting Spectrum
   5.2 Digital Gatekeeping
   5.3 Telecommunications
   5.4 Assessments

6. Digital Business
   6.1 Ownership
   6.2 Media Funding
   6.3 Media Business Models
   6.4 Assessments

7. Policies, Laws, and Regulators
   7.1 Policies and Laws
   7.2 Regulators
   7.3 Government Interference
   7.4 Assessments

8. Conclusions
   8.1 Media Today
   8.2 Media Tomorrow

9. Recommendations
   9.1 Policy
   9.2 Media Law and Regulation
   9.3 Public Service in the Media

List of Abbreviations, Figures, Tables, Companies
Mapping Digital Media

The values that underpin good journalism, the need of citizens for reliable and abundant information, and the importance of such information for a healthy society and a robust democracy: these are perennial, and provide compass-bearings for anyone trying to make sense of current changes across the media landscape.

The standards in the profession are in the process of being set. Most of the effects on journalism imposed by new technology are shaped in the most developed societies, but these changes are equally influencing the media in less developed societies.

The Mapping Digital Media project, which examines the changes in-depth, aims to build bridges between researchers and policymakers, activists, academics and standard-setters across the world. It also builds policy capacity in countries where this is less developed, encouraging stakeholders to participate and influence change. At the same time, this research creates a knowledge base, laying foundations for advocacy work, building capacity and enhancing debate.

The Media Program of the Open Society Foundations has seen how changes and continuity affect the media in different places, redefining the way they can operate sustainably while staying true to values of pluralism and diversity, transparency and accountability, editorial independence, freedom of expression and information, public service, and high professional standards.

The Mapping Digital Media project assesses, in the light of these values, the global opportunities and risks that are created for media by the following developments:

- the switch-over from analog broadcasting to digital broadcasting;
- growth of new media platforms as sources of news;
- convergence of traditional broadcasting with telecommunications.

Covering 60 countries, the project examines how these changes affect the core democratic service that any media system should provide—news about political, economic and social affairs.
The Mapping Digital Media reports are produced by local researchers and partner organizations in each country. Cumulatively, these reports will provide a much-needed resource on the democratic role of digital media.

In addition to the country reports, the Open Society Media Program has commissioned research papers on a range of topics related to digital media. These papers are published as the MDM Reference Series.
Mapping Digital Media: United States
Executive Summary

The media environment in the United States is undergoing a significant transition. The switchover from analog to digital broadcasting was delayed, but occurred without significant incident. However, media economics are in turmoil and the continuing digitization of news and information will only further challenge traditional models of media and journalism.

Terrestrial, over-the-air television has shrunk to less than 15 percent of households, due to consumers’ embrace of pay-TV services including cable, satellite, and IPTV. Cable continues to be the dominant form of reception but has competition from satellite television and the more recent emergence of IPTV. Though feared by cable providers, “cord-cutting”—whereby cable television subscribers switch to internet-based video services and content—has not yet occurred on the scale expected.

Broadcast network news from ABC, CBS and NBC that once commanded an overwhelming share of the television audience each lost between one and two million viewers over the past five years, as part of an overall decline in audience size of almost 20 percent since 2005. Nevertheless, they have not been completely abandoned by viewers and still command a total of 21 million viewers.

Traditional print newspapers have suffered even sharper declines than broadcast television. Daily print circulation fell by over 31 percent between 2003 and 2009. Some daily newspapers have moved to primarily or even exclusively online. The Christian Science Monitor, the Seattle Post-Intelligencer, and the Detroit News/Free Press have either abandoned or scaled back their print activities. The loss of revenue does not necessarily mean a loss of audience: many users still get their news from major papers via search engines, RSS readers and other digital aggregation methods.

While local and national television channels remain the most used news sources, the internet is now the third most popular platform for daily news after local and national television. More than 25 percent of adults in the U.S. now commonly access the internet via cell phones and personal digital assistants (PDAs), and some 33 percent of cell phone internet users check news regularly on their devices.
Perhaps the most significant change in news consumption over the past five years is the migration of consumers to the increasingly partisan reporting provided by cable news networks. However, much of the programming that airs on networks such as Fox News and MSNBC—particularly in primetime—does not meet traditional definitions of news. It might be better categorized as “public affairs” programming, given that it primarily involves comment on events, without original reporting.

Even so, along with the demographic segmentation of news audiences across different platforms, the overall time spent consuming news seems to be increasing. Research suggests that this increase is driven largely by the changing behavior of middle-aged consumers who essentially now actively integrate new media platforms into their news consumption.

Digital news outlets have changed the total news offer on a number of levels. Online political news and information sources such as Politico, The Daily Caller, Talking Points Memo, and the Huffington Post have become influential on a national scale. In an increasing number of cases, online news and information sources break stories that are then picked up and amplified by the mainstream media.

Both online comment systems and the blogosphere can and do serve as a “check and balance” on news organizations. New forms of reporting online, such as database journalism and news visualizations, let journalists take advantage of the vast amount of data, often available from official sources, to engage in rigorous investigative reporting.

At the same time, digitization has led to a far less profitable, more competitive and fragmented news environment. This has led to common criticisms of a lowering of the standards and practices associated with reporting. While research has yet to deliver a clear verdict and may never do so effectively, it is clear that online news and information platforms continue to remain highly dependent on news gathering and reporting by newspapers.

It is also clear that the proliferation of free or cheap news sources online is counterbalanced by the costs to consumers associated with maintaining digital or mobile connectivity and access to up-to-date devices and technology, as well as the time and trouble it takes users to master digital literacy skills. These factors contribute to a “digital divide” (and a new, rising “app gap”) in news consumption, which disproportionately affects communities of low income, low literacy, or both.

Financial investment in investigative reporting at major newspapers and broadcast networks has declined steadily over the past two decades. Though this fall-off in investigative capacity has had a tremendous impact on what is covered, digitization has also had a positive impact in terms of crowdsourcing and Computer-Assisted Reporting (CAR). ProPublica has emerged as a leader in both of these techniques, winning Pulitzer Prizes in 2010 and 2011. The Center for Public Integrity recently launched iWatch News, a portal for investigative reports that often feature data-driven, interactive, and multiplatform elements. The Public Insight Network, a database that acts as a platform to connect journalists with knowledgeable sources, appears to be a particularly robust and useful addition to the landscape. There are signs that transparency has become
increasingly important as an overriding value in journalism—a counterbalance to standards of “objectivity” that have come under fire by critics.

In short, the digital transition has created new opportunities for innovative forms of investigative journalism while undermining the economic foundation that has supported traditional producers of investigative and local public accountability journalism. The net effect remains unclear.

Many more voices are heard today in political and policy discourse thanks to new and digital platforms. Social media sites have come to play an important role for political organizing, fundraising, and mobilization. Facebook technology is now embedded into many major platforms and thus tailors news far beyond the Facebook.com URL. New platforms such as the Huffington Post and Townhall.com have achieved considerable reach for both progressive and conservative writers alike. Activists are now embedding digital processes more deeply in the methods of community organizing. Highly visible and influential forms of digital activism—not just in election campaigns but in mobilizing volunteer efforts after natural disasters and for social causes—demonstrate that communities have the potential to create media and communicate in ways never before imagined.

The pursuit of viable business models to sustain public-interest journalism in a digital environment has yielded mixed results. The re-examination of non-profit alternatives has led to interesting initiatives in the margins of news production. It is an unfortunate fact that the local news institutions and newspapers most under threat from the collapse of traditional journalistic business models have initially struggled to embrace many of these pioneering forms of networked, collaborative reporting.

By and large, digital policy-making has been market-driven. Policymakers have not taken a proactive stance toward the transition, interpreting it rather as justification for scaling back existing regulatory systems (e.g. the case of media ownership). Regulatory activities directed at preserving and promoting competition, free and independent news production, diversity, and pluralism in the digital space have yet to emerge in any meaningful sense. Unlike what has taken place in Europe, non-linear online content remains outside the scope of all content regulation.

This is consistent with the overall picture of U.S. media regulation over the past decade, which has been defined by increasing politicization in terms of both digital and non-digital platforms. The Federal Communications Commission (FCC)—the primary agency for regulating communications—comprises five commissioners, no more than three of whom may be associated with the same political party. The commissioners are appointed by the President and confirmed by the Senate. The political party that controls the White House will populate the FCC with three commissioners (including the Chairman). Members of the other party occupy the two remaining positions. Not surprisingly, when votes are split at the FCC they almost always break along party lines.

Few if any impartial observers would conclude that there are any meaningful mechanisms in place to insulate regulators from external political forces. In this regulatory vacuum, the recent and ongoing mergers in
the commercial media and telecommunications industries threaten to permit a small group of powerful commercial gatekeepers to control the future path of communications policy and infrastructure development.

The primary mechanism by which government has shaped the media markets has been through ownership regulation. Media ownership regulations have been reduced over time. The prevailing logic within the FCC has been that, given the increasing use of the internet and other new media, it makes ever less sense to restrict ownership concentration in traditional media such as radio, television, and newspapers. Not surprisingly, ownership diversity in these media sectors has declined.

Many of the imbalances in terms of minority ownership and employment that have characterized the traditional media are replicated in the new media space. Even in new media spaces such as the blogosphere, the patterns of underrepresentation of various demographic groups that have long characterized the traditional media still persist. Ethnic media, though weathering the economic downturn relatively well, have been slower than their mainstream media counterparts to move into the digital realm.

The 2010 merger to create Comcast–NBC may usher in additional mega mergers between content companies and telecommunication providers. The proposed merger between AT&T and T-Mobile would leave the cellphone network provider market in the hands, for the most part, of two providers. This raises issues of cost, diversity of content and ownership, editorial bias, and fears of censorship.

With respect to minority programming, there are no regulatory requirements related to quotas or coverage. Indeed, in the current news environment, few regulatory controls exist except on public broadcasting—which is mandated to be balanced, subsidizes coverage on topics of concern to particular ethnic minorities, and is closely scrutinized by advocates on all sides.

The immediate future looks very unsettled. The open internet rules, only very recently implemented, face court challenges from both sides of the debate and could be overturned. With spectrum policy intertwined with budget deficit reduction discussions, there is less focus on innovative uses of spectrum such as unlicensed and opportunistic access that open the airwaves to the public and all innovators.

Broadband adoption has slowed, and roll-out of fiber to the home networks by the leading telecommunications companies has effectively stopped. Despite the recent fiscal stimulus spending on “middle mile” and adoption efforts, affordable access to broadband of sufficient speed is an issue and is likely to continue to be a tremendous challenge in rural areas.

The FCC has very recently embarked on a process to update the way commercial broadcasters report the on the fulfilment of their public interest obligations. Public media are innovating rapidly in radio, but continue to labor under the threat of the elimination of their budgetary appropriation by Congress. Community media are growing with new online hyper-local outlets but their more traditional arm of public access television faces challenges. A bright spot is the anticipated licensing of additional low power stations as a result of the recently passed Local Community Radio Act.
Sustaining policies that continue to support tools and media that best enable the way we find, create, and share knowledge will be a hard struggle. Moreover, as the U.S. enters what will almost certainly be a very contentious election cycle, where digital activism associated and unassociated with political parties will increasingly prevail, the remaking of U.S. media will undoubtedly be tested.

In this context, this report calls for policies to promote greater media diversity and protect and promote the public’s voice through the enforcement of open internet rules, the allocation of spectrum to unlicensed and other innovative uses, an expansion of the universal service fund to broadband and the broadening of entities that can receive it. In order to strengthen commercial media, the newly proposed public interest obligation reporting rules need to be implemented. Increased public and philanthropic funding for both public and community media is needed. In today’s political context, many of these recommendations are a tall order. However, all are necessary if the United States is to develop the diverse media that will support democracy and the information needs of its communities.
Context

With over 300 million inhabitants, the United States is the world’s third-largest country by land mass and population. Those who speak only English make up slightly more than 80 percent of the population, with Spanish speakers making up approximately 12 percent of the population. The vast majority of people live in urban centers.

Its economy of US$14 trillion ranks as the second largest in the world and, though hit hard by the economic crisis of 2008, it has stabilized over the past year. More than 70 percent of citizens are considered by the census as white and around 12 percent as African American. Persons of Hispanic or Latino origin represent 16.3 percent of the total U.S. population. A small minority of Native Americans, approximately 1 percent, are outnumbered by Asian immigrants, who make up almost 5 percent.
Social Indicators

Population (number of inhabitants): 308.74 million
Number of households: 116.8 million

*Figure 1.*
Rural/urban breakdown (% of total population)

- Rural: 21%
- Urban: 79%


*Figure 2.*
Ethnic composition (% of total population)

- White: 72.4%
- Black or African American: 12.6%
- Asian: 4.8%
- American Indian and Alaska native: 0.9%
- Native Hawaiian and other Pacific Islander: 0.2%
- Other race: 6.2%
- Two or more races: 2.9%

*Note:* Hispanics may be of any race, so they are included in all race categories as reported. Persons of Hispanic or Latino origin represent 16.3 percent of the total U.S. population. Persons who are not Hispanic represent 83.7 percent of the total U.S. population.

**Figure 3.**
Linguistic composition (% of total population)

- Speaks only English: 82.0%
- Asian and Pacific Islander: 2.7%
- Other Indo-European: 0.7%
- Spanish-speaking: 10.2%
- Other Indo-European: 3.8%


**Figure 4.**
Religious composition (% of adult population)

- Christian: 76.0%
- Muslim: 0.6%
- Other religions: 1.6%
- Buddhist: 0.5%
- Jewish: 1.2%
- Refused to reply to question: 5.2%
- No religion specified (atheist, agnostic, no religion): 15.0%
- Asian and Pacific Islander: 2.7%
- Other Indo-European: 0.7%
- Spanish-speaking: 10.2%
- Other Indo-European: 3.8%

Economic Indicators

Table 1.
Economic indicators

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP (current prices), total in US$ billion①</td>
<td>12,638</td>
<td>13,399</td>
<td>14,062</td>
<td>14,369</td>
<td>14,119</td>
<td>14,624</td>
<td>15,157</td>
<td>15,825</td>
<td>16,526</td>
<td>17,268</td>
</tr>
<tr>
<td>GDP (current prices), per capita in US$②</td>
<td>42,680</td>
<td>44,822</td>
<td>46,577</td>
<td>47,155</td>
<td>45,934</td>
<td>47,131</td>
<td>48,387</td>
<td>50,040</td>
<td>51,762</td>
<td>53,574</td>
</tr>
<tr>
<td>Gross National Income (GNI), per capita, current US$③</td>
<td>44,620</td>
<td>46,240</td>
<td>46,700</td>
<td>47,580</td>
<td>46,360</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Unemployment (% of total labor force)④</td>
<td>5.0</td>
<td>4.6</td>
<td>4.6</td>
<td>5.8</td>
<td>9.2</td>
<td>9.7</td>
<td>9.5</td>
<td>8.8</td>
<td>8.0</td>
<td>7.3</td>
</tr>
<tr>
<td>Inflation (average annual rate in % against previous year)⑤</td>
<td>3.6</td>
<td>2.1</td>
<td>4.0</td>
<td>0.6</td>
<td>1.9</td>
<td>0.5</td>
<td>1.2</td>
<td>1.4</td>
<td>1.6</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Note: n/a = Not available.
Figures for 2010–2014 are estimates.

---

④ IMF, World Economic Outlook Database.
⑤ IMF, World Economic Outlook Database.
1. Media Consumption: The Digital Factor

1.1 Digital Take-up

1.1.1 Digital Equipment and Literacy

There are many ways to acquire news and information these days in the United States. Television, radio, and print have been supplemented by digital platforms—including online news, email, cell phone/smartphone platforms, social networking/Twitter, and RSS feeds. According to a survey by the Pew Research Center, television and radio are still major news sources for Americans but digital platforms are playing a larger role in news consumption. The internet is now the third most popular platform for daily news after local television and national television.\(^6\)\(^7\)

---


7. K. Purcell et al., *Understanding the Participatory News Consumer*. 
### Table 2.
Households owning equipment in the United States, 2005–2010

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TV sets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of HH ('000)</td>
<td>109,600</td>
<td>110,200</td>
<td>111,400</td>
<td>112,800</td>
<td>114,500</td>
<td>114,900</td>
</tr>
<tr>
<td>% of HH</td>
<td>98.2</td>
<td>98.2</td>
<td>98.2</td>
<td>98.9</td>
<td>98.9</td>
<td>98.9</td>
</tr>
<tr>
<td><strong>Radio sets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of HH ('000)</td>
<td>109,900</td>
<td>110,500</td>
<td>110,500</td>
<td>115,600</td>
<td>116,700</td>
<td>116,362</td>
</tr>
<tr>
<td>% of HH</td>
<td>99.0</td>
<td>99.0</td>
<td>99.0</td>
<td>99.0</td>
<td>99.0</td>
<td>99.0</td>
</tr>
<tr>
<td><strong>PCs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of HH ('000)</td>
<td>75,572</td>
<td>66.0</td>
<td>77,895</td>
<td>68.1</td>
<td>81,439</td>
<td>72.5</td>
</tr>
<tr>
<td>% of HH</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

**Note:** HH = Households; n/a = not available.

Television and radio percentages are based on Nielsen estimates of number of households, not annual current population surveys from the U.S. Census Bureau; radio figures in 2009 and 2010 are assumed to be what they were in earlier years; PCs: the current population survey of the U.S. Census Bureau stopped collecting data about computers in homes in 2003.

#### 1.1.2 Platforms

The American audience acquires a signal over the air, via analog cable, digital cable, satellite, and Internet Protocol television (IPTV); and, for the past few years, via online video platforms. ABC, CBS, and NBC, the three largest private television networks, used to garner 90 percent of the U.S. television audience market with free-to-air broadcasting. However, terrestrial television has shrunk to only 11 percent, a small portion of market share, after the rapid spread of pay-TV services including cable television, satellite television, and, more recently, IPTV.

---

11. Estimated as a static percentage of the population in the absence of other factors affecting ownership.
12. Estimated as a static percentage of the population in the absence of other factors affecting ownership.
17. Current population survey of the U.S. Census Bureau stopped collecting data about solely computers in homes in 2009.
Even though the U.S. completed its switch-over from analog to digital broadcasting on 12 June 2009, audiences have not significantly shifted from pay-TV to over-the-air broadcasting networks. Analog cable continues to be the dominant form of television reception, growing since 1975 from around two million subscribers to some 62 million in 2009. Major players include Comcast, Time Warner, Cox, and Charter; these have pay-TV market shares of 22 percent, 13 percent, 5 percent, and 5 percent respectively, charging customers monthly fees of approximately US$50 plus taxes and equipment fees.18

In the 1990s, cable providers began to invest in digital cable systems that can carry more channels and programming than analog cable. Subscription fees for such services cost approximately US$60 plus taxes and equipment fees. Most cable companies offer a hybrid analog and digital cable system that provides subscribers with basic service via analog cable and with additional channels via digital service accessed through a special cable converter box. Analog cable subscriptions have declined from 80 percent in 2000 to 62 percent in 2009 due to the conversion to digital cable and aggressive competition from satellite television and IPTV.

A strong competitor of analog cable, satellite television has grown from 21 percent of the pay-TV share in 2005 to 29 percent in 2009.19 Two major players of satellite television, DirecTV and the DISH Network, have gained subscriptions of 18.9 million and 14.3 million, respectively, since the services were launched.20

Recently, major telecommunications companies entered the pay-TV market by launching IPTV. Between 2005 and 2010, Verizon rolled out a fiber-to-the-home network across parts of the country and acquired franchise licenses to bring its FiOS TV service elsewhere. AT&T also entered the market at the end of 2007 with its U-Verse IPTV service. Combined IPTV subscriptions are still very small compared to analog cable service, although AT&T gained 4.9 million subscriptions by the end of the fourth quarter of 2010 among the 27 million households to which the service is available.21

19. See Table 3.
### Table 3. Platform for the main TV reception and digital take-up

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of HH (’000)</td>
<td>% of HH</td>
<td>No. of HH (’000)</td>
<td>% of HH</td>
<td>No. of HH (’000)</td>
<td>% of HH</td>
</tr>
<tr>
<td>Terrestrial reception</td>
<td>21,403</td>
<td>19.5</td>
<td>17,505</td>
<td>15.9</td>
<td>14,108</td>
<td>12.7</td>
</tr>
<tr>
<td>– of which digital</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cable reception</td>
<td>65,400</td>
<td>59.7</td>
<td>65,400</td>
<td>59.3</td>
<td>64,900</td>
<td>58.3</td>
</tr>
<tr>
<td>– of which digital</td>
<td>28,500</td>
<td>26.0</td>
<td>32,600</td>
<td>29.6</td>
<td>37,100</td>
<td>33.3</td>
</tr>
<tr>
<td>Satellite reception (total ADS)</td>
<td>22,797</td>
<td>20.8</td>
<td>26,999</td>
<td>24.5</td>
<td>31,192</td>
<td>28.0</td>
</tr>
<tr>
<td>– of which digital</td>
<td>22,797</td>
<td>20.8</td>
<td>26,999</td>
<td>24.5</td>
<td>31,192</td>
<td>28.0</td>
</tr>
<tr>
<td>IPTV</td>
<td>0</td>
<td>0</td>
<td>296</td>
<td>0.3</td>
<td>1,200</td>
<td>1.08</td>
</tr>
<tr>
<td>Total</td>
<td>109,600</td>
<td>100</td>
<td>110,200</td>
<td>100</td>
<td>111,400</td>
<td>100</td>
</tr>
<tr>
<td>– of which digital</td>
<td>51,297</td>
<td>46.8</td>
<td>59,895</td>
<td>54.4</td>
<td>69,492</td>
<td>62.4</td>
</tr>
</tbody>
</table>

**Note:** HH = Households; n/a = not available.

**Source:** Authors’ calculations based on data from sources listed in footnotes.

An increase in internet penetration, along with innovation in cell phone services, have provided consumers with more options for accessing news content beyond traditional television platforms. According to the Pew Project for Excellence in Journalism, nearly half of Americans get news from four to six different sources—not just via television, radio, and print but also online using personal computers (PCs), laptops, netbooks, and tablet computers such as iPads. On a typical day, 61 percent of Americans get news online, including from news websites, search engines, emails, social networks, and podcasts. Another way that the internet challenges pay-TV is through free news content shown on websites such as Hulu. Viewers are able to view clips from cable news channels online for free.

Mobile telephones represent another major way that consumers now receive news. Mobile penetration has sharply increased since the 2007 introduction of smartphones (mobile phones with advanced computing and connectivity). Currently, nearly 90 percent of the U.S. population has a cell phone; in 2009, 15.2 percent...

---


24. TV Basics, “A Report on the Growth and Scope of Television.” Satellite is considered DBS and other ADS is considered SMATV, MMDS, and Large Dish Satellite.


28. K. Purcell et al., *Understanding the Participatory News Consumer.*

29. K. Purcell et al., *Understanding the Participatory News Consumer.*
of these used 3G ‘(third-generation mobile telecommunications) services. More than 25 percent of adults now commonly access the internet via cell phones and personal digital assistants, or PDAs,\textsuperscript{30} and some 33 percent of cell phone internet users check news regularly.\textsuperscript{31}

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|c|c|c|}
\hline
\hline
Internet at home (% of adults)\textsuperscript{32} & 58.1 & 59.9 & 61.7 & 65.2 & 68.7 & 71.0 \\
\hline
of which broadband\textsuperscript{33} & 33 & 42 & 47 & 55 & 63 & 66 \\
\hline
Mobile telephony & 69\textsuperscript{34} & 77\textsuperscript{35} & 83\textsuperscript{36} & 86\textsuperscript{37} & 89\textsuperscript{38} & 90\textsuperscript{39} \\
\hline
of which 3G & n/a & 9.6 & 22.1 & 29.1 & 37.6 & 51.0 \\
\hline
\end{tabular}
\caption{Internet and mobile penetration rates}
\end{table}

\textbf{Note:} The broadband and 3G figures represent percentages of the total internet and mobile subscriptions, respectively; n/a = Not available.

\textbf{Source:} Authors’ calculations based on data from sources listed in footnotes.

The 3G net covers major parts of the country. The next generation, 4G, is implemented in some metropolitan regions, and the plan is to develop the net throughout the country in the future.

30. K. Purcell et al., \textit{Understanding the Participatory News Consumer.}
31. K. Purcell et al., \textit{Understanding the Participatory News Consumer.}
1.2 Media Preferences

1.2.1 Main Shifts in News Consumption

The most significant transition in news consumption over the past five years is the migration to increasingly partisan news sources. Many 24-hour cable news networks, including Fox News, MSNBC, Fox Business, and Current, explicitly target certain segments of the political spectrum. The audiences for these networks are becoming increasingly homogeneous in terms of political orientation (i.e. primarily Republicans watching Fox News; primarily Democrats watching Current). As the Project for Excellence in Journalism (PEJ) noted at the outset of its 2010 report on the cable news business, “maybe one of the few questions left about cable news is whether a channel attempting to build its brand around neutral reporting and balanced conversation can succeed.” In the aggregate, cable news networks have experienced a fall in audience from their peak, with combined median prime-time viewership down 16 percent to 3.2 million in 2010. In addition, as PEJ’s 2011 report states, “after 30 years, cable news has come to play a broad but somewhat more limited role in the information ecosystem. Many people tune into it occasionally, but its role has become more refined and prescribed. And there may be a ceiling on how much prime-time talk and opinion people will watch.”

More traditional television news sources, such as morning and evening broadcast network news programs, experienced relatively steady annual declines in viewership (between 2009 and 2010 it was 3.4 percent). Local television news has experienced similar steady declines over the past five years. However, after a bad 2009, when the audience was down between 5.5 and 6.5 percent, the most recent data from 2011 suggests that this loss has slowed, though not turned around.

Print newspapers have suffered even more significant audience declines than their broadcast television counterparts. Daily print circulation declined more than 31 percent between 2003 and 2009. Sunday edition circulation declines were similarly severe over the same period: 27.5 percent. However, in the six months ending September 2010, the Pew 2011 State of the Media Report indicated that the rate of decline had slowed to 5 percent—half the rate of decline a year earlier.
Of course, many lost readers migrated to the online platforms of these newspapers; however, it remains far more difficult at this point to monetize online news readers than print readers. In addition, the average age of a U.S. newspaper reader is now 55 and is likely to continue to rise.\(^49\) This is a demographic group that advertisers continue to value less than younger audiences. The result of this (at least for now) is an environment in which newspapers continue to experiment with various ways of enhancing revenues from online readers (e.g. paywalls), but—most importantly—one in which the revenue base for funding news gathering and reporting is shrinking.

In terms of radio news, listenership for commercial news/talk stations has remained fairly stable over the past five years, though underlying this overall stability are increases among older radio listeners and declines among younger listeners.\(^50\) The commercial news/talk category has increased substantially, with the fewer than 1,500 stations that existed in 2006 growing to almost 3,500 in 2010.\(^51\) However, within this increase, there are currently only 30 “all news” stations nationwide, up from 27 the previous year.\(^52\) The remaining stations in this category tend to be “political talk” stations that tend not to engage in much, if any, original reporting.\(^53\) Data indicate that talk radio listeners skew heavily male and tend to be older than the listeners of other radio formats.\(^54\) Perhaps not surprisingly, given the conservative content on much talk radio, conservative Republicans, who make up only 17 percent of the population as a whole, account for 28 percent of the talk radio audience.\(^55\)

Overall, local and national television channels remain the most frequently used news sources for Americans, as they have been for many years.\(^56\) However, the internet continues to move closer to displacing them as the primary platform for obtaining news. According to recent survey data, 78 percent of news consumers reported relying on local television news during the previous day; 72 percent reported consuming national television news; and 61 percent reported using the internet.\(^57\) Underlying these data is an increasing demographic segmentation of news audiences across different platforms. Specifically, younger audiences rely much more heavily on new media platforms such as the internet and mobile devices, while older news audiences continue to rely on traditional platforms such as television and newspapers.

The switch-over to digital television in 2009, after many delays, was a non-event for the audience. This was partly because the 80 percent of television viewers who were customers of cable or satellite services were shielded from any effects. Of the 18.3 million households that relied on a terrestrial signal, only 1.7 million remained unready. That said, those unprepared were disproportionately low-income and elderly households. What went unsaid was that few were eagerly anticipating the switch-over, as few broadcasters had succeeded in developing innovative offerings or even programming for the additional multicast channels broadcasters are able to transmit after the switch-over.

Additionally, younger audiences continue to exhibit far less interest in news than older audiences. According to recent data, only 35 percent of Americans aged 18–29 report following the news regularly. This number increases to 56 percent for those aged 30–49, 65 percent for those aged 50–64, and 70 percent for those aged 65 or more.

However, overall time spent consuming news actually seems to be increasing. According to a recent report by the Pew Research Center:

The net impact of digital platforms supplementing traditional sources is that Americans are spending more time with the news than was the case a decade ago. As was the case in 2000, people now say they spend 57 minutes on average getting the news from TV, radio or newspapers on a given day. But today, they also spend an additional 13 minutes getting news online, increasing the total time spent with the news to 70 minutes. This is one of the highest totals on this measure since the mid-1990s and it does not take into account time spent getting news on cell phones or other digital devices.

As a result, the report concludes that “instead of replacing traditional news platforms, Americans are increasingly integrating new technologies into their news consumption habits.” Of course, in keeping with the demographic patterns discussed above, this increase in overall time spent with news is being driven largely by the changing behavioral patterns of middle-aged news consumers (essentially, those who are now actively integrating new media platforms into their news consumption).

64. Pew Research Center, Americans Spending More Time Following the News.
The percentage of the population that reported reading a print newspaper the previous day has declined from 38 percent in 2006 to 26 percent in 2010.\textsuperscript{65} The population that reported watching television news the previous day has remained stable over the past five years (57 percent in 2006; 58 percent in 2010).\textsuperscript{66} The same measure for radio news consumption shows a slight decline, from 36 percent in 2006 to 34 percent in 2010.\textsuperscript{67} Clearly, print is experiencing the most dramatic audience behavior changes among the traditional news platforms.

1.2.2 Availability of a Diverse Range of News Sources

A primary context in which digitization has affected the availability of news sources over the past five years has been cable television. As the ongoing digitization of cable systems has led to increased bandwidth and channel capacity, content providers have focused increasingly on ever narrower niche audiences (ideological and otherwise).\textsuperscript{68} In national cable news, while once there was a single 24-hour news network, there are now at least six produced in the U.S. (CNN, MSNBC, Fox News, HLN, CNBC, and Fox Business), in addition to the many international news networks that many U.S. cable systems and satellite providers make available.

While an increase in the number of outlets does not necessarily equal an increase in viewpoint diversity, in this case the added outlets do indeed represent viewpoints that were not previously as easily accessible on television. Unlike newspapers, which have always had opinion columns, television news before the advent of cable was confined to the “big three” networks, which strived to remain politically neutral to attract the widest audience.\textsuperscript{69} With the expansion of outlets, companies have responded by choosing to cater to both the mainstream and niche audiences (ideological and otherwise).\textsuperscript{70}

There has been a growth in outlets catering to ethnic minorities, but a decline in minority-owned television stations.\textsuperscript{71} African-American newspapers, now mostly weeklies, saw a flat circulation in 2010.\textsuperscript{72} Several ethnic groups have moved to take advantage of internet platforms, some with more success than others. While Asian

\textsuperscript{65} Pew Research Center, \textit{Americans Spending More Time Following the News}.

\textsuperscript{66} Pew Research Center, \textit{Americans Spending More Time Following the News}.

\textsuperscript{67} Pew Research Center, \textit{Americans Spending More Time Following the News}.

\textsuperscript{68} G. Baym, \textit{From Cronkite to Colbert: The Evolution of Broadcast News}, Paradigm Publishers, Boulder, CO, 2010 (hereafter, G. Baym, \textit{From Cronkite to Colbert}). It is important to note that technological change has not been proven to be the sole reason for the return of partisan news; Fox News, owned by Rupert Murdoch’s News Corporation, is perhaps equally attributable to the rise of conservatism since the 1970s.


\textsuperscript{70} G. Baym, \textit{From Cronkite to Colbert}.


\textit{OPEN SOCIETY MEDIA PROGRAM}  \textit{2011}  \textsuperscript{23}
Americans are more likely to have access to the internet at home, U.S.-based Asian media have been unable to develop and sustain an online audience—instead most Asian youths utilize the internet to seek news and entertainment information from Asia.73 By contrast, the percentage of Asian-American adults reached by television grew by 30 percent from 2004 to 2009.74 Likewise, although African Americans in 2010 still primarily got their news from television, their news consumption from internet sources jumped 10 percent from 2009 to 42 percent.75 African Americans also outdid both white and Hispanic populations in producing online content—through social media, Twitter, or blogging.76 Although the internet is opening up new potential, it is still too early to tell what effect this will have on overall ethnic media growth and consumption. The persistence of digital divides mean that traditional ethnic media outlets are still needed to provide local ethnic communities with information.77

Foreign channels that serve diaspora audiences have also become more pronounced. An ongoing battle for carriage has been waged by Al-Jazeera English on U.S. cable systems, revealing U.S. companies’ ability to restrict access to content that might prove controversial.78 While corporations such as Comcast claim that blocking Al-Jazeera is nothing more than a “business decision”, the challenges are likely due to a combination of factors that range from cable systems’ hesitancy to devote more channel capacity to news (as opposed to more lucrative content options) to their unwillingness to confront any controversies that might arise from carriage of the network.79 However, interest in the channel has risen markedly as a result of this spring’s series of uprisings in Arab countries,80 and the network is slowly gaining inroads in the U.S. market, recently launching on Time Warner Cable in New York City.81 In so doing, Al-Jazeera stands alongside efforts by the BBC and other state-affiliated broadcasters, such as Russia’s RTV and China’s CCTV, to expand their offerings in the U.S. Undoubtedly the presence of these channels increases the breadth of viewpoints available to the American consumer.

In addition, increased channel capacity has facilitated the creation of local and regional cable news networks, such as New York 1 (serving the New York City area) and News 12 New Jersey (serving New Jersey). Generally, these networks are owned and operated by the primary video programming service providers (for example,


Time Warner Cable, Cablevision, or Verizon FiOS). The networks’ entrance into the local/regional television news marketplace represents an expansion beyond the local broadcast stations that have long served these markets.

However, it is important to recognize the complexity of these processes. In some instances, cable companies enter into local/regional news marketplaces in partnership with existing local broadcasters. In others, new cable news channels may be accompanied by one or more local television stations exiting the news business or scaling back news operations. Thus, new entrants in the marketplace have not always led to a meaningful expansion of news sources. Indeed, one important recent trend has been the decline, in some markets, of local news programming by local television stations (at least in terms of investment in news programming, if not always in terms of the number of hours aired).82

A decline in ownership diversity (see section 6.1) has been offset, in some ways, by the explosive growth of online information sources. However, increasingly, research is raising questions about the extent to which these online sources make meaningful contributions to diversity and pluralism of content. A study of the news ecosystem in Baltimore found that very little original reporting originated from online news sources. Rather, reporting by traditional news sources such as newspapers and television stations was co-opted and circulated.83 Another extensive study found that concentration of audience attention around a select few online news sources is even greater than in the traditional media space, and that in new content categories such as blogs the diversity of the most widely read examples is no better than the diversity of the most widely consulted traditional news sources.84

1.3. News Providers

1.3.1 Leading Sources of News

The state of the U.S. newspaper business has prompted much soul searching. Its financial situation has deteriorated year on year over the past five years, and after a decade of consolidation and increasing amounts of debt leverage, many companies were not well-positioned to deal with the downturn. By 2010, while few had gone bankrupt (as many had feared they might), many newspapers had fewer pages and fewer reporters.85 Reasonable estimates are that advertising revenues fell 43 percent between 2007 and 2009, while staffing fell by 15,000 to 40,000.86 Newspapers are estimated to have lost 16.9 percent of their circulation between

---


2007 and 2009, and 25.6 percent since 2000. This has left those newspaper companies trading on public exchanges in a perilous state. Newspapers have responded not only by cutting costs but also by raising the prices of print editions. In 2010, the trend slowed—advertising revenue shrank only by 6.4 percent and circulation only by around 5 percent. That said, typical profit margins were around 5 percent and newspapers were still profitable.

Figure 5.
Daily paid circulation of daily newspapers in the U.S., 2006–2010

As suggested above, newspapers, however, remain significant sources of online news. A large survey shows that of the top 200 online news sites, 67 percent are tied to a “legacy” outlet such as a newspaper or television station. Traffic is extremely concentrated, with 10 percent of the sites receiving half of the traffic, though no one spends very long on a site: three minutes is average. Additionally, social media platforms—especially Twitter—have emerged as disseminators and breakers of news. Search engines are also serving as a news destination, aggregating many different news sources on a minute-by-minute basis. Most notably, Yahoo! has retained its status as a news portal leader, serving up both aggregated and original coverage.

Table 5.
The most popular online news sites in the U.S. (in million estimated unique monthly users), 2005–2010

<table>
<thead>
<tr>
<th>July 2005</th>
<th>Number of unique monthly users</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. MSNBC</td>
<td>27.4</td>
</tr>
<tr>
<td>2. Yahoo! News</td>
<td>27.3</td>
</tr>
<tr>
<td>3. CNN</td>
<td>23.0</td>
</tr>
<tr>
<td>4. AOL News</td>
<td>20.0</td>
</tr>
<tr>
<td>5. Knight Ridder</td>
<td>9.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>February 2010</th>
<th>Number of unique monthly users</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Yahoo News</td>
<td>40.4</td>
</tr>
<tr>
<td>2. CNN Digital Network</td>
<td>35.7</td>
</tr>
<tr>
<td>3. MSNBC Digital Network</td>
<td>32.0</td>
</tr>
<tr>
<td>4. AOL News</td>
<td>20.8</td>
</tr>
<tr>
<td>5. NYTimes.com</td>
<td>15.9</td>
</tr>
</tbody>
</table>


1.3.2 Television News Programs

In terms of national television news, it is difficult to provide a rank ordering of popularity, given the fundamental differences between a 24-hour cable news network and a broadcast network that generally provides news for half an hour in the evening (in addition to some news during their morning news and entertainment programming—NBC’s The Today Show, for instance). Consequently, these two categories of television news source are treated separately.

The current rankings for broadcast network news (and evening news audience figures) are as follows:

Figure 6.
Broadcast network news audience, 2005 vs. 2010 (millions)

Figure 7.
Broadcast network news ratings, 2005 vs. 2010 (% of households with TVs tuned to a given program)


The nightly newscasts of the “big three” broadcast networks (ABC, NBC, and CBS) attract a combined 21 million viewers on a typical evening, down from just over 25 million viewers in 2006. Overall, each newscast lost between one and two million viewers during the past six years as part of an overall decline in audience size of approximately 20 percent since 2005.94 The decline in many ways mirrors what is seen with newspapers. According to the Pew Project for Excellence in Journalism, “since 1980 network evening newscasts have lost an average of one million viewers a year. Smaller declines over the past two years … suggest audience erosion is slowing but not reversing.”95

Figure 8.
Current rankings (and primetime audience figures) for cable news

94. E. Guskin, T. Rosenstiel, and P. Moore, “Network: By the Numbers.”

Audience numbers for cable news still pale in comparison to the sizes reached by broadcast network newscasts. However, broadcast news audiences are shrinking while cable news audiences are growing. This pattern is reflective of the larger trend over the past decade, in which multichannel video programming services such as cable and satellite grew to serve roughly 85 percent of television households, with only approximately 15 percent relying entirely on over-the-air broadcasting for their video programming. Very recent reports, however, suggest that some households are beginning to abandon cable/satellite subscriptions in favor of relying on broadband internet subscription supplemented by over-the-air broadcasts for their video programming.

On cable, news and current affairs programs broadcast by Fox are among the most popular. These include The “Glenn Beck Show” (recently canceled due to ratings declines) and “The O’Reilly Factor,” each of which attracts more than two million viewers in a typical airing. Fox’s “Hannity” and “The Fox Report with Shepard Smith” draw just under two million viewers.

In radio, analog broadcast is still the norm. As recent Nielsen data suggests, listeners are sticking with traditional broadcast despite the explosion of online and pay audio content.96 (Nielsen is the primary source of television audience research in the U.S.) The most significant national radio news provider is National Public Radio (NPR), the non-commercial radio network.97 According to recent estimates, NPR reaches approximately 27.2 million radio listeners in a typical week via the 900-plus stations that carry its programming, many of whom are run by members of NPR.98 Some NPR affiliates, as well as non-commercial community and university radio stations, provide local news coverage, but this varies greatly from station to station. Local commercial radio tends to provide “news you can use”: traffic, weather, sports, and local events. The ABC and CBS television broadcast networks also operate national radio networks (indeed, they began as radio networks).

The introduction of new radio platforms such as satellite radio, digital radio, and online streaming, while significantly increasing the diversity of available music and talk, has not as yet been accompanied by the introduction of significant new news operations. Satellite radio provider Sirius/XM, for instance, carries NPR broadcasts rather than its own national news operation.

1.3.3 Impact of Digital Media on Good-quality News

It is difficult to determine whether digital media have enhanced the quality of news. Certainly, the online space has given rise to new quality sources of news reporting (e.g. the Huffington Post and Politico, plus numerous new sources of local and niche news), as well as new forms of data-driven and interactive reporting.

---


97. In the U.S., a “public” broadcaster such as NPR relies almost entirely on individual and corporate donations and receives only a small percentage of its operating budget from the federal government. See “About NPR: Public Radio Finances,” available at http://www.npr.org/about/aboutnpr/publicradiofinances.html (accessed 14 May 2011).

yet the impact on the economics of newspapers has resulted in cutbacks in original reporting elsewhere. However, the online space is also filled with more sensationalist and tabloid-style sites (such as Gawker and Perez Hilton) that compete for news consumers’ attention. And even sites such as the Huffington Post choose to provide their readers with a substantial amount of tabloid news reporting alongside their more contextual, non-tabloid news content.

Nevertheless, new digital platforms have certainly enhanced the accessibility of news and given news users greater opportunities to provide feedback to news organizations. In some cases, citizens have even contributed to newsgathering and reporting efforts via cell phone pictures, video, and other methods.

One striking aspect of the ongoing digital transition is the way in which it has, in some contexts, encouraged news organizations to experiment with innovative approaches to producing and disseminating news, with an eye toward identifying new ways of engaging audiences. NPR, for instance, has embraced the notion of moving from public broadcasting to public media. Its website (NPR.org) features a blog that allows users to comment on individual stories. It also has launched successful apps for the iPhone and iPad and has embraced a “create once, publish everywhere” (COPE) philosophy designed to spread NPR content across any and all platforms.99

On television, one trend is the replacement at the local level of some “hard” news broadcasts with “light” news-style programs that focus on lifestyle.100 For years, local broadcast television newscasts have been criticized for focusing more on subjects such as crime and lifestyle than on hard news or for utilizing video news releases (VNRs) prepared by organizations hoping to influence coverage.101 Today, “news” broadcasts are replaced with programs that are overtly lifestyle-focused and lack even a pretense of providing genuine local news content. Perhaps most important, when we look at the increasing ratings for cable news networks such as MSNBC and, more especially, Fox News, much of their programming—particularly in primetime—does not meet traditional definitions of news. It might, at best, be categorized as “public affairs” programming (a category that the Federal Communications Commission (FCC) has long utilized to distinguish news programs from programs focusing on the discussion/interpretation of public issues), given that these programs primarily involve one or more “talking heads” discussing recent events without original reporting and often with a perspective on events, amounting in the case of Fox to a conservative slant and in the case of rival MSNBC to a slant generally sympathetic to a more progressive perspective. Such programming might even be categorized as tabloid, given the apparent emphasis on conflict, controversy, and sensationalism.

---


100. An example in New York is NBC’s replacement of some traditional newscasts with a program called LX New York, which focuses on shopping, restaurants, parenting, and other lifestyle-related issues.

1.4 Assessments

Perhaps the most important factor today in audience selection of news content platforms is convenience. The growing use of smartphones is leading audiences to increasingly access news via mobile platforms, for instance. Control is perhaps the second-most important factor, as audiences have increasingly become accustomed to directly accessing news about the issues and events that matter most to them, rather than waiting for this information to be presented within a longer, linear television or radio broadcast. A third rising factor is affinity—consumers are increasingly relying on friends, families, and trusted aggregators to point them to relevant news. Underlying this assessment is the extent to which cost is diminishing as a significant factor, as services providing news for free continue to overwhelm services that require consumer payment, such as newspapers. However, the proliferation of free or cheap news sources online is counterbalanced by the costs associated with maintaining digital or mobile access and with staying up-to-date on associated devices, as well as the time and trouble it takes users to master associated skills. These factors contribute to a “digital divide” in news consumption, which disproportionately affects those with low income, low literacy, or both.

Though the switch-over to digital television hasn’t had a significant impact on news habits, online digital news outlets have certainly changed total news offerings. Lower barriers to entry and new, interactive platforms have increased the number and diversity of individuals and institutions engaged in news production, and have also spurred innovation in news presentation styles and funding models. These developments are certainly positive. On the negative side, however, these new news platforms and competitors are damaging traditional news organizations by attracting a growing share of their audience and thereby undermining their investment in news operations. Moreover, as mentioned earlier, the rise of cable outlets that focus more on commentary and target those with particular political sympathies create media outlets that don’t seek to be neutral arbiters but outlets that, arguably, exacerbate differences in perspective on news events. The changes described here refer to national news, however, and though many of the trends manifest at the local level as well, phenomena such as cable television news impact local television news only peripherally.

Finally, the overall effects of the changes described above are particularly complicated given that online news and information platforms remain highly dependent on the news reporting activities of traditional media outlets such as television stations and newspapers. In the end, the key question here may be whether any improvement in the overall diversity of the news offering has been accompanied by an improvement in the overall diversity of news consumption.

102. PEJ, How News Happens.
2. Digital Media and Public or State-Administered Broadcasters

2.1 Public Service and State Institutions

2.1.1 Overview of Public Service Media; News and Current Affairs Output

Public service media in the United States break down into two components: public broadcasting and community media. Traditionally, the latter have been understood as consisting of public access and educational/government information channels on cable television systems. More recently they have included Low Power FM (LPFM) radio stations and emerging online media platforms.

The public broadcasting system grew out of a movement in the 1950s around educational television stations, as well as a report funded by the Carnegie Foundation in 1966 that resulted in the Public Broadcasting Act of 1967. This act provided for annual appropriations for interconnecting television and radio; set up an independent entity, the Corporation for Public Broadcasting (CPB), to disburse the funds; and laid the groundwork for a largely decentralized national system. The aim was to serve and represent local constituencies, provide a platform for diverse perspectives, and offer citizens high-quality educational, news, and cultural content.

For both television and radio, the system is centered on locally licensed stations. On the television side, all 381 stations are members of the Public Broadcasting System (PBS).\textsuperscript{103} Various types of licensees—local, regional, university-based, and so on—emphasize slightly different types of content. On radio, there are more than 2,800 “educational” FM stations. Only 934 currently qualify for federal funding, however, since the rest are student-run or religious stations.\textsuperscript{104, 105, 106} Complicating how public radio is understood by the public, not all


\textsuperscript{104} 170 Million Americans for Public Broadcasting, “American Public Broadcasting by the Numbers.”


of these stations are affiliated with NPR, even though listeners often conflate the organization with the public stations. NPR is not a station itself but rather a membership organization that acts as a distributor to local stations of many of the flagship programs that are heard on these stations. Other large program producers are American Public Media (APM) and APM’s smaller spin-off organization Public Radio International (PRI). Public radio stations themselves provide varying degrees of local coverage.

Collectively, the above radio and television systems are known as “public broadcasting” and receive money via CPB. Most funding flows to the station level for infrastructure and operational costs; additional support for content production is provided by charitable foundations, viewer or listener dollars, and corporate underwriting. The public television viewing audience is estimated to be 121.9 million per month. Public radio listenership is 64.7 million per month.¹⁰⁷

Public broadcasting provides a considerable portion of national public affairs programming. However, PBS does not produce its own programs, but instead licenses them from the stations and from various independent production sources, and provides stations with subscriptions to a national service offering bundles of primetime shows. This content-sharing arrangement sidesteps the legal barrier erected by Congress that prevents CPB from distributing shows, so as to maintain a strong firewall between the distribution of federal money and content production. In television, three of the local PBS stations have traditionally produced 60 percent of the programming for all stations (KCET in Los Angeles, WNET in New York, and WGBH in Boston.)¹⁰⁸ For example, WGBH produces a hard-hitting investigative show called Frontline and a science show called NOVA. Other popular shows include the documentary series POV, produced by ITVS, and the flagship nightly news show, PBS NewsHour, produced by MacNeil/Lehrer Productions. On radio, the aforementioned large content networks (NPR/APM/PRI) serve up a partial national schedule of shows which they distribute to member stations.

The balance of local/national coverage is just one of several flashpoints for public controversies over federal funding of public broadcasting. While there is criticism from both the right and the left about bias in coverage, conservatives in particular dispute that any government support at all should be channeled to media production, suggesting that the market will provide any media that consumers want and citing fears of political interference in media produced with government funding.¹⁰⁹ The most recent Congressional debate on this took place in 2011, sparked by budget discussions and the firing of NPR commentator Juan Williams, a reporter and known conservative voice who also appeared regularly on Fox News as a commentator.¹¹⁰ The

---

107. 170 Million Americans for Public Broadcasting, “American Public Broadcasting by the Numbers.” Cumulative unduplicated audience, or “cume audience”, is the total number of unique individuals who watch or listen in a fixed time frame—in this case, a month (television) or four weeks (radio). The industry reporting standard used here is that, to be counted, television viewers must be tuned in for at least six minutes; radio listeners must tune in for at least five minutes. People are counted only once during the specified period, regardless of how many times they tune in or how many programs they watch or listen to.

108. KCET has recently split off from the PBS system. P. Aufderheide and J. Clark, “Public Broadcasting & Public Affairs.”


Public, Educational, and Government Access Television (PEG) channels were first created in the early 1970s and began to flourish in the mid-1970s as the Nixon administration sought to grow the cable industry. Initially supported by FCC orders, such stations were subsequently bolstered by the 1984 Cable Franchise
Policy and Communications Act, in which channels were assigned for public, educational, and government usage. These channels come in many flavors—some are operated by government entities and broadcast solely formal municipal meetings; others provide educational programming; and others are operated as “public access” community media centers, privileging a free speech ethic above all else.

PEG stations typically provide a variety of content, including airing local government proceedings and electoral information, distance learning content, community service announcements, and local job openings. PEG stations that have negotiated funding for access centers also provide broadcast space for citizen productions, ranging from citizen reporting and public affairs programming, to musical and cultural productions, to less easily categorized examples of self-expression.

These channels, however, are frequently critiqued for poor production values and unimaginative programming and have undergone cycles of boom and bust, given changes in the regulatory landscape and tightening of municipal budgets. In the latter case, municipalities have often treated cable franchise fees as an additional source of revenue and spent them not on the public or government access channels but on other government services. Despite this, cable access channels currently provide coverage of council meetings in 92 percent of cities with populations greater than 200,000.121

2.1.2 Digitization and Services

The digitization of television signals has put significant strain on public broadcasters. Technical upgrades were expensive, though extra funds for the transition have been forthcoming at both federal and state levels, and there has been less provision of extra programming (now possible through multicast channels and higher quality HD) than hoped for.122 Moreover, though one Spanish-language channel has been picked up in some places, other stations where multicasting exists broadcast the same fare as available on traditional channels, merely in repackaged form.

For public radio, which is not subject to the same regulatory requirements to deliver broadcasts using digital signals, stations and national networks have been moving toward more single-format music channels. These serve to attract younger or more diverse audiences, to preserve and promote cultural forms of expression—such as jazz, bluegrass, or classical music—or in some cases to showcase local talent. These stations stand in contrast to nationally programmed commercial music stations that stress predictable formats, niche marketing, and music industry tie-ins.123

The second leg of the digital challenge for public media has been adoption of online platforms as distribution mechanisms. On its face, broadband provides an opportunity for drawing in new audiences, but it also presents several challenges. First, as online audiences grow, streaming costs grow proportionally. Second,

121. R. McCausland, “How Many Cities Have Access TV?”
licensing of intellectual property rights for back catalogs constrains usage of archival content, and licensing
terms for current content must be renegotiated to include new platforms. Third, the institutional structure
of the public broadcasting system, with its distributed and large number of organizations, presents further
challenges, as both radio and television channels and national content networks develop somewhat competing
websites. Add to that the introduction of programs by independent producers, who often air their material
online for free while charging channels for broadcast rights. In addition, those stations that have traditionally
generated income from sales of shows for educational purposes are reluctant to have PBS provide the show
for free via the web.124

National and local public broadcasters are consequently now being asked to provide content and services across
a much broader array of platforms and formats, including broadcast, on-demand, online, and mobile, as well
as to provide participatory/social engagement functions for each form of content. Developing this capacity
and the related R&D needed for continual innovation far exceeds their financial and staffing resources.

For PEG channels, delivery of content via the web is an extension of their traditional mission. In many
ways, for instance, YouTube is an access channel for the world and represents a victory for a culture of media
participation long advanced by PEG activists. At the same time, public access stations are equipped with
human capital and technology specialized not to encode content for the web, but for broadcasting. The
challenge ahead is to transition to a multiplatform future even as funding streams are under threat. There are
examples of channels making such a transition. The Grand Rapids Community Media Center (GRCMC),
though centered on an access channel, also supports a citizen journalism outlet, a full-power radio station,
a theater, and media literacy services. Access Humboldt in Eureka, California, similarly pairs its four access
channels with the development of a community access network to deploy broadband across a large rural
county.

2.1.3 Government Support

As mentioned above, the federal government provided support for digitization of public television signals.
Support for the creation of online and mobile content in both radio and television is also available in the form
of competitively awarded CPB grants, but only in a piecemeal fashion. For instance, CPB is funding several
pilot experiments designed to reveal new models for multiplatform and participatory news production, such
as Local Journalism Centers.125 This has been complemented by initiatives by the national content networks,
experiments by and partnerships with independent producers, support from charitable foundations, and
fundraising and strategic initiatives at the local station level.126 These “public media 2.0” experiments have
been documented by researchers and submitted into the public record via calls for comment by the FCC and

the Federal Trade Commission (FTC). Similarly, public access stations are piecing together support for new multiplatform initiatives. In summary, government funding has supported the transition to digital broadcast, but is scanty for online, mobile, or multiplatform initiatives, and, when it does exist, serves only to incubate projects rather than to provide long-term support.

In general, the new digital experiments have increased both the diversity of public media content and engagement projects and the range of independent producers involved. Major questions still remain, however, about how to close the digital divide in order to serve minority, youth, and aging populations with “public media 2.0” content. Demonstration projects such as the Public Media Corps and One Economy are being supported through a mix of federal and foundation funds to address these questions. A recent infusion of funding to local access centers through the Broadband Technology and Opportunities Program (BTOP) is also supporting broadband access at the local level, although this has not explicitly been tied back to public media production.

Public media are not widely reported upon by commercial media or the cultural press except in times of crisis, such as the present, when funding is threatened. Then, public media become a source of fascination, with their varying missions—education, news, cultural and civic engagement, and crisis response—unpacked and critiqued, very often inaccurately, and its business models and taxpayer support dissected. This debate goes hand-in-hand with the ongoing and increasingly vociferous big-government critiques—in the U.S. and around the world—of government funding of arts and culture, education, public health, and other social services.

Current Congressional challenges to public broadcasting appropriations might shortcut any progress that has been made in the digital realm. Budget year 2011 funds for public media innovation have been cut from US$36 million to US$6 million. Moreover, funding from charitable foundations, individual donations, and underwriting are not sufficient to support the existing system, much less spur innovation.

### 2.1.4 Public Service Media and Digital Switch-over

Results from television digitization have been mixed in terms of increasing the reach, influence, and engagement of public broadcasters. Again, there is much experimentation—for example, WGBH’s World Channel is attempting to build not only a standalone multicast channel featuring news, documentary, and factual content, but also an affiliated online presence (WorldCompass.org) with its own content and associated mobile and social media engagement tools. Challenges in determining the impact of such projects include WGBH’s unfamiliarity with web and mobile metrics and the difficulty of making accurate comparisons to broadcast audience numbers across various locations.

---

127. The One Economy Digital Connectors (see [http://www.one-economy.com/what-we-do/digital-connectors=]) and Public Media Corps (see [http://publicmedia.corps.org/]) are both projects designed to pair digital literacy with citizen media production by sending young “digital natives” into communities to offer access to computer and broadband resources, training in computer use, and exposure to online media resources.

128. BTOP Sustainable Adoption grants, awarded in 2010, are designed to support community-level programs that encourage the use of broadband resources by underserved populations through digital literacy training, career development, and specialized support services for disabled and elderly users. See [http://www2.ntia.doc.gov/sustainableadoption](http://www2.ntia.doc.gov/sustainableadoption) for a list of grant recipients (accessed 20 July 2011).
Providing online/mobile versions of broadcast content on new platforms has been more successful. National networks and stations are now much more commonly providing online and mobile access to both podcasts and streaming video content, with selected shows such as “Frontline” leading the pack in offering numerous options for digital content and interaction. Users are now also gravitating to public broadcasting content on iPads, iPhones, and other mobile devices—for example, the Public Radio Exchange reports three million downloads for its Public Radio Player,129 and PBS reports a million active users of its iPhone/iPad apps, with more expected after the release of a PBS Kids app.130 PBS recently redesigned its website and, as a result, online traffic is growing to both the main site and associated station sites. Behind the scenes, the CPB and major radio and television content networks are working on a “Public Media Platform” project, which would make much more digital content available to stations, partners, and users for recombination, curation, and redistribution. This project is still in its conceptual phase but promises to dovetail with other efforts to standardize website development and content sharing across local stations.131 In principle, this would increase both reach and engagement for public broadcasting. However, a focus on digital distribution over free-to-air broadcasting is not as accessible to elderly and low-income households, which are far less likely to have wired broadband or a smartphone. A lack of federal support for these efforts in the 2011 budget—which dramatically cuts back on digital investments—will slow deployment efforts and complicate collaboration.

2.2 Public Service Provision

2.2.1 Perception of Public Service Media

The mission of public broadcasting is only understood in the vaguest terms by members of the public, journalists, and policymakers—most of whom identify the general service with the organizations that implement it (i.e. “public broadcasting is PBS”) rather than the stations, producers, and federal contributions that interface more directly with the public. Widespread misapprehensions include the idea that public broadcasting receives much more federal support than it does,132 and that there is some significant danger of government interference in public broadcasting content—a critique espoused in particular by conservative critics. More substantive assumptions include critiques that public broadcasting is insular and focused on Washington, D.C.; that its content skews older/whiter/richer than the general population; and that key personalities and programs tend to be more progressive than conservative. While bias may exist in one direction or another within particular program segments, efforts to prove wholesale bias tend to break down. And despite these critiques from various factions, PBS remains the most trusted source of news, beating out all commercial competitors in recent polls.133

Several recent reports from charitable foundations, research centers, and the federal government have examined and proposed new mandates for public media to fill “market gaps” in the news and information ecology. These include suggestions for more local reporting, more international reporting, more support of civic engagement and dialogue, more multiplatform non-commercial children’s programming, and more content aimed at diverse and younger users, including games, apps, social media platforms, and interactive maps. Within these discussions, the proposal that public broadcasters provide more local news content has gained significant traction. It is unclear whether this movement is visible to users and politicians outside the system, although increased listenership of public radio and increased use of digital platforms suggests a shift. Stations have also become energized by the threat to their federal funding and have formed an organization named 170 Million Americans to make their case to the public. In addition, a significant media reform movement values public service media and would like to see it strengthened. While lacking the dollars or visibility of corporate media lobbyists, this group has gained significant credibility at the FCC and with Congress, for example, working in coalition to deliver more than a million petitions to Congress in February 2011 to protest against efforts to defund CPB.

2.2.2 Public Service Provision in Commercial Media

The commercial U.S. broadcasting industry emerged on the basis that broadcasting would be permitted under regulations promulgated by the FCC to act in the “public interest, convenience, and necessity.” This standard, first advanced in the Federal Radio Act of 1927, has changed over time. Moreover, the value it provides is questionable, as the ultimate sanction of license removal (or even non-renewal) has rarely been invoked and even limited fines are only occasionally levied. The Telecommunications Act of 1996 extended the aforementioned license renewal period to eight years.

The Clinton administration also established the Advisory Committee on the Public Interest Obligations of Digital Television Broadcasters. In response, then-FCC Chairman William Kennard had originally planned to issue a Notice of Proposed Rule Making (NPRM) that included the advisory committee’s free airtime proposal. Congress reacted negatively to that, however, going so far as to threaten to cut the FCC’s budget. Congress’s reaction led Kennard to introduce a more tentative Notice of Inquiry (NOI) on digital broadcasters’ public interest obligations instead of the NPRM. In it, the Commission sought comment on a wide variety of issues raised by the advisory committee, including the free airtime proposal, but did not propose specific rules. This NOI led to an NPRM that focused specifically on children’s television obligations for digital broadcasters.

---


The FCC has issued no further decisions or rules on the variety of public interest obligation issues raised in
the NOI, with the exception of regulations directed at children’s programming. The last official word on more
expansive public interest obligations came from then-Chairman Kennard’s 2001 Report to Congress on the
Public Interest Obligations of Television Broadcasters as They Transition to Digital Television.¹³⁹ This report
presented a variety of recommendations, including a minimum public affairs programming requirement,
the reinstatement of community ascertainment requirements, and a five-minute free airtime requirement for
political candidates.

The report was delivered to Congress on 18 January 2001, six days after Kennard announced his resignation
and one day before his resignation became effective. That this report emanated from Kennard alone and
was, in many ways, his parting statement suggests diminished support within the Commission for moving
forward on any public interest obligation initiatives. Of course, a report from an outgoing FCC chairman
would not, and did not, exert much influence among members of Congress.¹⁴⁰ And, perhaps reflecting this
circumstance, virtually nothing has happened on the digital broadcasting public interest obligations front
since the completion of the Kennard report.

The public interest obligations initiative fell by the wayside in part because of a change of regulatory philosophy
that took place within the White House and the FCC after Kennard’s departure. The composition of the
FCC changed to reflect the more deregulatory philosophy of the Bush administration, most notably with
President Bush’s appointment of Michael Powell as FCC chairman. The effects of this shift in personnel and
regulatory philosophy were likely compounded by the fact that the Commission had also become mired in a
variety of complex and contentious transition issues, which included accelerating broadcasters’ conversion
to digital transmission, developing and imposing a DTV tuner requirement for television manufacturers, and
establishing equitable and effective must-carry rules.¹⁴¹

Between 2001 and 2005, under Powell, the FCC loosened ownership restrictions, leading to increased cross-
ownership of media outlets within and across many communities. This led to a decrease in local news and arts
coverage, diminished airtime for political candidates, and fears of reduced capacity for local crisis response—
and a corresponding increase in generic national content being repeated across numerous locations. In the
subsequent era, under Kevin Martin, additional public interest reporting requirements, known as “enhanced
disclosure”, were approved, but have not yet been implemented.¹⁴²

¹³⁹. W.E. Kennard, Report to Congress on the Public Interest Obligations of Television Broadcasters as They Transition to Digital Television, Federal Com-
(accessed 20 July 2011).


¹⁴¹. If implemented, these rules would require broadcasters to provide more detailed and more easily available records of actions taken in the public
interest. Despite being approved by the FCC, they have not yet been put in place.

¹⁴². See http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-07-205A1.pdf. This order, though approved by the FCC, has not yet been put
into operation as it was not submitted to for OMB approval (accessed 20 July 2011).
In December 2010, FCC Commissioner Michael J. Copps proposed a stronger test of public interest obligations that he dubbed the “public value test.”\textsuperscript{143} He suggested in the broadest terms that such a test would include meaningful commitments to news and public affairs programming, enhanced disclosure, political advertising disclosure, diversity, community discovery, local and independent programming, and public safety. Opinion on his proposal has been mild, most likely because his ideas are unlikely to prevail given that the make-up of the current commissioners that has led to very cautious policymaking at the FCC.

At present, FCC regulations require three hours of children’s educational content per week and restrict advertising within this period to no more than 12 minutes per hour.\textsuperscript{144} Political advertising is also guaranteed to all legally qualified candidates for federal office at the lowest unit charge available to commercial advertisers on broadcast, cable, and satellite systems. Furthermore, all terrestrial broadcasters are required to keep a public file indicating, among other things, the programming they do in the public interest. Indicative of the limited purchase this provides is the size of the form required for license renewal, which requires no more text than fits on a large postcard.

Assessments of public interest obligations are mixed. On one side, according to recent research by the New America Foundation, the North Carolina broadcaster WRAL still feels this responsibility.\textsuperscript{145} But at the other end of the scale, Scranton in Pennsylvania cut news reporting on WYOU and replaced it with light entertainment.\textsuperscript{146} Looking to the practical impact, it is clear that as broadcasting stations fall into absentee ownership, or adopt new sharing or local management agreements, the responsibilities felt by local owners to provide meaningful news and information is becoming less common.\textsuperscript{147} As one participant in a roundtable organized by the New America Foundation remarked, “What really annoys me is when they headline the news with yesterday’s weather. It isn’t news!”\textsuperscript{148}


\textsuperscript{144} “The FCC’s rules limit the amount of commercial matter that may be aired in certain children’s television programming to 10.5 minutes per hour on weekends and 12 minutes per hour on weekdays.” See http://www.fcc.gov/cgb/consumerfacts/childtv.html. These are also defined (and originated) in the Children’s Television Act of 1990 (see D.A. Hayes, “The Children’s Hour Revisited: The Children’s Television Act of 1990,” Federal Communications Law Journal, vol. 46, no. 2, available at http://www.law.indiana.edu/fclj/pubs/v46/no2/hayes.html) and are required of broadcasters (Sites accessed 20 July 2011).


\textsuperscript{148} Comment made by participant at Schemel Forum roundtable organized at the University of Scranton in conjunction with the New America Foundation, May 2010.
Broadcasters advance twin rationales for their programming decisions. First, they assert that public interest programming is “what interests the public”, which justifies chasing ratings regardless of the quality of the content. Second, they suggest that, given that the profitability of broadcasting has fallen, asking them to do more than the absolute minimum represents onerous regulation. A recent study by the Lear Center of the University of Southern California provided perhaps the strongest indictment of current broadcaster news provision, finding that in a typical half-hour of news for Los Angeles, actual news makes up only 15 minutes 44 seconds, and of that only 8 minutes 17 seconds is local news. Furthermore, 7 minutes 18 seconds of local news is about crime, soft news, and entertainment, with only 22 seconds devoted to Los Angeles government-related stories.149

Another wrinkle is that verification that the public file is in order (and thus that public interest obligations are being met) has been delegated to state broadcasting associations through a process known as the Alternative Broadcast Inspection Program. This results in FCC inspections under only a very limited set of circumstances, since the inspection is delegated to a state broadcaster association, which selects an auditor to review the files and subsequently to submit a confirmation to the enforcement bureau of the FCC.150 In short, public files will only likely be inspected by ordinary citizens visiting the broadcaster’s office during normal business hours who can take copies of the file at their own expense.

Most recently, the FCC report “Information Needs of Communities. The Changing Media Landscape in a Broadband Age” has proposed a simplified reporting regime that would require broadcasters to disclose public interest obligation information on the web. As the report states, “the primary goal should not be to provide the FCC with tools for license-renewal denials, but to provide communities the data they need to understand what their local TV stations are doing.” Left unstated in the report is that the FCC will not likely act on the disclosures in license renewal proceedings.

During its open meeting in October 2011 the Chairman of the FCC declared his intention to implement new rules by the summer of 2012 as the FCC moved forward on these proposals and formally opened proceedings.


2.3 Assessments

The digital switch-over has provided opportunities for public media, including potential new audiences; new funds from CPB and large charitable foundations for the transition; the opportunity to reconsider offerings and curate content in new ways; and new opportunities to innovate civic participation and rethink the public service mission as more participatory, inclusive, and responsive to community needs. Losses, however, include staff time, money needed to run new channels and platforms, time lost in endless process meetings, and failed experiments that must be accounted for.

With respect to public access television, opportunities to share programming at low cost are only beginning to emerge, and innovative approaches have yet to take root except in the most forward-looking stations.

Public service provisions—in fact, regulation in general of commercial broadcasters—have been subject to battering criticism as the media markets have transitioned. The admirable recommendation that disclosures are posted online has attracted considerable support in the public interest community, but it remains unclear if it will ever be implemented. However, it would be wrong to suggest that public interest obligations have become less important for holding the broadcasters to account. Broadcasters have been critiqued from all political quarters and, more recently, in 2011 the FCC fined a small number of stations for failing to provide timely access to their public file.151

Whether the oversight of the broadcasters’ public interest obligations will remain is an open question. The current Congress seems unlikely to be sympathetic, and it is possible that Congressional action or Supreme Court judgments may yet further constrain the authority of the FCC. Against this, the News of the World phone-hacking scandal in the United Kingdom is bringing to the fore the responsibilities of the media, and the importance of public interest-focused regulation. As of this writing, Senator Robert Menendez has called on the Department of Justice to investigate News Corp., and Senators Jay Rockefeller and Barbara Boxer have called on Dow Jones (a News Corp. subsidiary) to reassure the American people that similar misconduct has not occurred in the United States. Furthermore, on 24 August 2011, Attorney General Holder confirmed that the U.S. Justice Department was pursuing a preliminary investigation. Should this investigation go forward, it may open a broader debate about fitness of character of broadcast licensees, media responsibilities and consolidation, as has happened in the U.K.

3. Digital Media and Society

3.1 User-Generated Content (UGC)

3.1.1 UGC Overview

As of 30 July 2011, the top 10 most popular websites in the United States were as follows:

Table 6.
Most popular websites in the United States, July 2011

<table>
<thead>
<tr>
<th>No.</th>
<th>Site</th>
<th>Monthly audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Google</td>
<td>167,000,000</td>
</tr>
<tr>
<td>2</td>
<td>YouTube</td>
<td>145,000,000</td>
</tr>
<tr>
<td>3</td>
<td>Facebook</td>
<td>143,000,000</td>
</tr>
<tr>
<td>4</td>
<td>Yahoo</td>
<td>100,000,000</td>
</tr>
<tr>
<td>5</td>
<td>eBay</td>
<td>83,800,000</td>
</tr>
<tr>
<td>6</td>
<td>MSN.com</td>
<td>81,800,000</td>
</tr>
<tr>
<td>7</td>
<td>Amazon</td>
<td>72,300,000</td>
</tr>
<tr>
<td>8</td>
<td>Wikipedia</td>
<td>69,900,000</td>
</tr>
<tr>
<td>9</td>
<td>Twitter</td>
<td>68,600,000</td>
</tr>
<tr>
<td>10</td>
<td>Live.com</td>
<td>67,800,000</td>
</tr>
</tbody>
</table>

Monthly audience, in this context, reflects the terminology used by Quantcast, an audience measurement firm, which uses a proprietary algorithm and a “cookie-based” methodology to assess how many different visitors a website receives in a given month (thus, an individual who visits Google 20 times in a month counts as one unique visitor, or UV). Importantly, Facebook, YouTube, Wikipedia, Blogger, and Twitter, none of which are operated by traditional media companies, contain user-generated news and information. Blogspot, the host of the most prominent blogging service, receives 60.9 million monthly visitors.

News employers and platforms pay little to nothing for user-generated content (UGC), which often has high traffic potential. Through UGC, news organizations can draw from a large knowledge and talent base, as each news audience member becomes a potential contributor. This lowers newsroom costs and has become an attractive feature of many media outlets. One prominent example from mainstream media is cable news channel CNN’s iReport, “where people take part in the news” by uploading personal videos involving news and commentary to the website. Community calendars, events notices, reader comments, and photo galleries are common user-generated features of community-access online news and information portals. UGC or other contributed content is perhaps most critical to fledgling independent online news organizations. Many new online community news outlets are staffed by a single person who needs a regular flow of content to build an audience and further news production.

**OffTheBus:** on a national level, the 2008 “OffTheBus” project, co-sponsored by The Huffington Post and New York University Professor Jay Rosen’s NewAssignment.net, engaged 12,000 people in a collaborative journalism effort designed to tell local campaign stories that mainstream media missed. Amanda Michel, the project’s organizer, acknowledged that this model is insufficient to provide communities with all the news and reporting they need, but she argued, “if taken seriously and used properly, this pro-am model has the potential to radically extend the reach and effectiveness of professional journalism.” Noting that more than five million people read OffTheBus in October 2008 alone, even though the budget for 16 months of nationwide collaborative journalism was just US$250,000, Michel sees an opportunity for these models to forge a “new social contract between the press and the public.”

**The Huffington Post:** a liberal-leaning news and information site that launched in 2005. It provides original comment and analysis along with aggregated news and reporting from other sources. The site has relied extensively upon uncompensated contributions (i.e. UGC) and reported its first year of profitability in 2010. The site was purchased by AOL for US$315 million in February 2011.153

**ProPublica:** an independent, non-profit newsroom that seeks to produce journalism in the public interest. It leverages a distributed reporting model and enlists the public as sources or analysts using its Reporting Network (ProPublica also partners with The Public Insight Network described below.)

**Public Insight Network:** a platform for connecting journalists with knowledgeable sources. It provides partners access to its platform and the more than 100,000 people registered as sources. The project initially started to serve the needs of American Public Media, but has now grown and serves 30 newsrooms across the country—some that are for a single program radio program and others that serve an entire regional newspaper.

---

Nevertheless, for a variety of reasons, the local news institutions and newspapers most under threat from the collapse of traditional journalistic business models have been the least likely to embrace pioneering forms of networked, collaborative reporting. Research suggests that while many online news sources are embracing the notion of participatory journalism, they do so with some reluctance, and certainly not to the full extent that technology allows. Journalism scholar Pablo Boczkowski attributes this to the tendency of newspapers to view their readers primarily as consumers of content, leading to the creation of online platforms that provide little opportunity for readers to speak alongside reporters and editors. This tendency may also reflect Lowrey’s contention, in reference to blogging, that “news organizations may be more interested in containing and directing the blogging phenomenon than in fostering democratic participation.”

3.1.2 Social Networks

According to Alexa statistics, the top 10 social networks are Facebook, YouTube, Twitter, LinkedIn, Flickr, MySpace, Yelp, Reddit, Match.com, and Digg. However, this list fails to convey the complexity of the category. Some of those sites, such as Flickr and YouTube, are not seen first and foremost as a mechanism for social networking, along the lines of Twitter or Facebook, by some users because they provide other functions. Other sites play a role much larger than a place for sharing news with friends within the site. Facebook technology is now embedded in many major platforms and thus tailors news far beyond the Facebook.com URL. Others serve a specific purpose: Match.com is for dating, and Yelp for restaurant reviews. Digg and Reddit are social bookmarking platforms that are used to highlight news stories on other sites partly via a social network.

In addition to these major sites there are two other significant types of platforms. The first are sites that cater to a specific interest or ethnographic sector—such as BlackPlanet.com for African American youth, PatientsLikeMe for patients suffering from chronic diseases, deviantART.com for artists, or Flixster for movie buffs.

The second type of network is formed by local groups using simple Google Groups or Yahoo! Groups technology. Especially in urban areas, such groups serve increasingly important roles—for example, alerting subscribers to crime and public safety issues or encouraging the sharing of resources.

157. According to Facebook, the number of active users on its site is over 500 million. As of September 2010, Twitter had more than 145 million registered users.
3.1.3 News in Social Media

Many popular Google search terms for 2010 were for other platforms, such as YouTube, Yahoo!, Facebook, and Craigslist (oddly “Google” is the sixth most popular search term on Google).\(^{158}\) Clearly this is a tool via which users not only search for subject-specific information, but also how they navigate their repertoire of online platforms and services. Google’s top news search terms are similarly general.\(^{159}\) The top Bing searches of 2010 sought out celebrities such as disgraced golfer Tiger Woods and U.S. reality TV stars such as Kim Kardashian and Kate Gosselin.\(^{160}\) Out of the top 20 most followed on Twitter, the only news source to make the list is CNN Breaking News at 20. The remainder are celebrities (Lady Gaga is first), although President Barack Obama is fourth. The *New York Times* is at 35, behind Perez Hilton, a Hollywood-based celebrity gossip website.\(^{161}\)

A look at the 20 most popular blogs shows that they often relate to entertainment gossip (third) or technology (sixth). Two news blogs, the Huffington Post and CNN.com, are in the top 20. There are also several opinion blogs.\(^{162}\)

One indication of the amount of news sharing on social networks is the volume of referrals they provide to public news sites. Recent growth in such referrals suggests that a significant amount of news sharing is occurring. The Poynter Institute reports that the *Washington Post* has seen referrals grow 280 percent year on year since it fully integrated Facebook-sharing tools.\(^{163}\) The Philadelphia news site Philly.com conducted an analysis that showed that, by its measures, those referred by Facebook are also more engaged readers.\(^{164}\) Facebook itself suggests that multiple publishers are seeing referral traffic increases of greater than 200 percent as a result of tighter integration.\(^{165}\) Facebook isn’t the only social tool in this space. StumbleUpon, a much smaller tool, with fewer than 13 million users, was referring more users to sites in December 2010 than Facebook, according to StatCounter.\(^{166}\) Data from a popular widget show that of the referrals handled by it, 24 percent are sent via social networks, a rise of 3 percent year on year.\(^{167}\) For video referrals, Facebook passed


Yahoo! as the second-largest referrer of traffic, according to one study.\(^{168}\) Though each element of these data tells only part of the story, in the aggregate they point to the growing and sustained trend of reading news following prompts from social networks.

### 3.2 Digital Activism

#### 3.2.1 Digital Platforms and Civil Society Activism

Two trends have shaped the history of digital activism in the United States. In 1998, MoveOn collected half a million signatures on a petition against the impeachment of President Bill Clinton.\(^{169}\) The organization then leveraged these digital signatures to identify volunteers in more than 200 districts to deliver the petition and phone their representatives.\(^{170}\) The group has subsequently grown and now leverages a much larger list on many progressive political issues.

A more concrete thread of digital activism was born at almost the same time with the creation of the first Indymedia center. Its role was to act as a physical and virtual nexus for activists to share news during the protests in Seattle against the World Trade Organization (WTO) in November 1999. Indymedia eventually sprouted into a network of sites around the globe. It was premised on the idea that disseminating accurate reporting would require a participatory network of citizen journalists.

Today the use of practices that emanated from these efforts is extensive. Within the national election context, the landmark campaign to integrate Indymedia-type technologies was the 2004 Democratic primary campaign of Howard Dean. The Dean campaign leveraged emerging hosted email distribution and associated online services such as Meetup.com, alongside a jury-rigged homemade infrastructure, to permit activists to assemble in support of their causes and to mobilize and engage young people at a level not seen in decades. Senator John Kerry was unable to capitalize on this energy, though both his and President George W. Bush’s campaigns leveraged online tools for coordination purposes.

Many lessons were learned from these efforts by Obama For America, which in its primary campaign took the opportunity to engage activists in then-Senator Obama’s presidential campaign; this effort demonstrated that online and mobile tools can scale political activism to unprecedented levels and can also (very importantly) raise large sums for the infrastructure to support that engagement.\(^{171}\) More recently, similar tools were deployed to support the rapid growth of the conservative- and libertarian-inspired Tea Party movement.

---


that recruited many people across the country to form a grassroots network of conservative activists during 2010.172

Local activism is an emerging phenomenon in which local groups glued together via a simple email list or a technology such as Meetup.com now serve as organizing points, just as churches and more traditional physical spaces did in decades past. This has not yet come to the fore in a major way, but experiments exist around the country. For example, in Minneapolis–St. Paul Stephen Clift has deployed a platform in multiple communities that he calls a “local issues forum” which involves asking local community members to recruit others to participate online.173

Another key area is the organizing of crisis response online. Spurred by a need to respond to the aftermath of Hurricane Katrina, technologists have developed platforms to better respond to disasters. In this case, the tools are not only digital; low-power and ham radio play an important role, complemented by the deployment of mesh wireless.174 In such situations, it is important to realize that reach is likely best achieved through multiple complementary platforms. For example, such efforts generated a tool called the Katrina People Finder that used multiple platforms and distributed labor to aggregate the many lists of missing people.175 Subsequent efforts around feared hurricane disasters resulted in the development of the Hurricane Information Project, which has since morphed into a movement and gained an offline infrastructure in the form of Crisiscamps.org.

Labor unions have been active on this front as well. The Service Employees International Union (SEIU) pioneered efforts in labor organizing, and the speed with which the February 2011 protests against abolishment of Wisconsin state collective bargaining agreements were organized and publicized nationally outside of traditional media suggests that such innovations have taken root.176 Nowadays, few campaigns would eschew an online campaign component and most would collect signatures and engage supporters to complement more traditional efforts.

Along with efforts linked to particular policy issues, activism for open government and transparency has become more organized—aimed first at obtaining the release of data collected by government, and ultimately at creating a more participatory engagement with government at the local, state, and federal levels. Examples of organizations involved in this work are the Sunlight Foundation and MapLight.org at the national level (though MapLight.org also looks at individual states); OpenGovernment.org has a growing list of states


for which they track campaign contributions, post bills, and provide forums for discussion of “hot issues”. Similarly, a group called Sunshine Review has the motto of “Bringing state and local government to light”, a task the organization executes through a wiki that rates openness of state and local governments. At the city and state levels, New York, with the dataMine and reinventNYC initiatives to redevelop its web presence; San Francisco, with Data.sf.org; and Portland, with its CivicApps initiative, serve as leaders.

### 3.2.2 The Importance of Digital Mobilizations

With digital elements being added to nearly all campaigns, the digital divide is growing in importance. The clear challenge for these tools is uneven distribution in access, adoption, and the skills to engage. Uptake of forums and other organizing technology often privileges the more educated, wealthy, and connected. In particular, disproportionately low access to the internet by persons of low income and minorities across rural and urban America means that a significant number of people are unable to participate meaningfully online. As a result, such online activism acts to widen the participation divide between the connected and the non-connected.

To fully understand the import of digital activism, it is necessary to separate virtual protests or campaigns that just require users to click or “like”—so-called slacktivism—from campaign practices that extend into physical spaces as well. The former are widely criticized by those who are supposed to be persuaded. In particular, the offices of Congressional office holders are skeptical of petitions signed by people who are not identified as living in their electoral districts and thus who might not vote for that elected official. However, as office holders themselves have started engaging in these participatory platforms, including Twitter and Facebook, the broad-based skepticism is melting away.

These tools are also utilized by extremist groups. Al-Qaeda’s use of decentralized organizing principles has been well documented, and around the United States the use of online organizing technologies by hate groups is growing.
3.3 Assessments

Many more voices are heard today in political and policy discourse thanks to new and digital platforms. The ideals of media participation espoused in the 1970s within the public access channel movement and renewed by activists from Indymedia in 1999 have become the norm for many people, with Pew emphasizing the significant role the internet plays in aiding participation in many group activities. The opportunity to comment or provide positive or negative feedback on news articles is widespread within traditional media as they have migrated online. Letters pages are still important, but they are no longer the only way readers can participate. New platforms such as the Huffington Post and Townhall.com have achieved considerable reach for more progressive writers and for conservative writers and comment-makers, respectively. That said, such digital activism—centering as it does around UGC—often requires a news story to anchor it, something that is still often provided by more traditional media.

However, despite much discussion about mobile platforms and specialized tools, it appears that the more mundane technologies of email and plain cell-phone access have been the most critical to organizing efforts. A spike in mobile campaigning around the upcoming 2012 election is, however, to be expected. Many recent articles and books have argued that online activism is overhyped and the product of a misguided digital utopianism. Though this critique is fair, especially when it targets so-called slacktivism, the overall situation is certainly more complex. It is becoming obvious that activists are now embedding digital processes more deeply in the repertoire of community organizing and that citizens are becoming more familiar with those practices and the ways in which digital tools can aid activism and protests beyond cyberspace.


4. Digital Media and Journalism

4.1 Impact on Journalists and Newsrooms

The primary factors affecting journalistic work have been the digitization of news and the breakdown of traditional funding models. Resulting changes include the following:

- drastically lowered prices for digital advertising as compared to ads in traditional outlets;
- the easy sharing of digital news;
- the persistent trend of broadcast and print producers providing free online access to content;
- an increased ability to narrowly target audience demographics and tailor the content accordingly;
- new possibilities for collaborative forms of news production work and a broadening and “mashing up” of informational sources.

This confluence of changes has created turmoil in the news industry. Newspapers, traditionally the repository for serious journalism in the United States, entered the 2000s with significant profit margins and went through a period of consolidation. When the 2008 economic crisis hit, however, this burdened newspapers with debt they could not easily service in what had become a much lower-margin business; print circulation fell, and free online services much reduced classified advertising as a revenue source. The result was the continuation and acceleration of a reduction in the journalistic workforce and in the number of traditional newspapers. On the other hand, the proliferation of outlets on cable television and the internet has lowered barriers to entry, theoretically broadening the field in terms of both sources of news and viewpoints expressed. As we are still in the midst of these major transformations, it is difficult to predict what the public sphere might look like when the dust settles.


4.1.1 Journalists

The separation between online and print journalists has narrowed and in some cases even disappeared. Over the past few years, all journalists have come to appreciate that their work has an online audience often as large, if not larger, than through traditional platforms. Successive waves of journalistic innovators have leveraged rising platforms—blogs, online video, Twitter, tablets, and beyond—to position themselves as entrepreneurs and experts and to experiment with new revenue streams. Nimbleness and experimentation are prized in an industry that is in a perpetual state of reinvention.\(^\text{187}\)

The flipside of this constant innovation is that journalists now often feel they are in a “hamster wheel” situation, as Dean Starkman has written: “in today’s newspapers, stories tend to be gathered faster and under greater pressure by a smaller, less experienced staff of reporters, then are passed more quickly through fewer, less experienced, editing hands on their way to publication.”\(^\text{188}\)

The constant pressure to update and multipurpose one’s content has elsewhere been referred to as the shift from a news cycle to a “news cyclone”.\(^\text{189}\) The old boundaries of the journalistic profession are also being challenged.\(^\text{190}\) Though the writing was on the wall, journalists working in legacy media (radio, television, and print) initially reacted with a mix of “reactive, defensive, and pragmatic.”\(^\text{191}\) However, as they have become more familiar with the new technology, an increasing number of journalists have showed enthusiasm, seeing the changes as “empowering and liberating.”\(^\text{192}\) In addition, web producers are emerging as a distinct class of news producers whose role it is to aggregate, interlink, bundle, and illustrate web content. Increasingly, their task is to rank and respond to an article’s changing level of importance.\(^\text{193}\) The implications of real-time audience engagement with a story are now visible in the newsroom, and editors at least take them into account. The result of this is that newsroom management (and reporters themselves) can now supplement their independent news judgment with audience metrics.\(^\text{194}\)

Although 2011 is turning out to be a year where news coverage of the journalism industry is less fatalistic than it has been during the past five years, and there are jobs to be had, the future continues to remain

---


\(^\text{189}\) E. Klinenberg, “Convergence: News Production in a Digital Age,” p. 54.


\(^\text{194}\) C.W. Anderson, “Between Creative and Quantified Audiences.”
uncertain. The new boundaries of journalism are only just emerging as computer-assisted reporting, reader engagement, and multimedia are becoming more firmly embedded. The new reality is that journalists of the future will need to be more broadly skilled with digital media, not just by supplementing stories with video and photographs but also by mastering techniques of digital storytelling.

4.1.2 Ethics

It is hard to say if any major and systemic ethical violations have been caused by digitization. There are examples, best illustrated by the Jayson Blair scandal at the New York Times, in which the internet permitted the reporter to more easily plagiarize stories.195 There are also occasional stories, mostly having to do with the “hamster wheel” phenomenon (see section 4.1.1), that have highlighted questions around what is fair use of someone else’s reporting. The ability of a website to paraphrase or copy critical paragraphs of reporting and intersperse them with commentary can generate an article that might generate more page views and thus ad impressions than the original.196 The speed at which journalism is now being produced can also lead to highly visible and quickly replicable mistakes in sourcing and fact-checking—hoaxes and false information that might have been buried in next-day corrections in print are now immediately visible and subject to audience comment.

More significant, however, is the possibility for massive leaks of information, exemplified by the State Department cables released by WikiLeaks and the Palestine papers shared with Al-Jazeera. It is clear that the possibilities of involuntary institutional transparency are considerable, and this has forced the journalism profession in the United States to examine how to engage with sources that hold massive caches of data.197 As Yochai Benkler has written, WikiLeaks has moved from winning awards in 2009 for exposing a range of information around the world to being identified as an organization that through its release of embassy cables had perpetrated “an attack on the international community.”198 As a defense, WikiLeaks has sought formal partnerships with mainstream media outlets, and its leader has identified himself as a journalist. The aim of these moves, of course, is to paint the organization as falling within the ethics of American journalism—much to the dismay of critics.

195. While at the New York Times, Jayson Blair would plagiarize stories using “selected details from photographs to create the impression he had been somewhere or seen someone, when he had not” and where “[h]is tools of deceit were a cell phone and a laptop computer—which allowed him to blur his true whereabouts—as well as round-the-clock access to databases of news articles from which he stole.” See D. Barry et al. “Correcting the Record: Times Reporter Who Resigned Leaves Long Trail of Deception,” the New York Times, 11 May 2003, available at http://www.nytimes.com/2003/05/11/us/correcting-the-record-times-reporter-who-resigned-leaves-long-trail-of-deception.html (accessed 12 May 2011).


197. Notably, the faculty of only one journalism school, the Graduate School of Journalism at Columbia University, has taken an explicit position with respect to WikiLeaks—a large number of their faculty signed a letter addressed to the United States Attorney General arguing in support of WikiLeaks. See “Faculty Speaks Out Against WikiLeaks Prosecution,” news release, Columbia Journalism School, New York, NY, 4 January 2011, available at http://www.journalism.columbia.edu/news/295.

There are also questions about what the standards of journalism should be in the new digital age. The Society of Professional Journalists’ watchwords of professionalism, separation of news and opinion, verification, accuracy, and the ideal of objectivity are now challenged in a world of digital interactivity, transparency, and partisan journalism that often seeks to meet the news and information needs of a particular (sometimes politically identified) demographic.  

Previously, niche and partisan outlets served limited audiences and were restricted in size and distribution by the limitations of benefactor or advertising support, subscription base, and marginalization by “mainstream” news sources. Now, however, distribution is cheap and widespread, and the boundaries between mainstream and partisan news have nearly been erased online and in a cable line-up of hundreds of channels. Previous journalistic gatekeepers—national newspapers, network television news, high-subscription newsweeklies, and Sunday news shows—no longer control and define what constitutes “news”. Instead, the burden is placed on news consumers to sift, choose, compare, and decide.

These new conditions have spawned new journalistic standards, which are most clearly illustrated by those who argue that journalists need to be transparent, accountable, and open. The shorthand for this is the TAO of Journalism Pledge that journalists are encouraged to support and display prominently on their publications. The pledge asks the signer to disclose their expertise, funding, advertisers, and political or other affiliations that might be important to a reader. It further asks them to be accountable for errors, to make corrections, to remain open to contrary positions, and to provide opportunities for dialogue.

Notwithstanding the effort above, the proliferation of outlets has resulted in some that fail to adhere to high standards. One example can be seen in the willingness of some partisan and mainstream outlets alike to distribute misinformation and devote media coverage on already refuted issues such as President Obama’s birth certificate. A response to this loss of the objectivity ideal in American journalism has been the emergence of fact-check programs. There are multiple initiatives—for example, Factcheck.org is a project of the Annenberg Public Policy Center at the University of Pennsylvania, while Politifact was launched by the St. Petersburg Times. In addition, the Center for Public Integrity provided real-time coverage of the 2011 State of the Union speech in conjunction with other organizations. The Washington Post even has an online column called “Fact checker”.


200. See http://taoofjournalism.org/.


A related set of questions has to do with the blurring of boundaries between reporters, sources, advertisers, and advocates. While the same questions plagued previous decades of print and multimedia journalists, the ease with which media that resembles journalistic production can now be created has prompted multiple re-examinations of how best to differentiate between news, analysis, opinion, promotion, and activism. One such recent examination by public broadcasters proposes new ethical guidelines for editorial partnerships, financial arrangements, and the public interest.\(^{204}\)

### 4.2 Investigative Journalism

#### 4.2.1 Opportunities

Support for investigative reporting at major newspapers and broadcast networks has been steadily declining for the past two decades. Though this fall-off in investigative capacity has had a tremendous impact on what is covered, digitization has also had positive impacts.\(^{205}\) What have come to be known in the U.S. as Computer Assisted Reporting (CAR) techniques encompass the use by reporters of database and data-analysis tools. CAR has often been deployed around campaign contribution tracking and cross-referencing, but it also has utility in other realms. Add to this the sophisticated visualization tools used by some media outlets, as well as interactive interfaces that provide users with direct access to custom data, and it is clear that digitization is leading to richer media. The marriage of these two is perhaps best exemplified by a series published by the *Washington Post* in July 2010 titled “Top Secret America”. The series involved significant research and cross-checking and utilized the web to present it in sophisticated ways.\(^{206}\)

Interestingly, computer specialists (“hackers”) are convening informal meetings with journalists (“hacks”) to share their expertise at “hacks and hackers” Meetups. The Computer Assisted Reporting Conference (NICAR) took place in February 2011 and was sold out. This is occurring even as universities take steps to create dual-training programs for reporter-developers. In 2011, Columbia University will see its first class of dual-degree students. And platforms such as Document Cloud—a tool to host large volumes of documents digitally and make them easily searchable—are only beginning to be widely used.\(^{207}\)

#### 4.2.2 Threats

The loss of profit margins in the newspaper industry has been felt very clearly in the field of investigative reporting.\(^{208}\) As these economic effects have hit newsrooms in the United States, well-publicized layoffs have resulted in fewer reporters assigned an investigative beat. As media historian Paul Starr warns:

---


When they were financially strong, newspapers were better able not only to invest in long-term investigative projects but also to stand up against pressure from politicians and industries to suppress unfavorable stories. As imperfect as they have been, newspapers have been the leading institutions sustaining the values of professional journalism. A financially compromised press is more likely to be ethically compromised.\textsuperscript{209}

Starr provides detailed statistics about the decline in the number of \textit{Star-Ledger} reporters covering the state government of New Jersey and argues persuasively that oversight will shrink as a result.

One obvious risk to reporters is any digital platform that leaves a trail between source and writer; this provides a record that may ultimately be discovered, perhaps as a result of inadvertent disclosure on a social network or as a result of legal action. This may result in a somewhat higher risk of exposure for sources, inasmuch as more interactions are digitized and reporters fail to use secure, encrypted communications methods.\textsuperscript{210} Having said this, the risk to reporters appears to be far outweighed by the possibilities of massive levels of data disclosure by whistleblowers, utilizing electronic drop boxes along the lines of WikiLeaks.

\subsection*{4.2.3 New Platforms}

New non-profit journalism centers have been formed (and dissolved) in a fit of experimentation and disaggregation in the news production business. The Huffington Post formed an investigative arm in August 2009\textsuperscript{211} and in February 2011 folded it into the Center for Public Integrity, an independent organization that has been around for more than 20 years. Indicating that this movement may be gaining traction, the former editor of the well-respected \textit{Wall Street Journal} formed ProPublica\textsuperscript{212} and, in parallel, the Investigative Reporting Workshop based at American University. ProPublica, which has explicitly sought to develop investigative journalism in the public interest as an organization independent of any single outlet, develops stories on its own and then places them in traditional news outlets. The Pulitzer Center on Crisis Reporting performs a similar role internationally and seeks to cover foreign stories with an investigative lens comparatively cheaply. Though ProPublica and its equivalents replicate many traditional elements of investigative reporting units, the cost pressures that came from digitization and the disaggregation of reporting functions are what drove the development of these units. In a sense, the birth of these separate investigative reporting outfits has been the silver lining to the crisis in traditional journalism, which had largely forsaken time- and resource-intensive journalism under the pressures of declining reader/viewership and profit imperatives. There are some benefits

\begin{itemize}
  \item \textsuperscript{212} See http://www.propublica.org/.
\end{itemize}

Another development has been the increasing use of crowdsourcing. Audience partnerships play a key role at TalkingPointsMemo, a start-up website that broke arguably the biggest investigative story in 2007, the U.S. attorneys firing scandal, using, among other methods, tips from readers. The site won a major journalism prize (a George Polk Award) for that story.\footnote{N. Cohen, “Blogger, Sans Pajamas, Rakes Muck and a Prize,” the New York Times, 25 February 2008, available at http://www.nytimes.com/2008/02/25/business/media/25marshall.html (accessed 27 July 2011).} This is becoming more typical. In Rochester, N.Y., the Democrat and Chronicle asked readers to share information about groundwater contamination.\footnote{J. Marshall, “The Transformation of Investigative Journalism in the Digital Age,” Paper presented to the Newspaper Division of the Association for Education in Journalism and Mass Communication, 2010 annual meeting.} Though in both cases input from readers could have happened prior to digitization, the scale of partnerships and level of involvement is materially different post-digitization.

Distributed citizen-led reporting efforts in this area have had a mixed impact. The first, NewAssignment.net, led by Jay Rosen and started in July 2006, never really took off. Rosen then collaborated with the Huffington Post in an effort called OffTheBus, a “pro-am” network of 12,000 people, which made a name for itself in the 2008 campaign (see section 3.1.1). One innovation of OffTheBus was “replacing objectivity with an ethic of transparency,”\footnote{A. Michel, “Get Off the Bus: The Future of Pro-am Journalism,” Columbia Journalism Review, March/April 2009, p. 42, abstract available at http://www.cjr.org/feature/get_off_the_bus.php (accessed 29 July 2011).} with editors providing clarity and structure to content that would normally wind up on a blog or Twitter feed. One of the drawbacks of relying so heavily on volunteers is that the project was ultimately unsustainable; when excitement around the 2008 presidential election died down, participants largely lost interest. In addition, ethical questions arose in this project about the boundaries between citizen reporting and political action.\footnote{J. Rainey, “Mayhill Fowler Goes from New Media Star to Old News,” the Los Angeles Times, 13 March 2010, available at http://articles.latimes.com/2010/mar/13/entertainment/la-et-onthemedia13-2010mar13 (accessed 1 August 2011).} The more sustainable use of citizens as journalists appears to be in the distribution and confirmation of breaking information; events such as the Arab Spring, the killing of Osama bin Laden, and the Japanese earthquake and tsunami were all broken first on Twitter and Facebook, then picked up and expanded on by news organizations.\footnote{“Social Media: The People Formerly Known as the Audience,” the Economist, 7 July 2011, available at http://www.economist.com/node/18904124 (accessed 28 July 2011).}

Such innovation has been mirrored on the conservative side of the political spectrum by the unquestionably impactful efforts of James O’Keefe, a young conservative activist who pursues stories as an undercover reporter and seeks to embarrass those he interviews. His efforts have resulted in resignations at NPR and the breakup of ACORN, a national organization that advocated on behalf of low- and moderate-income

\footnotetext[214]{See http://www.iwatchnews.org/ (accessed 20 July 2011).}
\footnotetext[216]{J. Marshall, “The Transformation of Investigative Journalism in the Digital Age,” Paper presented to the Newspaper Division of the Association for Education in Journalism and Mass Communication, 2010 annual meeting.}
families. However, his methods—which include exaggerated costumes and aliases, as well as the selective editing of responses by his subjects—have been called into question as being closer to “agit-prop” than traditional reporting.220

With Amanda Michel, formerly part of OffTheBus, now leading ProPublica’s distributed reporting unit and the expansion of APM’s Public Insight Network, we should expect more innovations. The Public Insight Network, a database that acts as a platform to connect journalists with knowledgeable sources, appears to be a particularly robust and useful addition to the landscape.

4.2.4 Dissemination and Impact

“Think of how much faster Woodward and Bernstein would have toppled Nixon if Deep Throat had a Twitter account.” So said Jon Klein, president of CNN U.S., in 2009.221 Undoubtedly social media tools permit the sharing of information, and the web provides a place to print without the constraints of word limits. Add to this the ease with which links can be (and are) shared via Twitter, and it is clear that stories are being disseminated—and usually ignored—much more quickly than before.

The above-mentioned Pulitzer Center on Crisis Reporting, which commissions individual stories from journalists and places them in traditional media outlets, also holds related events and engages with schools and colleges to share the stories. This is something that traditional newspapers rarely did, but which is now much easier when digital tools can be used to develop a dialogue between the students and the reporter while in country. Reporters and outlets are experimenting with a wide range of online and offline engagement strategies in order to build buzz and break into the 24-hour cable news cycle. For example, ProPublica produced a music video to generate interest in a long-term investigation into “fracking”, a form of natural-gas drilling that contaminates adjacent water supplies.222

4.3 Social and Cultural Diversity

4.3.1 Sensitive Issues

Today in the U.S., the most sensitive issues in terms of social and cultural diversity include the following:

- Immigration. Political discussions have focused on immigration policy, particularly the extent to which undocumented immigrants may be taking advantage of social services and holding jobs that would otherwise be filled by U.S. citizens. This issue largely breaks down along liberal and conservative lines, with the more conservative voters and politicians generally taking a much more aggressive stand on immigration policies (particularly in relation to immigration from Mexico) than more liberal voters and politicians.


221. D. Carr, “Rerunning the James O’Keefe NPR Tape.”

- **Race.** A related but distinct issue, race relations and racial prejudice remains highly charged, especially in relation to blacks in urban areas and the treatment of stories related to crime, poverty, and social welfare. The election of Barack Obama was heralded by some as the advent of a “colorblind” society, but instead has produced a backlash among some political quarters, generating a fresh wave of reporting and analysis on race issues.

- **Gay/Lesbian Rights.** This also remains a high-profile and controversial area in the U.S., with several sub-issues, including whether gays and lesbians may serve openly in the military and whether marriage should be permitted within these groups. Again, public opinion and policymaker perspectives on this break down very much along liberal and conservative lines.

- **Treatment of Arabs/Muslims.** In the aftermath of 11 September 2001 and other attempted terrorist activities in the U.S., as well as the country’s involvement in Iraq and Afghanistan, the treatment of Arab and Muslim communities in the U.S. remains a sensitive issue. Debates over prejudice and racial/religious profiling remain prominent.

- **Economic Inequality.** The financial collapse of 2008 and the resulting jump in unemployment has had a complex impact on the national conversation. Economic disparities have become increasingly stark, yet the discussion around the role of government in addressing this question has become increasingly polarized.

- **Reproductive Politics.** Abortion, birth control, and sexual practices and norms remain hot-button topics, with a vocal set of groups actively advocating to recriminalize abortion.

### 4.3.2 Coverage of Sensitive Issues

Not surprisingly, these issues have received substantial attention in the news media. Given their highly politicized nature, these topics also give rise to conflicts that have proven central to contemporary American news values. Accusations of media bias, for instance, have been commonplace.\(^\text{223}\) Given that many of the ascendant news outlets (such as Fox News, MSNBC, and a groundswell of blogs on the right and left) have engaged in a far more opinionated and ideological style than has been commonplace in recent U.S. journalism (see section 1), these issues have become a focal point of these news organizations’ activities, as well as for debates over the behavior of the organizations themselves.\(^\text{224}\)

Until the late 1980s, the FCC maintained a policy known as the Fairness Doctrine, which required broadcasters to provide airtime for multiple perspectives on controversial issues of public importance (e.g. to provide equal time to both pro-choice and anti-abortion perspectives). This was perhaps the most direct form of news content regulation that has existed in the U.S. and might well have militated against the kind

---


of coverage discussed just above. However, this doctrine was rescinded by the FCC on the grounds that it was an infringement on broadcasters’ speech rights and that it in fact imposed a “chilling effect” on news due to the fact that some broadcasters reportedly opted to avoid coverage of controversial public issues rather than become mired in fulfilling fairness requirements.225

In the current news environment, few regulatory controls exist except on public broadcasting—which is mandated to be balanced, subsidizes coverage on topics of concern to particular ethnic minorities, and is closely scrutinized by advocates on all sides. A few high-profile news organizations—the New York Times, the Washington Post, CNN, prestige magazines such as Harpers, and select investigative programs including “60 Minutes”—still serve as national standard-bearers for objective and in-depth journalism. However, the pressure to succumb to a more partisan or simply sensationalized model is intense, as evidenced by the recent merger of venerable newsweekly Newsweek with online tabloid The Daily Beast.226

4.3.3 Space for Public Expression

In the emerging digital ecosystem of blogs and social networking tools, those who are online have almost infinite access to space for dialogue, even though privacy and security issues in commercial online platforms are a concern for some. That said, much of that expression will be unheard or unseen, because though much of this discussion is technically public, it will not reach a significant audience. This 21st-century media landscape is also accompanied by the infrastructure within many communities of public access cable channels, many of which have a free speech ethic and aim to serve communities on a first-come, first-served basis.

With respect to minority programming, there are no regulatory requirements related to quotas or coverage. The closest approximation would be the FCC’s Equal Employment Opportunity (EEO) rules, which require local broadcast and cable outlets to make certain minimum efforts to recruit minorities for available positions. These EEO rules used to be much more stringent (requiring minority hiring commensurate with minorities’ representation in the media outlet’s surrounding community), but have been substantially scaled back over the years, due in part to court decisions that declared previous iterations of the rules unconstitutional.

People of color are dramatically under-represented in newsrooms. They comprised just over 13 percent of newsroom staffs around the country in 2009. In 2008, 15.5 percent of television news directors were people of color, a figure skewed by their over-representation in Spanish-language stations. And just 11 percent of staff in radio newsrooms were people of color in 2008. This significantly affects program content and how stories get told, given the accumulation of evidence that the characteristics of those reporting and editing the news affect how news is reported.227 For instance, mainstream news media often do not provide adequate

representation of minority populations or provide sufficient information serving the needs and interests of these minority communities. Accordingly, consumers of news in communities of color must often rely on multiple news sources—if and when available—to get a full picture of relevant events in their area. One news source may be the local broadcast news or newspaper, and another may be a local paper created by and for their ethnic or racial group. An African-American resident of Harlem may read the *New York Post* and the *Amsterdam News*. A Mexican resident of Washington, D.C., may read the *Washington Post* and *El Tiempo Latino*. It is important to note that ethnic media have been slower than their mainstream media counterparts to move into the digital realm. Many ethnic and foreign language newspapers, for instance, continue to only be available in print and have yet to establish a meaningful online presence, although this may be driven by a lack of access, production skills, or comfort with the web in their target audiences.\(^{228}\)

While most people in the U.S. now have access to more information than ever before, race, gender, income, education, geography, age, disability, and sexual orientation all continue to shape Americans’ opportunities. People of color, women, low-income groups, new immigrants, rural residents, youth and the elderly, differently abled people, and LGBTQ (lesbian, gay, bisexual, transgender and questioning) persons are all still under-represented in ownership of, employment within, truthful representation by, and access to information and communication technologies (ICTs) both old and new.

As noted above, however, users with access to cable and the internet now also have a much more robust array of partisan news choices than ever before. Ethnic and political distinctions and tastes do not always fall along predictable lines, and those with resources can easily find reporters, analysts, and commentators to match not only their ethnic origins but their political temperament.

### 4.4 Political Diversity

#### 4.4.1 Elections and Political Coverage

Digitization has not triggered any changes in the regulation of media coverage of elections. There is, indeed, very little meaningful governmental regulation of election coverage. A recent Supreme Court decision to overturn campaign finance laws further restricts the regulation of advertising expenditures.\(^{229}\)

Digitization has, however, had profound effects on the way the public receives and uses political information. The internet has increased the number of political voices exponentially. In particular, the internet has allowed people to join or create political communities that are no longer bound by geography. As Davison has stated, “emerging digital technologies represent a departure from the industrial philosophy [characterized by the logic of twentieth century marketing] and the broadcast media logic that follows from it” that audiences

---


may be treated as consumer demographics.230 Others have pointed out that while the democratic potential of digital media is met through the more pluralistic, participatory nature of platforms such as blogs, those same platforms are simultaneously insular and inactive, thereby counteracting their democratic potential.231 Similarly, experiments looking at youth use of the internet channel YouTube found them to be simultaneously more cynical yet more empowered after watching political content.232

How the emergence and adoption of digital platforms will play out during the 2012 presidential election is unknown, though it is likely that many outlets will seek to provide tailored coverage by state and issue. Much of this will likely be delivered through social network news platforms that would have been unthinkable four years ago.

4.4.2 Digital Political Communications

Digitization has had a dramatic effect on political communication in the U.S. First, the web has become increasingly important as a mechanism for communication, mobilization, and fundraising by political parties and advocacy organizations. Citizens are not just relying increasingly on the internet for political information (whether through websites or emails directly from political parties, advocacy groups, or individual candidates), but are, as well, increasingly donating money to political causes/candidates and being recruited for other forms of political activity via the internet.233

Social media sites have come to play an important role for political organizing, fundraising, and mobilization. According to the Washington Post, then-Senator Obama raised more than US$500 million online in his campaign for the White House.234 His campaign’s email list totaled greater than 13 million addresses. Over one million cell phone numbers were on his campaign’s text message list. Across the various social networking sites, he maintained more than five million supporters.235 Even what might be termed “fringe” candidates (i.e. candidates with relatively narrow appeal and little legitimate chance of winning the election) have found the internet to be an incredibly powerful tool. In one day in November 2007, Ron Paul, a fringe candidate for U.S. president and a longstanding member of the House of Representatives, was able to raise more than US$4 million online.236

There are both positive and negative dimensions to the diminished importance of traditional media “gatekeepers” of communication between politicians and the public. On the positive side, the political biases or economic imperatives that led media outlets to provide diminished or biased coverage of political campaigns or issues have become less significant in terms of the individual citizen’s ability to obtain political information. In addition, digitization has increased the opportunities and ease with which citizens can monitor the activities of—and communicate with—their elected representatives. On the negative side, the traditional notion of the news media as the “fourth estate”, ensuring checks and balances in the political process, may be reduced when politicians and political organizations communicate directly with their constituents. Some conservative candidates, such as Sarah Palin, have even made a point of eschewing communication with traditional reporting outlets in favor of communicating with constituents only through partisan outlets and online channels.

4.5 Assessments

Digitization has had important effects on the work of journalists and the quality and accuracy of their reporting. Both online comment systems and the “blogosphere” have, on numerous occasions, served as a sort of “check and balance” on news organizations, for instance. In some instances, individual bloggers have located and distributed information that revealed biases or factual inaccuracies in the reporting of traditional news outlets. In addition, the ease of reposting online comments and the use of automated web archiving software creates living records of coverage that make errors more difficult to correct clandestinely. An early, well-known instance of this involves a blogger uncovering a reliance on forged documents in CBS’s reporting on President George W. Bush’s military service. The resulting scandal ultimately led to long-time CBS anchor Dan Rather’s resignation. As a result of such incidents, journalists are now much more accountable to their audience members and are forced to be more transparent.

Another positive effect has been the way in which the online space has facilitated new forms of reporting, such as database journalism, in which journalists take advantage of the vast amount of data available from official sources to engage in rigorous investigative reporting. And finally, new media tools and platforms such as blogs, social networking sites, and camera phones are allowing news organizations to receive information from locations and individuals that, for political, logistical, economic, or safety reasons, might not be accessible to them.

However, in a more negative direction, the digitization of media has led to a far more competitive and fragmented news environment, in which the pressure to break stories as quickly as possible has become more pronounced. This has led to common criticisms of a diminishing of the standards and practices associated with reporting. Rumor, questionable editing practices, and unconfirmed reports are more frequently reported by news organizations that previously succeeded in adhering to stringent standards, in their efforts to keep pace with emergent online news and information sources. So are stories that largely mirror press releases or

237. P. Starr, “Goodbye to the Age of Newspapers.”
other organizations’ coverage without providing citations of such.238 As one satirical take on the contemporary news business noted, “It’s a 24-hour news cycle. We don’t have time to do it right anymore.”239

It is important to recognize the rise and influence of online political news and information sources such as WikiLeaks, Politico, and the Huffington Post. In an increasing number of cases, online news and information sources are breaking stories that are then distributed and amplified by the mainstream media. In the U.S., however, the issue is less whether these news sources have emerged from non-regulated versus regulated platforms (given the general lack of regulations directed at the news industry), but rather one of whether these emergent news sources adhere to the ethical and professional standards that were established within traditional journalistic platforms. Some clearly aspire to, while others have no intention of doing so, and others again such as WikiLeaks are introducing new and different ethics. As the definitions of journalist and news outlet become looser, there is the accompanying question of if and how ethical and professional standards of journalists can or should evolve.

Overall, digitization has given those citizens with an interest in political campaign coverage and political information an increased array of sources of information and easier access to more detailed information than was possible before. Other areas of coverage have also flourished in this environment, including technology, travel, and business reporting—each supported by specialized audiences and enthusiastic pro-am contributors. The changes have created opportunities for niche media outlets that address the political needs, interests, and concerns of marginalized groups and hyperlocal audiences. Successive waves of innovation have supported a newly entrepreneurial and experimental news culture with a variety of creative new entrants. The digital transition has simultaneously created new opportunities for innovative forms of investigative journalism while undermining the economic foundation that has supported traditional producers of investigative journalism. The net effect in this regard remains unclear.

Within the debates over whether digital platforms and the changing economics of the news business have been harmful or beneficial to journalism, there is broad agreement that traditional investigative journalism is suffering. Investigative journalism, which is generally expensive and time-consuming to produce, seems to be the type of journalism most at peril in today’s commercial media environment, where stories have very short shelf-lives, audiences can be attracted and retained via much less expensive forms of journalism, and zero cost or near-zero cost content options are available, such as relying on UGC.

Local news, too, has been a point of great concern over the past five years. The consolidation and failure of local newspapers and broadcast reporting units has not fully been replaced by online equivalents. The economics of local and hyperlocal reporting are fragile, and much experimentation is underway to discover the sustainability of local news collaborations, the role of UGC, the role of data-driven information aggregation, and the viability of smaller online outlets to reach the same levels of exposure and influence achieved by print and broadcast journalism.

5. Digital Media and Technology

5.1 Spectrum

5.1.1 Spectrum Allocation Policy

The authority of the Federal Communications Commission (FCC) over spectrum allocation was first granted by the Radio Act of 1927, which allowed for “the use of such [radio] channels, but not the ownership thereof.” This non-ownership clause was included in the Communications Act of 1934. These acts clearly established the foundation for licensing rather than exclusive private ownership of the airwaves. Three decades later, however, the Nobel Prize-winning economist Ronald Coase wrote his seminal 1959 article, “The Federal Communications Commission”, which helped launch an intellectual movement in support of privatizing the airwaves. Coase lamented that the early U.S. communication laws codified the public interest doctrine and established the airwaves or spectrum as public property, albeit under federal oversight and management. His market-based approach was later adapted, and the established process where hearings comparing potential licensees were held was replaced with an auction mechanism to allocate spectrum to the highest bidder (though without the assignment of full property rights).

Although recent spectrum auctions have netted billions of dollars for the federal treasury, the auction approach has also disproportionately benefited powerful economic interests and privileged profit-making uses, especially given the prohibitive upfront costs of purchasing exclusive rights to spectrum. Since


243. The prohibition on ownership from 1927 (see above) remains in place in spite of considerable efforts by commercial interests and free-market conservatives to wholly convert licensees into private property.

pioneering the use of spectrum auctions as the dominant paradigm for frequency assignment, the United States has seen diversity and competition suffer greatly, with the levels of independent carriers and minority and women-owned spectrum licenses plummeting and consolidation of spectrum ownership increasing. The underlying rationale of the private property approach to spectrum management views the market as a neutral, if not benevolent, arbiter. As a consequence, policymakers have often ignored the public interest and non-monetary benefit in favor of maximizing treasury revenue.

Moreover, the high price of spectrum at auction has only increased the incentive for commercial users to prioritize higher revenue customers and delay coverage to less populated areas. Given an auction’s reliance on quantification of value in narrow financial terms, a model auction may also fail to realize the social and economic benefits of opening access to spectrum for as many users as possible, especially given the difficulty of estimating potential consumer benefits from new business models and technologies.

Traditionally, the spectrum scarcity rationale has led to difficulties in finding frequencies to support wireless broadband internet. Recently, advances in smart or cognitive radio (CR) and software defined radio (SDR) technologies have fundamentally expanded the options available for unlicensed access and allocation. These technological advances have created opportunities for dynamic spectrum sharing, thus potentially ending the persistent problem of artificial scarcity of spectrum. This especially holds true for use within vacant or unused spectrum, often referred to as “white spaces”, where cognitive radios could rapidly scan and process spectrum use in real time, identify unused frequencies, and utilize these frequencies rather than leaving them fallow. By opportunistically occupying unused frequencies within specific bands, these devices are far more efficient than traditional “dumb” technologies, which often broadcast on a single frequency regardless of other users or potential congestion.

In November 2008, the FCC opened vacant television channels to unlicensed white space devices (WSDs). These devices are required to employ spectrum-sensing technologies and a geolocational database to automatically detect occupied television frequencies and other protected users in the television bands. The technologies allow white space devices to identify and use the unassigned frequencies that exist

245. For example, in the FCC’s AWS-1 auction, the four biggest winners, T-Mobile, Spectrum Co., Verizon, and Cingular accounted for 71 percent of the total units of MHz-pop sold and 78 percent of total revenue. (MHz-pop is calculated by dividing the sales price by the product of the total number of MHz available and the population in a given territory.) Similarly, in the 700 MHz auction, Verizon, AT&T, and Frontier accounted for 80 percent of the total units of MHz-pop sold. See P. Bajari and J. Yeo, “Auction Design and Tacit Collusion in FCC Spectrum Auctions,” University of Minnesota, 31 March 2009, 1-23; 9-11, available at http://www.mysmu.edu/faculty/jyseo/research/Bajari_Yeo_FCC.pdf (accessed 27 July 2011).


between broadcast television channels and outside the coverage areas of licensed broadcasters for digital communications, including broadband networks.

As of 2011, there are two ongoing debates over spectrum policy. The first relates to the possibility of “incentive auctions” of spectrum currently allocated to over-the-air broadcasters. Although the FCC has proposed an approach in which the stations themselves would receive a percentage of auction proceeds if they agree to go off the air or share a channel with another broadcaster, the recommendations have met significant resistance from commercial spectrum incumbents.250 Although this opposition can be attributed to financial motivations, the proposal is also not particularly attractive for broadcasters that want to remain broadcasters and retain the rights and privileges associated with that position, such as public broadcasters. Additionally, those stations that choose to remain on-the-air and not to share a channel will probably be required by the FCC to transition to different frequencies in an effort to pack the remaining television signals closer together and clear as many continuous blocks of spectrum as possible for auction. This “repacking” process would happen soon after the digital television transition and would require broadcasters to incur additional transition costs and to purchase new equipment.

The second debate concerns use of the 700 Mhz D-block. The D-block is spectrum from the 2008 700 MHz auction that did not meet minimum bid requirements and therefore remains unused. Most likely, the band will be used to facilitate the development of a nationwide public safety network. However, at least one senator hopes to tie much of the revenue from auctioning the vacated television channels mentioned above to funding the build-out of the public safety network.

In sum, current spectrum policy allows a variety of devices and uses, although some are favored more than others by the auction mechanism that determines new allocations. It is also clear that the need for additional mobile wireless spectrum, alongside a desire to pay off federal debt with auction revenues, is driving policy change.251

5.1.2 Transparency

A study by Gregory Rose of the 2006 Advanced Wireless Auction Services (AWS-1) auction concludes that “the auction rules were manipulated to exclude new entrants to the marketplace from obtaining spectrum.”252 Rose states that targeted new entrants “were met with a tacitly collusive strategy of blocking bidding,” evidenced “in the pattern of bids … indicated by the significantly higher mean price they paid


for the spectrum they acquired … compared to other bidders.”253 Importantly, influence was most exerted via lobbying on the auction rules themselves, such that bids would not be anonymous. In response, the most recent FCC spectrum auctions have utilized anonymous bidding to limit anti-competitive behavior by spectrum incumbents and speculators. Even so, anonymous bidding has not yet been enshrined in the bidding rules for spectrum auctions; rather, the rules are subject to change for each auction. In addition, despite a multi-round auction with anonymous bidding in the FCC’s 700 MHz auction, the two largest wireless carriers, AT&T and Verizon, were the only carriers to obtain sufficient licenses in major markets to achieve nationwide coverage, outbidding a number of smaller rivals. The two next largest carriers, Sprint and T-Mobile, did not bid to secure any licenses in the auction, having devoted considerable capital to secure licenses in another auction just a few years earlier. They also understood they would not be able to outbid AT&T and Verizon.254

5.1.3 Competition for Spectrum

In 2011, competition for spectrum continues to be intense and is centered around the incentive auction bills currently under consideration in Congress. Much of the debate centers around the potential income to the federal treasury from four competing uses of spectrum—broadcasting, mobile, public safety, and unlicensed white space devices.

The core of the incentive auction proposal is to compensate broadcasters who give up their licenses with a percentage of any funds raised by the sale of the associated spectrum. The buyers of the newly available spectrum will most likely be cell phone providers looking to expand capacity, especially in urban areas. As mentioned above, the currently unused 700 MHz D-block may be assigned for use by public safety agencies. The fourth use is for unlicensed devices. These have been conceived as devices which would utilize the unused spectrum between television channels; however, with the repacking and reassignment of channels that is likely after incentive auctions, it is possible that such space will be reduced or in some cases lost entirely.

Intense lobbying is also occurring around Lightsquared, a startup company with hedge fund support to deploy a whole wholesale wireless network using spectrum originally assigned to satellite broadcasters. Manufacturers of GPS devices, which utilize a neighboring band of spectrum, claim that Lightsquared devices will interfere with their products. All in all, despite novel and more efficient methods for utilizing spectrum, existing assignments are continuing to generate intense competition for the airwaves.


5.2 Digital Gatekeeping

5.2.1 Technical Standards

For digital television (DTV), the U.S. uses the set of proprietary standards developed by the Advanced Television Systems Committee (ATSC); and in the case of digital radio, it uses HD radio. In the case of satellite radio, two proprietary standards are used. For cell phones, the U.S has two standards—Global System for Mobile Communications (GSM) and Code division multiple access (CDMA)—that different providers have adopted. Initial deployments of Long Term Evolution (LTE) by a few providers are also occurring. Because of the multiple standards as well as business practices by providers, consumers are for the most part prevented from taking their device to other providers, creating a significant barrier to competition. Digital television broadcast receivers are often built with one or another codec and are unable to view media broadcast in other formats.

Video codecs, software responsible for saving or playing digital video files, create additional technical conflicts. Numerous video codecs exist, such as MPEG-2, MPEG-4, or advanced MPEG-4 H.264. Proprietary codecs such as the MPEG family require licensing costs to include the software in devices such as receivers or media players. Debate about these standards in the media has been very limited. The decision by Apple to not support Flash on the iPhone or iPad, and Google’s decision to support the WebM video codec in its browser, have been characterized as a corporate food-fight with little if any discussion of the public interest.

The New America Foundation has published one piece, “Video Prison: Why Patents Might Threaten Free Online Video”, but any informed debate has been restricted to the technical press.

5.2.2 Gatekeepers

Issues here fall into three buckets. The first has been a slow exploitation of multicast broadcast channels that came with the move to digital broadcasting. All in all, the opportunity to greatly expand the number of television channels created by this capability has been underexploited. This is likely due to several factors, including the fact that broadcasters’ secondary channels are not guaranteed must-carry status on cable systems, as well as uncertainty about whether additional programming streams can generate sufficient ad revenues to justify the costs of additional programming. This latter issue helps to explain why stations that have engaged in multicasting have often done so by broadcasting reruns of programming that originally aired on their primary channels, rather than developing new offerings. Secondary programming streams that focus on niche or foreign language specific offerings are slowly developing.


The second has been the move of public access channels, previously carried on channels adjacent to commercial and public television, to a second-tier menu selection that ultimately means that fewer viewers happen upon these channels, and results in longer load times.\(^{260}\) As Congressman Ed Markey responded to testimony:

> I think every guy who is here knows—and every woman who sees a guy with a clicker in his hand knows—that that guy can watch the news, a sporting event, and a movie simultaneously, clicking back and forth—and no guy waiting a minute and thirty seconds for any station to come on [can do so].

Furthermore, these channels have only 25 percent of the resolution of the commercial and public television channels, a smaller picture, and the transmission stutters when it shows sports, dance, or motion. Finally, digital video recorders (DVRs) cannot record U-Verse PEG from them.

The third issue is related to a cable-card system implemented by the FCC some years ago to allow consumers to purchase set-top boxes from multiple manufacturers. However, it has been a large failure, as the cable companies have been uncooperative and have set up their systems so that they do not inter-operate with other equipment. The FCC is now looking into establishing a new standard, known as Allvid.\(^{261}\)

### 5.2.3 Transmission Networks

Despite efforts of many in the public interest community and moves within the FCC, the result is that much of the spectrum is licensed to a relatively small number of companies. Such moves have resulted in limited competition at the national scale, leading to increased prices and poor choices in service and network quality. In addition, consumers can typically use such licensed spectrum only in extremely limited ways, stifling the kind of innovation seen in the Wi-Fi spectrum bands.

### 5.3 Telecommunications

#### 5.3.1 Telecoms and News

Cable and telecommunications companies have been playing a major role in distributing media and news content via different platforms including the internet, analog and digital cable, satellite television, and IPTV. The internet in 2011 outpaced newspapers as the primary source for news among Americans, but television is still the number one source for news.\(^{262}\) Among 18–29 year-olds, the internet is the number one source.\(^{263}\)

---


These platforms are controlled by a small number of big cable and telecommunications companies. Four major cable providers—Comcast, Time Warner, Cox, and Charter—own nearly 50 percent of this market. Satellite television owns 34 percent of combined market share of subscribers and is an oligopoly dominated by two companies, Direct TV and DISH Network. This trend also applies to IPTV, which entered the battle for the television market in 2007, and is provided by the two largest American phone companies, Verizon and AT&T. The concentration of ownership represented above has implications for the quantity and quality of news on many fronts. For instance, diminished competition undermines the imperative among news providers to compete on the basis of news quality. In addition, increased concentration allows news outlets to pursue greater economies of scale by recycling news content across multiple outlets. It also means that the diversity of local reporting—and the capacity for rapid response to local crises or scandals—is diminished as national content providers move into those markets and fill airtime with nationally centralized program streams.

According to the Pew 2011 State of the News Media Report, in a typical day more Americans went online for news than read a newspaper. This increase of U.S. news consumption on the internet has not been ignored by cable television providers such as Comcast, Time Warner, Cox, and Charter or by IPTV providers such as Verizon and AT&T. (Verizon and AT&T offer mobile services as well.) The digital technology introduced in 2000 transformed the market and brought the convergence of digital cable television and broadband internet, and bundled them together as bundled-services or double play. Telecommunications companies, on the other hand, partner with satellite broadcasting services to sell bundled-service with Digital Subscriber Line (DSL) internet. Recently, Verizon and AT&T started to deploy fiber internet infrastructure to deliver IPTV or video services, called FiOS and U-Verse, and sell the bundled services with internet service. Cable and telecoms providers take advantage of dominating the television market and internet to offer lower bundled prices to retain existing customers and attract new ones. The bundled-service subscriptions have had steady growth and have brought customers more than one platform to get news sources through television and the internet. However, through the growing use of data caps and on-demand services, internet service providers may in the long run move subscribers toward a conduit provider’s preferred or in-house video news services or news portals.

Cable and telecoms companies function as gatekeepers who decide which channels are to be offered in program packages. The FCC granted cable and satellite television operators the rights to select the channels on their systems. However, must-carry rules and the Satellite Home Viewer Act were enacted by Congress in 1992 and 1999 respectively, to require cable and satellite providers to carry certain channels such as major broadcasting networks and local broadcast television channels in their program packages.

---


265. See the FCC’s 13th Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, paragraphs 75–76.


5.3.2 Pressure of Telecoms on News Providers

The imposition of higher fees or restrictions or pressures on news services by flagship cable and telecoms operators is very rare in the U.S.

However, broadcasting companies and programming networks have blocked cable and telecoms customers from accessing programs on television and the internet. News Corporation, which owns the Fox network, prevented 3.5 million Cablevision subscribers in Long Island and New Jersey from accessing Fox News and other programs due to a disagreement over retransmission fees. News Corporation even blocked Cablevision internet subscribers from access to Hulu.com, a News Corporation-owned website offering ad-supported streaming news, television shows, and movies from Fox, NBC, ABC, and many other broadcasting networks and studios. News Corporation’s blockage not only affected Cablevision, but also satellite television provider DISH Network. DISH Network customers in Colorado were unable to access 19 Fox regional networks as both sides could not settle on a new contract.

Cable or telecoms companies can also restrict access to news service by preventing competitors from getting the favorable discounts and access to news programming for their subscribers. The third-largest cable company, Cox Communications, is the largest member of the National Cable Television Cooperative (NCTC) and was accused of being responsible for denying NCTC membership for the Louisiana Municipal Fiber Company (LUS Fiber), which also provides cable television service. Cox Communications is the largest competitor of LUS Fiber, and without being an NCTC member, LUS Fiber is forced to charge its subscribers for fewer options of news channels and programming.

There is also an ongoing debate in the U.S. regarding the ability of internet service providers (ISPs) to determine what content, applications, and services consumers can access over their internet connection or the issue of network neutrality. In 2010, the FCC adopted open internet rules that generally prohibit wireline (i.e. DSL and cable) ISPs from blocking or discriminating against specific lawful content, applications, and services. However, it declined to apply the same rules to wireless ISPs including mobile providers, only prohibiting the providers from blocking access to websites and applications that directly compete with their service offerings. But the rules have yet to be implemented, and it remains unclear if they will survive judicial review.


269. B. Stelter, “Internet Is a Weapon in Cable Fight.”


5.4 Assessments

Concerns over the spectrum allocation process and its reliance on an auction model are increasing as traditional broadcasting—along with other forms of media and news content—rapidly converges on the internet and broadband networks. Today’s broadband communications providers, both wired and wireless, are increasingly in a position to control the flow of information over their networks and shape public access to news and multiplatform content. As a consequence, the policy focus must increasingly shift away from broadcasting to mobile and wireless broadband, where there is a need to develop policies to address issues of access, competition, innovation, and protection of a diverse ecosystem of ideas, information, and news.

To date, public interest groups have played a considerable role supporting policies that allow for white spaces and a digital dividend.272 For example, they have pushed for anonymous bidding to solve the problems of tacit collusion identified in the AWS-1 auction.273 They also supported open device requirements in the 700 Mhz auction alongside spectrum caps limiting any single organization from acquiring a disproportionate amount of spectrum bandwidth.274 They have also successfully argued for the use of television white spaces for use as unlicensed spectrum.275 Their efforts on the recently adopted open internet rules have been more mixed, with the adoption of rules that neither preserve net neutrality for wireless nor appear on a solid footing to survive the almost-inevitable court challenges they will face.

---

272. “White spaces” are the unused electromagnetic spectrum between frequencies, usually used as protection bands against interference.


6. Digital Business

6.1 Ownership

6.1.1 Legal Developments in Media Ownership

Every four years, the FCC is required by Congress to reassess its media ownership regulations in order to determine whether any of the regulations merit being strengthened or relaxed in light of changing competitive conditions.\(^{276}\) The FCC embarked on the latest media ownership review in May 2010 and at the time of publication the review is still underway.\(^{277}\) Currently, there are a number of media ownership regulations in place. These include:

- Limitations on national broadcast television station ownership. Currently, no company can own television stations that, in combination, have a national potential audience reach exceeding 39 percent of the population. Thus, there is no limitation on the number of stations that a firm can own, only on the total audience reach of these stations. As a result, firms with stations in large markets reach the ownership cap with fewer stations than firms that own stations primarily in small markets.

- Limitations on local broadcast television station ownership. Currently, a company can own only one television station in a market, with some exceptions. Specifically, if there are at least eight other stations in the market, a single company can own two television stations, as long as one of the stations is not among the four highest-ranked stations in the market.

- Limitations on local broadcast television/radio station cross-ownership. Generally, a firm is able to own one television station and one radio station in a market. However, if there are at least 10 independently owned media voices in a market, then a company can own up to two television stations and four radio stations. If there are at least 20 independently owned media voices in a market, then a company can own up to two television stations and six radio stations, or one television station and up to seven radio stations.

---

\(^{276}\) See Section 202(h) of the Telecommunications Act of 1996.

- Limitations on local radio station ownership. Generally, a firm can own a minimum of five stations in a market (as long as five stations does not equal or exceed 50 percent of the stations in the market). This number increases as the number of stations in the market increases, with a firm able to own a maximum of eight stations in markets that have at least 45 stations.

- Limitations on local television station/local newspaper cross-ownership. Generally, cross-ownership of local television stations and local daily newspapers is prohibited, though exceptions have been made in some cases. This rule is one that the previous FCC Commissioner Kevin Martin unsuccessfully sought to eliminate, and it may yet be eliminated at the conclusion of the current media ownership proceeding. In 2008, the FCC voted to eliminate this rule in the 20 largest media markets in the U.S., but Congress subsequently passed a bill that essentially overturned the FCC’s decision.

- Limitations on national broadcast network ownership. Common ownership of any of the top four television broadcast networks (ABC, NBC, CBS, and Fox) is prohibited.

- Limitations on foreign ownership of broadcast stations. The FCC restricts foreign ownership of U.S. broadcast outlets to between a 20 and 25 percent stake in any such outlets (depending upon the type of ownership stake). The FCC retains the discretion to waive these limitations, but has exercised it in only one instance—to grant Rupert Murdoch’s News Corporation a waiver in 1994 to maintain its ownership of Fox. The FCC granted the waiver on the grounds that the existence of a fourth broadcast network served the public interest.278

The past five years have seen fairly persistent pressure from within the broadcast and newspaper industries to relax U.S. media ownership regulations, continuing a consistent trend over the past two decades. These efforts have, however, been strenuously resisted by the public interest advocacy community (led by groups such as Free Press, Media Access Project, and the Consumer Federation of America), and, in some instances, by the courts and/or Congress.

In 2004, the U.S. Court of Appeals for the Third Circuit issued a decision that continues to reverberate. In this decision,279 the court overturned a wide-ranging effort by the Michael Powell-led FCC to relax or eliminate the bulk of the FCC’s media ownership rules. The court based its decision on its assessment that the FCC did not provide compelling justification for its decision. The court took particular issue with the nature of the empirical analyses that the FCC relied upon in support of its decision (such as its “Diversity Index”, which employed a methodology that proved quite controversial, and ultimately was deemed faulty by the court due to its system of weighting different media outlets according to the presumed usage levels for each type of media technology).280 This decision reverberates to this day because it has established a very demanding burden of proof on the FCC in any future efforts to revise its media ownership rules. Indeed, this same court

---


in 2011 raised similar concerns—and employed a similarly rigorous standard—when confronted with the FCC’s relaxation of select media ownership rules in the agency’s subsequent iteration of its quadrennial media ownership review. And, once again, the court vacated and remanded the FCC’s efforts to relax these rules.\(^{281}\)

In January 2011 the FCC and the Department of Justice (DOJ) approved a US$30 billion merger between NBC/Universal (NBCU) and Comcast, an unprecedented combination of one of the nation’s largest cable television and ISPs (Comcast) with one of the nation’s largest broadcast networks (NBC) and motion picture/television production studios (Universal). What was particularly interesting about the FCC’s decision was the extent to which the agency imposed a range of conditions (which all expire in seven years), some of which directly address news. For instance, the FCC required that, if Comcast “neighborhoods” its news channels (which means placing news channels on consecutive channels), it must include all unaffiliated news (or business news) channels in that neighborhood. Also, Comcast–NBCU is required to maintain at least the current level of news and information programming on NBCU’s owned-and-operated (“O&O”) broadcast stations, and in some cases expand news and other local content. Comcast-NBCU’s O&O NBC and Telemundo stations are required to provide 1,000 additional hours annually of local news and information to their viewers (including the launch of a weekly Spanish-language news program) on both the NBC and Telemundo O&O stations. In addition, some of NBC’s stations will enter into cooperative arrangements with locally focused non-profit news organizations. Additional free, on-demand local programming will have to be made available as well.

Many of these requirements emerged from voluntary commitments that Comcast/NBC proposed in order to obtain approval for the proposed merger. The company will be required to provide quarterly reports on its local news and information programming that is accessible to the public via the local stations’ web pages. Finally, the company was also required to maintain the editorial independence of its news operation from the parent corporation in the same manner that NBC news operations have maintained their editorial independence from their previous parent company General Electric. These policies include keeping an ombudsman on staff.\(^{282}\)

However, given the size and scope of the merger, many observers were surprised that other conditions were not imposed by either the FCC or the DOJ. For instance, the combined firm was not required to divest any of its components. Nor were any requirements imposed that strengthened, or extended into the online space, what are known as the “program access rules”. These rules require vertically integrated cable operators to make their programming available to competing providers such as telecommunications companies and satellite providers, in an effort to combat potential negative effects from vertical integration. These and other


possible safeguards against the unprecedented degree of vertical integration represented by this merger were left out of the equation in the FCC and DOJ's final decision on this merger.283

What are the arguments for and against consolidation of traditional media in this digital era? One rationale is that, for traditional media to remain viable in the United States today, the presumed efficiencies and strategic advantages that arise from greater concentration are essential. This logic is at the core of the FCC’s ongoing consideration of the future of the television–newspaper cross-ownership regulations. Some (including public interest groups such as Free Press and the Media Access Project) argue that such regulations are necessary to ensure a sufficient diversity of voices (particularly in news and information) in local media markets. Others (such as most of the owners of broadcast stations and newspapers) argue that cross-ownership of such outlets (and the efficiencies that can be derived from such cross-ownership) is essential to their survival.

However, the overall trend in terms of television, radio, cable systems, and newspapers, over the past two decades, has shown diversity of ownership in decline as ownership concentration has gradually increased.

### 6.1.2 New Entrants in the News Market

Major shifts in the production and distribution of news have taken place in the U.S. over the past five years. The traditional economics of news have essentially collapsed; the ability to monetize news audiences via traditional outlets such as the daily newspaper has been undermined by the web, and by the extent to which much of the advertising that traditionally populated the daily newspaper (classified ads, car ads, etc.) is now migrating to specialized ad platforms online (Craigslist, Monster, etc.). In addition, the audiences are increasingly unwilling to pay for news due to its widespread availability for free online.

As a result of these developments, new commercial entrants into the news business have been fewer than one would expect. One development worth highlighting is News Corporation's decision to launch a new daily newspaper, The Daily, produced specifically for Apple's iPad platform. There have been other entrants as well, though in considering new owners of news media outlets over the past five years, it is necessary to employ somewhat broader criteria as to what constitutes a news outlet than has been the case in years past. The online space, for instance, has seen the growth of a range of news and information sources.

---

New Players

ProPublica: an independent non-profit investigative journalism site funded via foundation support and other charitable contributions that began operations in 2008. The site has won several journalism awards in its short history, including a Pulitzer Prize for Investigative Journalism in 2010 for its reporting on the aftermath of Hurricane Katrina.

The Daily Beast: a news opinion and content-aggregation site (similar to the Huffington Post) particularly notable for being founded and published by Tina Brown, the well-known former editor of the New Yorker and Vanity Fair. Notably, the Daily Beast merged with Newsweek in 2010 to create a combined company.

Politico: a political journalism-focused news organization (founded in 2007), which, unlike other new entrants discussed thus far, has established a presence not only online but also in print and on television and radio. The Politico print edition circulates exclusively in the Washington, D.C., area. Audio and video content are distributed via partnerships with CBS News and with broadcast outlets owned by Allbritton Communications (Politico’s parent company).

Patch: This “hyperlocal” news initiative (launched in 2007) is a focal point of former internet giant AOL. Almost 800 Patch sites have been established in communities around the country with the intention of providing highly localized news and informational content from a mix of professional and citizen journalists.

EveryBlock: Although most of the staff are based in Chicago, EveryBlock has outlets which focus on 16 major cities across the U.S. Serving as a site to find local events ranging from crime reports to neighborhood discussions, each city site has four main sections: Neighborhood Messages; Civic Information; Media Mentions, which keeps track of when a city is mentioned in the news; and Fun From Across the Web, utilizing UGC from sites such as Flickr, Yelp, and Craigslist.

At the state and local level, significant innovation is occurring in exclusively online news and information sources. For instance, a number of state and regionally focused non-commercial news outlets have emerged online, such as the MinnPost, Texas Tribune (described below), California Watch, Wisconsin Center for Investigative Journalism, and New Orleans Lens. Along similar lines, the Huffington Post has, over the past three years, launched local market-specific versions of its national site (e.g. HuffPost Chicago, HuffPost New York) in an effort to establish a presence in the online local news space. AOL plans to invest US$120 million in Patch as a service to provide local news in communities across (to date) 23 states.284

In recent months, perhaps the most prominent emerging news source in the U.S. has been WikiLeaks. Although its materials have often entered discussion via reporting at established outlets, its impact is considerable. Al-Jazeera has established a comparable electronic dropbox after releasing its cache of The Palestine Papers, as has the Wall Street Journal with SafeHouse, and the New York Times expects to do the same.²⁸⁵

There have also been some important transfers of ownership of traditional media outlets over the past five years. For instance, News Corporation purchased the Wall Street Journal, the leading financial newspaper, from Dow Jones for more than US$5 billion in 2007. In 2009, financial news and information company Bloomberg purchased BusinessWeek magazine, one of the largest financial news weeklies, reportedly for less than US$ 5 million. In 2010, the Washington Post Company sold Newsweek, one of the most prominent weekly news magazines in the U.S., to entrepreneur Sidney Harman for one dollar and assumption of the publication's debt obligations. In 2007, Chicago-based investor Sam Zell purchased the Tribune Company, one of the largest media companies in the U.S., with wide-ranging broadcast and newspaper holdings (including the Los Angeles Times, the New York Newsday, and Chicago’s WGN television station) with the intention of privatizing the company. However, the Tribune Company subsequently collapsed in what is widely believed to be the largest bankruptcy in the history of the U.S. media industry. And, in 2006, Knight Ridder, the nation’s second-largest newspaper publisher (with more than 30 papers under its corporate umbrella), was sold to McClatchy, a newspaper publisher less than half the size of Knight Ridder (with only 12 dailies at the time of the Knight Ridder purchase).²⁸⁶


6.1.3 Ownership Consolidation

The key issue in relation to this question involves the effects of the Comcast/NBCU merger on diversity and pluralism. It is unusually difficult to speculate what the effects of this merger will be, given the unprecedented nature of the merger (involving extensive vertical rather than horizontal integration) and the unprecedented array of diversity/pluralism/localism-enhancing conditions that the FCC and the DOJ placed on the merger. Substantial research will need to be devoted over the next seven years (during which the diversity/pluralism/localism-enhancing conditions imposed on the merger are in effect) to examine if and how diversity, pluralism, and localism—both within traditional media and online platforms—are affected.

Another important transaction that merits discussion in this context is Mr Murdoch’s purchase of the Wall Street Journal. It has been reported that a key motivation was Mr Murdoch’s desire for an outlet to counter what he believed to be the undue influence of the New York Times on American political and cultural dialogue. In this context, it is worth noting that when the Bancroft family sold the Journal to Mr Murdoch, they attempted to impose an editorial independence agreement that was intended to protect the paper’s top three editors. Nonetheless, four months after taking over the paper, Mr Murdoch replaced the paper’s top newsroom editor.

One study of the Wall Street Journal’s news coverage before and after the Murdoch’s takeover of the paper found that, post-takeover, business coverage diminished dramatically, while political coverage increased substantially. These findings seem to support assertions that Mr Murdoch is seeking to refashion the Wall Street Journal into a more prominent political voice in his efforts to compete with the New York Times. According to one report, upon purchasing the Journal, Mr Murdoch wrote a letter to New York Times chairman Arthur Sulzberger, Jr. that concluded “Let the battle begin!”

6.1.4 Telecoms Business and the Media

Perhaps the most significant development on this front over the past five years has been the aggressive entry of telecommunications firms such as Verizon into the (multi-channel video program delivery) (MVPD) market. Today, telecommunications companies serve less than 10 percent of all MVPD subscribers in the U.S., but their subscriber numbers continue to grow. Along with Direct Broadcast Satellite providers DirecTV and DISH Network, these telecoms firms represent the most significant form of competition to the cable television industry.

One significant but little-discussed aspect of these telecoms firms’ entrance into the MVPD market is that, in some large markets, these providers have established their own regional news channels (such as Verizon’s

FiOS1) to compete with similar channels that are provided by many of the major cable companies in many of the larger U.S. television markets. For instance, in New York, Time Warner Cable owns and operates NY1, a New York City-focused cable news channel that has served the New York City region since 1992. A Spanish-language version of the channel has been in operation since 2003. Such efforts represent an infusion of new news reporting resources and sources into some U.S. markets.

Also significant is the extent to which wireless telecoms companies have made inroads into the media sector, offering music, games, movies, and other forms of media content via handheld devices. These providers have become some of the most significant distribution platforms for such content in the U.S. media system. In some instances, these firms are signing direct distribution deals with musical artists. This is a compelling indication of the extent to which these telecommunications firms are becoming significant players in the media landscape, though as yet there are no significant moves by wireless providers to provide hard news themselves.

## 6.1.5 Transparency of Media Ownership

In the case of broadcast, cable, satellite, and telecommunications entities, detailed ownership information needs to be reported to the FCC. Much of this information is available online, though its organization and accessibility have come under criticism in recent years. Many analyses that have attempted to rely upon these data have found them to be incomplete and out of date, and particularly lacking in terms of the FCC’s comprehensiveness in reporting on minority-targeted and foreign language media outlets. Even studies commissioned by the FCC have acknowledged the dramatic limitations in the FCC’s ownership data. Moreover, though this information is accessible online via the FCC’s website, efforts to conduct systematic research using these data have found the online organization and interface to be an impediment to rigorous analysis and the data to be significantly out of date.

In a recent review of 30 years of the best available data on ownership and employment in the information industries (including detailed examination of print, commercial television and radio, public television and radio, and online journalism), Wilson and Costanza-Chock demonstrate that the new digital media, while in many ways far more open than print and broadcast media, continue to reflect structural access inequalities and to be marked by systematic exclusion as well as by participation gaps along race, class, and gender lines.
### Table 7.
Media ownership and employment diversity across platforms

<table>
<thead>
<tr>
<th>Platform</th>
<th>Ownership (% people of color)</th>
<th>Employment (% people of color)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online</td>
<td>10.2 (all firms)/7.1 (firms w/ employees)</td>
<td>19.6 of online newspaper staff</td>
</tr>
<tr>
<td>Public Radio</td>
<td>10</td>
<td>19.8</td>
</tr>
<tr>
<td>Print</td>
<td>8.3</td>
<td>13.4</td>
</tr>
<tr>
<td>Commercial Radio</td>
<td>2.7</td>
<td>11.8</td>
</tr>
<tr>
<td>Public Television</td>
<td>1.7</td>
<td>19.4</td>
</tr>
<tr>
<td>Commercial Television</td>
<td>0.9</td>
<td>23.6</td>
</tr>
<tr>
<td>National Public Broadcasting</td>
<td>—</td>
<td>29.8</td>
</tr>
</tbody>
</table>

**Source:** Wilson and Costanza-Chock (2011)²⁹⁴

The only sector of the information industries that approaches parity with the general population in terms of racial diversity is employment within the national public broadcasting organizations (comprising CPB, PBS, and NPR). Worse, no other sector is on track to achieve parity with the general population, since changes in ownership and employment diversity are not keeping pace with shifting demographics.²⁹⁵

Inequality in ownership of internet media is little different than legacy media. Some have hoped that the open nature of publishing online and the broadband internet would make old inequalities disappear, as every community gained equal access to the ability to produce, circulate, and consume its own information. However, despite some data indicating a higher proportion of minority employment in online newsrooms than print, the data on internet news confirms that inequality remains entrenched.²⁹⁶ Many of the imbalances in terms of minority ownership and employment that have characterized the traditional media are being replicated in the new media space with minority reporters in newsrooms declining consistently over the last three years.²⁹⁷ Even in new, presumably more democratic, media spaces such as the blogosphere, the patterns

²⁹⁶. However, a 2009 American Society of Newspaper Editors (ASNE) survey counted online journalists employed by newspapers and found that nearly 19.6% were people of color. By that measure, there is greater employment diversity in full-time online journalism than in print, but less than in broadcast television (ASNE, Newsroom Employment Census, 2009). See http://asne.org/key_initiatives/diversity/newsroom_census.aspx. See also “ASNE Completes Second Census of Online-only News Sites, Finds Increasing Diversity”, ASNE, 29 July 2010, available at http://asne.org/article_view/articleid/833/asne-completes-second-census-of-online-only-news-sites-finds-increasing-diversity.aspx (Sites accessed 20 July 2011).
²⁹⁷. For example, a 2004 Pew survey noted that 77 percent of online content creators were white (A. Lenhart, D. Fallows, and J. Horrigan, “Content Creation Online,” Pew Internet & American Life Project, 29 February 2004, available at http://www.pewinternet.org/Reports/2004/Content-Creation-Online.aspx (accessed 28 July 2011)). The US Census Bureau found that people of color owned only 1,243 out of 12,158 (about 10.2 percent) of firms categorized as “internet publishing and broadcasting”. The vast majority of these were single person businesses (reporting no employees); of the 1,770 internet publishing and broadcasting firms reporting employees, whites owned 1,369 while people of color owned 125, or just 7 percent. The same report found about 40,000 employees of internet publishing and broadcasting, with fewer than 660 employed at minority-owned firms. Whites also owned 39,160 out of 46,859 firms categorized as “internet service providers, web search portals, and data processing services” (U.S. Census Bureau, “2002 Economic Census Survey of Business Owners,” September 2006, available at http://www2.census.gov/econ/sbo/02/sb02000c0cousumt.pdf (accessed 28 July 2011)).
of underrepresentation of various demographic groups that have long characterized the traditional media have been shown to persist.298

The FCC requires that all commercial broadcast licensees file a Form 323 biennially. In addition, a Form 323 must be filed in instances of transfers of control of a license. This form requires information on all individuals/entities with an attributable interest in any broadcast outlet. Non-commercial educational broadcasters are required to file a slightly different form (Form 323E). Within these forms, the FCC solicits information on whether the broadcast outlets are minority-owned.

In recent years, the accuracy, comprehensiveness, and accessibility of the FCC’s media ownership data have come under frequent criticism.

In a February 2011 letter to all FCC commissioners, more than 40 public interest organizations and scholars argued that the most recent Form 323 data should be made available to the public in a “searchable, aggregated, and cross-referenced format.”299 The data were released later that month.300 However, the FCC’s own ownership data are so widely considered to be incomplete and inaccurate that even the FCC staff have often relied on commercial data sources (such as those provided by the firm BIA Financial) to analyze media ownership.301 New data have been released very recently, and it remains to be seen how well they survive the kind of scrutiny that is essential for any data set intended to be used to guide policy decision-making. The FCC recently instituted a Data Innovation Initiative to correct issues of accuracy, comprehensiveness, timeliness, and accessibility of policy-relevant data, such as its media ownership data.302

6.2 Media Funding

6.2.1 Public and Private Funding

US major media advertising spending was US$147 billion in 2009 and grew to US$153 billion in 2010, according to media and marketing research firm eMarketer.com.303 Despite the economic slowdown, ad spending continues to rise in the private sector, especially for broadcast television, mobile, and the internet, while newspapers show a steady decline.304

301. P.M. Napoli and J. Karaganis, “Toward a Federal Data Agenda for Communications Policymaking.”
302. S. Coll, “Reboot.”
U.S. political media spending has also risen, and according to global metrics provider PQ Media, it hit a record high of US$4.55 billion in 2010, which even in the absence of a presidential election was up 8 percent compared to the presidential election year of 2008, and it jumped 44.9 percent in comparison to 2006. Analysts say that this hike in media spending by political organizations can be attributed to the Republicans having increased fundraising to gain control of the House of Representatives in 2010, controversial healthcare and financial reform initiatives, as well as the Supreme Court’s decision invalidating a large part of the Bipartisan Campaign Finance Reform Act of 2002, which had limited corporate spending in political media campaigns.

According to Internet Advertising Bureau (IAB), a major trending area in media advertising is the rising influence of internet mobile and social media. Spending on internet advertising in the United States rose to US$26 billion in 2010, up 15 percent on 2009. Spending on broadcast and cable television was US$60.5 billion, and newspaper ad spending in 2010 was US$22.8 billion (the latter of which is declining). Social networking crossed the 650 million global users mark in early 2011, with Facebook taking US$1.86 billion in advertising revenues in 2010. Of this sum, the share of spending by small companies was 60 percent, or US$1.12 billion, which is quite high, particularly when compared with the US$740 million spent by behemoth marketers such as Coca-Cola and Procter & Gamble, according to eMarketer. It would appear that smaller firms are moving into online ad spending more rapidly than their much larger counterparts.

Not to be omitted are public subsidies of private media that are rarely discussed or examined, such as an estimated US$ 270 million subsidy in which certain categories of publications receive discounted postal rates. In addition, federal and state governments provide tax breaks to newspapers that amount to an estimated US$890 million.

The federal government appropriation for public media in 2010 was US$420 million, with additional varying subsidies from regional and state sources though these have become under threat in recent years.


6.2.2 Other Sources of Funding

News providers have experimented with numerous novel funding mechanisms in recent years. Among the most innovative is an effort at “crowdfunding” news production by the online investigative news site Spot.us. Under this model, funding from readers is solicited via a list of potential story topics that the site’s journalists can investigate and report on. Those topics that attract the largest financial contributions from readers become the topics that the site’s reporters investigate and write about. Readers vote with financial contributions for journalistic coverage of those stories they think should be covered. So far, Spot.us has had 10,300 individual contributors, who have provided US$250,000 to fund 185 published stories across 105 outlets. They have also expanded their geographical focus southward from northern California to include the Los Angeles area. How sustainable and scalable this model will be is in question.

The longstanding vacillation between free content and paywalls continues in a variety of online contexts. Hulu, a popular online source for television programs, recently created a paywall-type paid service known as Hulu Plus. This subscription, which costs US$7.99 per month, provides subscribers with greater access to current and past network programming and higher-definition streams. At the same time, a substantial amount of material still remains on Hulu for free. Indications thus far are that the introduction of the paywall has led to a decline in the number of visitors to Hulu, though, according to CEO Jason Kilar, revenues have increased.312 Anticipated revenue growth is so high, in fact, that Hulu is now up for sale and attracting

---

numerous potential bidders, including cable companies, Google, Yahoo!, and Amazon, with an anticipated sale price of possibly US$2 billion.

In February 2011, the New York Times once again instituted a paywall. The paper had previously instituted a paywall in 2005, called TimesSelect (which charged readers US$49.95 annually for access to the paper’s archived content), but abandoned that effort in 2007. This time, the Times is offering multiple subscription packages. The paper will sell a basic monthly subscription to NYTimes.com, as well as one that groups the online subscription with one for the Times’ iPad app. In addition, subscribers to the print edition will get unlimited access to the site. However, a subscription will only be needed for so-called heavy users of the site. That is, readers will only have to pay after they’ve read a certain number of articles online. According to one estimate, 85 percent of the Times’ estimated 30 million unique viewers will not hit that limit. Early indications are that the Times has added 100,000 subscribers to NYTimes.com, but it is too early to tell whether the experiment will be a success for the paper. Other U.S. papers, including the Dallas Morning News and New York Newsday, have also instituted paywalls. However, the Wall Street Journal remains the one newspaper in the U.S. that has successfully maintained a paywall system of access to its content for many years. According to most accounts, the Journal has been able to successfully impose a paywall because the nature of the content contained within the Journal is considered a necessity for a category of readers (i.e. business executives) who have sufficient motivation and resources to incur the costs. This makes it difficult to compare the Wall Street Journal to other newspapers that generally provide a very different type of content to a very different target audience.

An emerging trend in Washington, D.C., has been the extension of the subscription model used by financial reporting services such as Bloomberg and Reuters into the government information space. Bloomberg has launched Bloomberg Government, and Politico has launched Politico Pro. These services focus on providing expedient analysis of the D.C. policy process and seek to reinvent services previously provided by industry-specific newsletters. It is too early to judge, but they may have a profound effect on news coverage around the federal bureaucracy, providing subscribers with information earlier than the public and at a higher quantity and quality level. Like academic journals and trade publications, such value-added publication may provide little direct benefit to the general public, but may be especially lucrative sources of income for media organizations because they provide highly relevant information to affluent groups of subscribers.

Another alternative funding approach that has achieved prominence is product placement (sometimes referred to as product integration). Such placement has reached such a level of prominence on television (particularly in the reality television genre) that some of the most popular programs are able to reach profitability before even one traditional advertising spot has been sold.


6.3 Media Business Models

6.3.1 Changes in Media Business Models

The issue of new business models is perhaps the most prominent point of discussion in media industry and public policy circles. Digitization, in concert with the economic crisis since 2008, has produced a confluence of circumstances that has led to one of the most dramatic reconfigurations of the U.S. media industries for decades, and perhaps in the history of the commercial media in the U.S. For example, as the FCC’s recent Information Needs of Communities report notes, “as technology offered consumers new choices, it upended traditional news industry business models, resulting in massive job losses—including roughly 13,400 newspaper newsroom positions in just the past four years. This has created gaps in coverage that even the fast-growing digital world has yet to fill. It is difficult to know what positive changes might be just around the corner, but at this moment the media deficits in many communities are consequential.” 316

One vitally important development has been the decision by some daily newspapers to move primarily or even exclusively online. Such venerable publications as the Christian Science Monitor, the Seattle Post-Intelligencer, and the Detroit News/Free Press have either abandoned or scaled back their print activities.

However, this transition has not in any way been based on the regulatory environment or the differences in regulatory treatment across different platforms. Rather, these papers are simply seeking to reduce production costs in a media environment that has become increasingly challenging for daily newspapers.

In television, there has been speculation for years that one or more of the major broadcast networks (ABC, NBC, CBS, and Fox) would abandon their over-the-air broadcasting model (which relies on a network of affiliated terrestrial broadcast stations) and instead operate essentially as a cable network, circumventing both the indecency-focused content regulations that apply only to broadcasters, and also their increasingly contentious relationships with their local affiliates. However, this has not yet happened. Instead, the status quo has held, perhaps because of the competitive advantage that broadcasters receive by being the only mechanism for reaching the roughly 15 percent of television households without a cable or satellite subscription. Perhaps reflecting this competitive advantage, the cost-per-thousand viewers also remains roughly 15 percent higher on broadcast television than on cable television. 317 A key implication of this situation is that aggregating large, somewhat homogeneous audiences remains a viable business model even in this area of extreme audience fragmentation and content specialization.

It is important also to note that the economic crisis affecting the media sector contributed to a slowing—and in some contexts a reversal—of trends toward increased concentration of ownership. As various media sectors/properties suffered financially, we have seen some divestitures that in many ways represent a slowing or slight reversal of trends that preceded the economic crisis. For instance, CBS and Viacom, which merged in 1999 to

316. S. Waldman, The Information Needs of Communities, p. 5.
become one of the nation’s largest media conglomerates, with holdings in broadcast television stations, broadcast networks, radio stations, radio networks, a motion picture studio, and multiple cable networks, formally split in 2006. After the split, CBS re-emerged as primarily a radio and television broadcasting company, and Viacom retained the cable networks and the Paramount motion picture studio. At the time of the break-up, Viacom founder Sumner Redstone declared that the age of the diversified media conglomerate was over.318

Similarly, AOL and Time Warner, which merged in 2001 in a move that many saw as heralding the convergence of old and new media, split only eight years later. This merger has been described as “one of the most disastrous business combinations in history.”319 AOL now functions once again as an internet company, with a focus on the provision of “hyperlocal” news and information. Time Warner retains its extensive interests in cable systems and networks, magazines, music, and motion pictures.

Successful business models thus far seem to be those in which much of the production costs are essentially transferred to the user community. User-generated content (or, as it is sometimes called, consumer-generated media) appeals increasingly to contemporary media companies. Media users—particularly online—demonstrate a pronounced and continued willingness to produce a wide range of content for little or no financial compensation. Valuable as this content is, little of it is a replacement for legacy reporting and journalism, as the overwhelming majority of this content is not focused on news or public affairs issues, but rather on other forms of creative expression.

At the state level, innovative models for supplementing legacy journalism have showed promise. In 2010, MinnPost, which specializes in news related to Minnesota but also aggregates articles about national and international events, turned a US$17,000 surplus on a US$1.2 million budget, and did so through balancing its expenditures with income from grants, subscriptions, and advertising. The Texas Tribune is a non-profit news organization supported by a combination of donors, grants, and corporate sponsors. The site is becoming known for its “data journalism”—a version of computer assisted reporting (CAR)—around issues such as federal campaign donations, gubernatorial appointees, and government employee salaries.320 Other entrants include St. Louis Beacon, New Haven Independent, Connecticut Mirror, and Voice of San Diego, all of which pledge to focus on in-depth or investigative reporting on issues of local importance. Voice of San Diego, for example, has won journalism prizes and increased government accountability, in some cases forcing the resignation of officials found by their investigations to be corrupt.321 Despite early successes, the somewhat precarious funding models for these organizations beg the question of how many of these sorts of outlets will be viable in the long run.

The continued decline in the economic viability of traditional printed newspapers has prompted substantial discussion—and even policy proposals—in relation to the notion of commercial newspapers converting to non-profit status. In March 2009, Maryland Senator Benjamin Cardin introduced the Newspaper Revitalization Act of 2009. The Act proposed amending the Internal Revenue Service Code to allow newspapers to qualify as charitable 501(c)(3) entities, thus obtaining tax exempt status and the ability to accept contributions that provide a tax deduction to the donor. Current tax laws do not permit newspapers to be operated as tax exempt, but they can be supported or owned by charitable foundations. Under this Act, a newspaper would only qualify for non-profit status if the paper contains “local, national, and international news stories of interest to the general public and the distribution of such newspaper is necessary or valuable in achieving an educational purpose.” Further, in order to qualify, advertisements must not “exceed the space allotted to fulfilling the educational purpose of such qualified newspaper corporation.” In addition, newspapers that accepted non-profit status would not be able to officially endorse political candidates.

As David Schizer, Dean of Columbia Law School, has written:

An important advantage of the tax-exempt model is that it is politically feasible. This approach already is available, to a significant extent, under current law. The non-profit form is already being used by independent newsrooms specializing in investigative reporting, such as Pro Publica, as well as by National Public Radio and a range of websites and public affairs magazines.

The fact that no change in law is needed in order for this approach to come into wider use means that there is no need to sell the public on a bailout for news organizations. Unlike with other subsidy models, it is not necessary to single out news organizations for special treatment or to authorize a separate budget line for subsidizing them. The relevant tax benefit exists under current law, and is offered not just to news organizations, but to a broad class of institutions, from religious organizations and universities to orchestras and museums.

In short, the ability of providers of journalism to receive tax-exempt funding, though it would be made easier with the passage of Senator Cardin’s proposed bill, is already possible where organizations can distinguish themselves from ordinary commercial publishers, though the IRS is currently withholding final approval for several organizations pending further consideration.

6.4 Assessments

Transparency of ownership does appear to have increased slowly over the past five years, in the wake of the FCC’s ongoing Data Innovation Initiative, which reflects the broader, ongoing effort of the Obama administration to increase governmental transparency. However, this increased openness and transparency is not proceeding as quickly as many stakeholders would like.

More importantly, the concentration of ownership has been justified partly on the basis that digitization and convergence requires that mergers be approved and relaxation of ownership rules be undertaken to allow media firms to take advantage of economies of scale and scope that these firms argue can help them successfully navigate today’s media environment. Unfortunately, our assessment is that it is very unlikely that concentration will, as Comcast argued in its public interest statement to the FCC regarding its merger, “better meet the entertainment, communications, and information needs of American consumers.” American audiences would be better served by maintaining the existing ownership rules and pursuing a competition policy that did not permit the mega mergers such as Comcast–NBC or those that might follow.

The challenge in this new digital landscape is that some advertising and subscription revenue has been decoupled from news production and needs to be replaced through the emergence of new models. Some solutions will be found in the mixed models described above, some through community media models and volunteering, and also through public funding.

One of the key debates that has emerged, and is likely to gain increased prominence over the next few years, is whether the economic hardships affecting the business of journalism require a return to a greater degree of public funding for news outlets. This debate revolves around the central question of whether the economics of commercial journalism are permanently damaged and whether it is the government’s responsibility to make sure that a certain minimum level of resources are available to support the journalistic enterprise at the local, state, and national levels in order to ensure the well-informed citizenry that is considered essential to a well-functioning democracy. Our contention is that such funding is required to make up for the loss experienced, especially for reporting at the state and local levels where coverage has declined dramatically and will not return with even the most optimistic assumptions regarding philanthropic funding or entrepreneurial innovation.

7. Policies, Laws, and Regulators

7.1 Policies and Laws

7.1.1 Digital Switch-over of Terrestrial Transmission

7.1.1.1 Access and Affordability

To a large extent, U.S. communications policymakers relied on market forces to spur the digital transition once date-specific conversion mandates were placed on broadcasters. Policymakers operated under the presumption that, over time, the price of digital televisions would drop and that the amount of digital content available to consumers would increase, thereby making the purchase of a digital set increasingly appealing. No specific affordability thresholds were set, though the initial switch-over deadline (the point at which analog broadcasting would cease) was pushed back in light of data indicating that a significant portion of the population still did not have access to digital signals.

A key aspect of the digital transition was the extent to which most U.S. television households subscribe to a multichannel video programming service provided by a cable, telecommunications, or satellite provider. These providers generally operate over digital infrastructures, and so the set-top boxes that these services provide to their customers effectively facilitated continued access to programming—even for consumers who had yet to purchase a digital television. That is, these set-top boxes served as digital converter boxes, allowing those who had yet to upgrade their sets to continue to receive programming even after the analog broadcasters had ceased.

From a more content-specific standpoint, one controversial aspect of digital transition has been the extent to which policymakers failed to follow through on what appeared to be initial commitments to pluralism and diversity. In March 1997, for example, the Clinton administration established the aforementioned Advisory Committee on the Public Interest Obligations of Digital Television Broadcasters. The Committee, a mix of industry executives, academics, and public interest advocates, was charged with “determining how the principles of public trusteeship that have governed broadcast television for more than 70 years should be applied in the new television environment.”

in different venues around the country to solicit input from the general public and outside experts, and ultimately produced a set of recommendations that was submitted to the White House.

These recommendations addressed a variety of issues, such as disability access, the promotion of diversity, disaster warnings, funding for public broadcasting, and the establishment of a voluntary code of conduct for broadcasters. The Committee’s report did not, for the most part, move very far beyond the regulatory framework and requirements that have been in place for analog broadcasters, and generally avoided specific details in regard to its recommendations. It did, however, include the very controversial recommendation that digital broadcasters should be required to provide five minutes of free airtime to political candidates each night during the 30 days before an election. With its combination of well-established public interest obligations and one fairly radical new public interest recommendation, the Committee’s report represented an important starting point for a meaningful examination and reassessment of how broadcast television could better contribute to American political and cultural life.

7.1.1.2 Subsidies for Equipment

The primary policy response to issues of the affordability of digital set-top boxes was the institution and administration of a coupon program by the National Telecommunications and Information Administration. Between 1 January 2008 and 31 July 2009, all U.S. households were eligible to request up to two coupons, worth US$40 each, to be used toward the purchase of up to two analog-to-digital converter boxes. Congress initially allocated US$1.5 billion to the coupon program, and added US$650 million in 2009. With this additional funding, a backlog of over four million requests for coupons could be addressed. By the time of the switch-over (June 2009), the Nielsen Company estimated that approximately 2.2 percent of television households were unable to receive digital broadcasts. This number was estimated at 0.5 percent by October 2009.

From these data, it would seem that virtually all citizens who desired financial assistance in making the digital conversion were able to receive the support necessary to do so. However, those citizens who received a coupon and redeemed it for a digital converter box still were not receiving the benefits of the digital transition, in terms of the picture and sound quality. These converter boxes allowed analog sets to remain functional by downgrading the digital signals received by the box into an analog signal that could be processed by the analog sets. In this regard, a substantial proportion of the population still does not enjoy the full benefits of digital television. However, this sector of the population includes not only those relying on NTIA-subsidized digital converter boxes, but also those households that rely on cable, telecommunications, and satellite set-top boxes that are operational with analog television sets.

7.1.1.3 Legal Provisions on Public Interest

The main public interest issues that arise in relation to the digital switch-over include:

1) the need to ensure that citizens were not denied access to programming as a result;

2) the desirability of establishing a system of public interest programming requirements and standards for the digital platform.
Digital switch-over became official and complete on 12 June 2009, without specific benchmarks having been established in advance in terms of access and affordability requirements for consumers. From a policy standpoint, the focus was much more on setting and enforcing conversion deadlines for broadcast licensees. Specific public interest programming standards were not established in conjunction with the digital transition. As described above, public interest programming requirements for the digital platform faded from the policy agenda over time.

However, when we consider the issue of ensuring citizen access to programming, it should be noted that the timetable for the transition was amended on several occasions in order to accommodate the rate at which U.S. households were becoming equipped to receive digital signals. Specifically, the 12 June 2009 switch-over date was an extension of an 18 February 2009 switch-over deadline that Congress adopted in 2006, which had itself extended the 31 December 2006 deadline adopted in the Balanced Budget Act of 1997. The deadline was extended due to January 2009 estimates by Nielsen that roughly 6.5 million television households were still unable to receive digital television broadcasts. This process of extending the switch-over date was the primary mechanism through which policymakers addressed public interest concerns over citizen access to digital signals and programming.

7.1.1.4 Public Consultation

Civil society groups played a role in the digital television transition on a number of fronts. First, in the lead-up to switch-over, civil society groups were included in the President’s Advisory Committee on the Public Interest Obligations of Digital Broadcasters. Members of the Committee included representatives of the American Enterprise Institute, Media Access Project, the Benton Foundation, Native American Public Telecommunications, Action for Children’s Television, and the National Parents Teacher Association. In addition, among the numerous meetings and consultations held by the Committee in its work was a session in December 1997 in which the Committee met with leaders of prominent public interest organizations.

However, there was substantial disagreement between many of the industry representatives on the Committee and many of the public interest representatives over the extent to which new and more rigorous public interest obligations should be applied to the digital broadcasting platform. These disagreements are reflected in the final report, and may in fact explain why the report ultimately gained relatively little traction in the digital television policymaking process.327

Another aspect of the process in which civil society groups have been involved has been the planning and logistics associated with the implementation of the NTIA’s digital converter coupon programming. According to the NTIA, the agency worked with “over 300 nonprofit organization partners with ties to the senior citizen, rural, and minority communities, and people with disabilities,” including such groups as the U.S. Hispanic Chamber of Commerce, the National Black Chamber of Commerce, the Southeast Asia Resource Action

Center, the Koahnic Broadcast Corporation, Native Voice One, and the Appalachian Regional Commission. These groups, by most accounts, played a meaningful role in the communication and outreach associated with ensuring that those segments of the population that might not be able to afford a digital television or a digital conversion box, or—perhaps more important—might not have all the information necessary to be fully aware of the digital conversion and of what actions were necessary in order to be prepared, were able to receive the necessary information and support for converting in advance of the switch-over.

7.1.2 The Internet

7.1.2.1 Regulation of News on the Internet

News delivery on the internet and mobile platforms is largely unregulated. Any regulatory interventions likely to affect the production and/or flow of news will be indirect. For instance, the FCC’s new network neutrality policies may have implications for the news flow. For instance, rules that prevent ISPs from blocking unaffiliated content providers can ensure that internet users have access to a greater diversity of news sources. Content regulations have, for the most part, remained confined to the broadcast sector. And, given the pressures on broadcast content regulation, it seems increasingly unlikely that any significant content regulations—particularly content-specific regulations such as those that might be directed at news—will be imposed any time soon.

Perhaps the most pressing legal/policy issue affecting the delivery of news online is what is known as the “hot news” doctrine. This doctrine arose in the U.S. from a 1918 Supreme Court case (International News Service v. Associated Press), in which the Court ruled that it was illegal for one news service (International News Service) to appropriate the reporting of another news service (Associated Press) and report it as its own—this, despite the longstanding legal tradition in U.S. copyright law that facts are not copyrightable. The key point here is that news services were granted some property rights in the news reporting that they produced.

This issue has resurfaced dramatically in the online space, given the extent to which individual web sites, bloggers, etc. frequently link to, paraphrase, or outright reproduce the news reporting of other online news outlets. Some courts have begun applying the hot-news doctrine in the online space, thereby prohibiting websites from reproducing news and information produced elsewhere. Higher court challenges to this decision are ongoing. How this issue is resolved will have important implications for how news and information flow online.

Even search engines such as Google and Yahoo! have been accused of engaging in copyright infringement via the act of linking to—and providing access to portions of—news stories produced by online news sources such as the Wall Street Journal and Fox News. By most accounts, the legality of the activities that such content aggregators and search engines engage in remains unclear. Should any legal precedent be established that


prohibits if or how search engines can provide users with access to online news sources, then this would be another significant legal development affecting online news and information flow. This issue represents an important developing point of the intersection between copyright and First Amendment law, in which the courts will have to weigh the economic concerns of news outlets against the First Amendment rights of search engines and other types of content aggregators and distributors.

7.1.2.2 Legal Liability for Internet Content

Generally, legal liability for content posted online rests with the author/poster. Section 230 of the Communications Decency Act of 1996 grants limited immunity to publishers from liability on account of statements and content created by third parties. This creates a new level of protection for services and individuals that redistribute speech on the internet, and is very different from liability for statements of others offline, in traditional media such as newspapers.

Section 230(c)(1) of the Act states that “[n]o provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider.” This immunity does not shield the person who created the content, but rather protects intermediary service providers who host content created by others. Congress enacted Section 230 in response to the difficulties in determining liability for unlawful content online.

As a point of contrast, in cases involving liability for unlawful content in print media, both the author of the content and the publisher are potentially liable. However, distributors (i.e. bookstores and newsstands) are not.

Perhaps the most significant impact of this legal framework has been the freedom it affords ISPs and online content aggregators. Media outlets that produce news and information and distribute that information online are not affected by this system in a way that is meaningfully different from how they are treated in the traditional media space. But one can argue that this legal system has created a powerful incentive for online entities to engage more in distribution and aggregation than in content creation, and to do so in a way that involves very little scrutiny of the content/sources that they distribute and/or aggregate.

One open question is the status of citizen journalists, as regards legal protections afforded to professional reporters. The Citizen Media Law Project tracks legal threats to bloggers, website operators, and social media platforms.330

---

7.2 Regulators

7.2.1 Changes in Content Regulation

The past five years have seen no meaningful efforts by policymakers to impose content regulation on online communication. Unlike what has taken place in Europe, non-linear online content remains outside the scope of all content regulation. However, in the realm of broadcast content regulation (the area of most intensive content regulation in the U.S.), the past five years have seen some significant changes.

Perhaps the biggest changes revolve around, on the one hand, efforts by Congress and the FCC to impose a more restrictive system of content regulation upon broadcast licensees and, on the other hand, decisions by the courts that have rejected these efforts and have taken the challenge to the FCC’s actions as an opportunity to raise questions about the constitutionality of the broadcast content regulation system that has been in place in the U.S. for years (see below).

Consider, for instance, that Congress voted in 2006 to substantially increase the maximum size of the fines that the FCC could levy on broadcast licensees for indecent broadcasts. Fines were raised tenfold, from US$32,500 to US$325,000. Again, in 2004, the FCC adopted a “fleeting expletives” policy that held broadcasters accountable for foul language that did not meet the traditional indecency definition that involves reference to sexual or excretory functions. Motivated by instances such as the sudden use of profane language during live broadcasts, the FCC decided to expand the parameters of its indecency policy to include such fleeting expletives.

However, in July 2010, the FCC’s more aggressive approach to broadcast indecency regulation was declared unconstitutional by the U.S. Court of Appeals for the Second Circuit. And while the specific policy element at issue was the “fleeting expletives” policy, the language of the court’s decision is much more expansive and calls into question the entirety of the FCC’s indecency regulation regime.331

In an even more recent decision, the same court overturned an FCC fine against broadcasters who aired an episode of the ABC television network series “NYPD Blue” that contained female nudity—reaching its decision in part on the basis of the precedent the court had established in the Fox Television decision.332 The underlying basis for both of these decisions is the court’s conclusion that the FCC’s indecency policies, as currently written, are vague to the point of being unconstitutional. It remains to be seen whether the FCC will challenge these decisions, or whether it will instead engage in significant revisions in its indecency policy in ways that address the vagueness critique.

In these regards, then, the past five years have seen efforts to regulate broadcast content more aggressively (reflecting the aggressive stance toward indecency regulation that characterized the FCC under Bush-appointed chairman Kevin Martin), though other media platforms have, during that same period, not experienced any significant change in how their content is regulated. Unsuccessful efforts by Congress in the 1990s to impose content regulation on the internet have not been revisited in the past five years.

Also in the realm of content regulation, ongoing controversy surrounds the notion of “network neutrality”. Network neutrality refers to the issue of whether ISPs should be required to remain “neutral” in handling the traffic that passes through their networks. That is, should ISPs be allowed to engage in practices such as charging differentiated prices to different customers, providing differentiated upload and download speeds for different network users, and blocking or limiting access to certain online content sources, in efforts to maximize their revenues and maximize the functionality of their network services? The FCC issued a Report and Order that addressed the network neutrality issue. 333 The Commission’s decision is widely seen as an effort to establish a compromise position, in which a somewhat limited form of network neutrality is mandated. One key element of the FCC’s decision involves a requirement that prevents network operators from blocking lawful traffic, subject to “reasonable network management”, an exception the Commission contends is needed to ensure that spam or denial-of-service attacks can be stopped. However, some network neutrality proponents see this exception as a substantial loophole through which ISPs will be able to circumvent any meaningful network neutrality requirements.

A second key element of the FCC’s decision involves a requirement that network operators be open about their network-management policies, so that consumers and companies can see what might be blocked, and why. A third key element involves a prohibition of “unreasonable discrimination”. Discrimination, in this context, refers to ISPs allowing some packets of data to travel faster than others. Here again, network neutrality advocates are concerned that the specific wording around the prohibition of “unreasonable discrimination” will make it difficult to enforce meaningful network neutrality. Opponents argue that engaging in such discrimination should be well within their rights as the builders and owners of these networks.

Finally, the network neutrality requirements imposed by the recent FCC decision are generally much more lenient in relation to providers of mobile forms of internet access (such as cell-phone companies). The FCC is allowing wireless providers to engage in some forms of traffic blocking in recognition of the greater bandwidth limitations under which they operate.

It remains to be seen how the FCC’s decisions will play out in the legal and public policy arena. Legal challenges are likely from both opponents of network neutrality (some of whom feel the FCC’s decision went too far in terms of infringing on their rights) as well as proponents (many of whom feel the FCC’s decision did not go nearly far enough). One irony that arises from the FCC’s decision is that, in this area of genuine convergence of communications technologies and networks, the FCC has imposed a technology-specific

regulatory regime (with differential treatment for wireless and wireline service providers). This occurred despite the fact that convergence was supposed to eliminate technologically particularistic approaches to communications regulation that have long characterized communications regulation and policy in the U.S. Yet such an approach has persisted and has now taken hold in the online realm. In the end, given the controversies raised by the FCC’s decision, the issue of network neutrality is likely to remain one of the most prominent and contentious U.S. communications policy debates.

Several cases that illustrate the difficult policy decisions that lie ahead result from the ease with which media can be distributed. Following the publication of the U.S. Embassy cables, WikiLeaks was quickly shunted off robust server space provided through Amazon’s cloud services, and its PayPal account and domain name system (DNS) services (the service that provides the service to resolve a URL name to the correct server on the internet) were withdrawn. On YouTube there has been continuing controversy regarding sermons by Anwar al-Awlaki, a former imam who has inspired multiple terrorists. All of these raise significant questions regarding speech and regulation.

Finally, there is one important context in which digital transition has extended existing regulatory authority. Specifically, the rise in prominence and influence of blogs, and widespread evidence of bloggers receiving payment in order to blog about certain products, issues, or services, led the U.S. Federal Trade Commission (which oversees advertising regulation) to extend its guidelines mandating disclosure of such payments to the blogosphere in 2009. Bloggers who receive payment in exchange for blogging about certain products, services, or issues must disclose to their readers any such “material connection”. The fines that the FTC has the authority to levy if these guidelines are violated, however, are directed not at the blogger but at the advertiser.

7.2.2 Regulatory Independence

The defining characteristic of U.S. media regulation over the past decade (in terms of both digital and non-digital platforms) has been its increasing politicization. Few if any impartial observers would conclude that there are any meaningful mechanisms in place to insulate regulators from external political forces.

There are, however, some efforts to maintain a modicum of political balance. For instance, the Federal Communications Commission—the primary agency responsible for the regulation of the communications arena—is composed of five commissioners, no more than three of whom may be associated with the same political party. The commissioners are appointed by the President and then confirmed by the Senate. Typically, the political party that controls the White House will populate the FCC with three commissioners (including the Chairman). Members of the other party generally occupy the two remaining commissioner positions. FCC votes almost invariably fall along party lines. These commissioners serve staggered five-year terms, and are eligible for reappointment once their term has expired. There are no term limits, though most leave after relatively short tenures, often to work in the private sector.

FCC appointments are frequently a form of political patronage, with high-level campaign supporters or political operatives of the President or members of Congress receiving appointments. In most instances, these
appointees have a substantial professional or policymaking background in communications, though this is not always the case, as it is not an explicit requirement.

Commissioners (as well as lower level staff ers) often end up working for one or more of the firms or industry associations that fall under the FCC’s regulatory authority. This “revolving door” raises concerns about industry influence over the regulatory process that are as great as—if not greater than—concerns about political influence over the regulatory process. The recent departure of FCC Commissioner Meredith Baker for a position as Senior Vice President of Governmental Affairs at Comcast, just four months after she had voted to approve Comcast’s US$13.75 billion merger with NBC/Universal, is the most recent example of this pattern.

No FCC commissioner has ever been dismissed mid-term, though certainly a number of commissioners have not have been reappointed when their terms expired. Failures to achieve a desired reappointment can occur for a variety of reasons, including displeasure on the part of the President or members of Congress with the commissioner’s performance (perhaps the commissioner failed to consistently adhere to the party line in his/her voting patterns) or the desire to cultivate a new policy leader in this area.

A regulatory agency such as the FCC is a somewhat unusual political entity. Its leaders are government appointees of the executive branch, who must also endure a confirmation process via the legislative branch. In addition, it is Congress that authorizes the FCC’s budget—and this has served as a mechanism for political influence. Congress has been known to threaten budget cuts if the FCC engages in a particular policy action; or, in some instances, Congress has written into the Commission’s budget specific prohibitions on any of the budgets being used to engage in certain activities. These “appropriations riders”, as they are known, have been used in the past to try to prevent the FCC from modifying its media ownership rules and to encourage it to consider alternatives to repealing the Fairness Doctrine.334 For all these reasons, some analysts of the FCC have described the agency as “a creature of Congress”. These dynamics and structures have not changed in response to the transition from analog to digital media.

Nor have there been any meaningful changes to these structures and dynamics over the past five years. Perhaps the most dramatic occurrence in relation to the politics of communications policymaking over that period has been in relation to the transparency of the FCC’s decision-making processes. The FCC has come under scrutiny by Congress and the U.S. Government Accountability Office for failing to provide adequate background information on the decisions it reaches; failure to provide adequate opportunities for interested parties to respond to policy proposals; and efforts to manipulate, distort, and suppress research and data related to its policy decision-making. The FCC under the Obama administration has made a priority of increasing the transparency of, and public participation in, decision-making.335


335. For details on the initiatives being deployed in this vein, see S. Coll, “Reboot.”
In terms of whether there has been an increase in public consultation in the digital age with respect to new media technologies, this is a question that can be addressed from numerous angles. First, the internet has certainly helped to broaden public participation in the media policymaking process. The FCC solicits and receives a substantial amount of public comment via its website. Public participation at its most extensive was illustrated in the FCC’s media ownership proceedings, in which the Commission received over two million public comments in response to its proposed regulatory changes. Despite the fact that the public’s position was overwhelmingly opposed to relaxing these regulations, the Commission moved forward with its efforts to deregulate. This apparent disconnect between policy decision-making and the nature of public participation has led many observers to question whether the FCC allows the public to play any legitimate role in its decision-making.

### 7.2.3 Digital Licensing

In the analog era, broadcast license allocation operated to avoid any impression that it was based on the proposed content of the licensee. A great concern within the FCC and Congress was that any licensing decisions that were overtly content-based would amount to government censorship. That being said, the FCC’s established licensing criteria did take into account the “character” of the licensee (criminal convictions, for instance, were cause for immediate disqualification) as well as the resources (financial, organizational) that the applicant was proposing to bring to the operation. This latter licensing criterion has been a source of significant criticism; many have argued that the emphasis on resources has led to an overwhelming emphasis on granting licenses to large, commercial broadcast companies, while leaving smaller, less-resourced applicants such as non-profit organizations, educational institutions, and community broadcasters very much at the margins of the broadcast system.

Turning to the more recent process of digital broadcasting transition, one of the most significant criticisms of the licensing process related to digital broadcasting was the extent to which, with relatively little public debate or discussion, policymakers decided to grant digital broadcasting licenses automatically to all existing analog licensees. In this regard, there was no meaningful digital licensing process. All incumbents received digital spectrum licenses to accompany their analog licenses, leaving little spectrum available to support new entrants.

Another recent licensing controversy concerned the establishment of low power FM (LPFM) broadcasting. In the 1990s, it became technically feasible to “drop in” low power FM radio stations in the portions of the spectrum that had historically served as the interference-preventing buffer between existing FM stations. Thus, the FCC launched an effort to license new LPFM broadcasters in January 2000. The signal strength of these stations would, of necessity, be quite limited, and thus their service area would be what has been termed “hyper-local”. The FCC decided to allocate these licenses exclusively to non-commercial entities that

did not already hold any broadcast licenses. In many ways, the LPFM license allocation process was an effort to address the closed process that characterized digital television license allocation. LPFM, unlike DTV, would facilitate genuinely new entrants into broadcasting. Of course, the reach these new entrants would be able to achieve via their LPFM stations is significantly less than could be achieved via digital broadcast television licenses.

The FCC’s decision to allocate LPFM licenses angered established broadcasters (both commercial and non-commercial), who expressed grave concerns over signal interference, but in all likelihood were simply concerned about new competition for audiences. A heated political battle ensued, with Congress eventually yielding to industry pressure and passing the Radio Broadcast Preservation Act of 2000, which limited the number of LPFM licenses that the FCC could allocate. This decision has been reversed by the passage of the Local Community Radio Act of 2010 by Congress in December 2010 and signed into law by President Obama in January 2011, which will allow the FCC to add significantly to the 800-plus LPFM stations broadcasting across the U.S. This is a significant development in that, by many accounts, it allows for the licensing of additional broadcasters, thereby taking full advantage of the spectrum, though it is too early to draw any definitive conclusions about the effects of the Act as the application window for licenses has not yet opened.

### 7.2.4 Role of Self-regulatory Mechanisms

Self-regulatory mechanisms have a long tradition in the U.S. media system, ranging from voluntary, self-conducted content labeling for the music, videogame, motion picture, and television industries, to a range of codes of ethics and statements of principles from journalistic associations, such as the Society for Professional Journalists, the American Society of Newspaper Editors, and the Radio and Television News Directors Association. The issues raised in these codes can be seen in this excerpt from the Statement of Principles of the American Society of Newspaper Editors:

- **Independence.** Journalists must avoid impropriety and the appearance of impropriety as well as any conflict of interest or the appearance of conflict. They should neither accept anything nor pursue any activity that might compromise or seem to compromise their integrity.

- **Truth and Accuracy.** Good faith with the reader is the foundation of good journalism. Every effort must be made to assure that the news content is accurate, free from bias and in context, and that all sides are presented fairly. Editorials, analytical articles and commentary should be held to the same standards of accuracy with respect to facts as news reports. Significant errors of fact, as well as errors of omission, should be corrected promptly and prominently.

- **Impartiality.** To be impartial does not require the press to be unquestioning or to refrain from editorial expression. Sound practice, however, demands a clear distinction for the reader between news reports and opinion. Articles that contain opinion or personal interpretation should be clearly identified.

- **Fair Play.** Journalists should respect the rights of people involved in the news, observe the common standards of decency and stand accountable to the public for the fairness and accuracy of their news reports. Persons publicly accused should be given the earliest opportunity to respond. Pledges of confidentiality to
news sources must be honored at all costs, and therefore should not be given lightly. Unless there is clear and pressing need to maintain confidences, sources of information should be identified.337 Comparable obligations are outlined in the codes of ethics of the Society of Professional Journalists338 and the Radio Television Digital News Association (formerly the Radio and Television News Directors Association).339 Self-regulatory guidelines have also been espoused by professional organizations such as the National Association of Broadcasters, which emphasizes “Specific Program Principles”, such as being aware of the composition and preferences of particular communities and audiences; portraying violence responsibly; avoiding glamorizing or encouraging drug use; and avoiding sexual themes during hours when significant numbers of children are likely to be in the audience.340

Despite the emphasis on social responsibility in these codes, there is a fairly long history of research and criticism that raises questions regarding the extent to which commercial media firms uphold their own ethical imperatives.341 Much of this criticism and analysis hinges on the increasing difficulty that journalists and media managers seem to have in effectively negotiating media organizations’ bifurcated nature as both economic and political/cultural institutions.342 Economist James Hamilton has shown how economic forces have affected the news product—often in ways that run counter to traditional public interest values.343 This has led to an intense re-examination within the journalistic community of what public service—and journalism’s status as a public trust—actually means, though specific outcomes arising from these discussions remain difficult to ascertain.344 In addition to economic pressures, news organizations in recent years have come under intense pressure from the political field, which has grown increasingly partisan.345 In an effort to compete with their openly ideological counterparts on cable television and the internet, traditional outlets

have come under intense criticism for their news decisions, though not one outlet has, to our knowledge, been threatened with any formal sanctions.

Perhaps the most prominent instance of the digital environment raising new self-regulatory guidelines is in the realm of online privacy. At this point, U.S. regulators have only instituted explicit privacy regulations in relation to protecting the privacy of children. In relation to adults, industry self-regulation remains the norm, codified by organizations such as the Interactive Advertising Bureau, with the relevant government agency, the Federal Trade Commission, having fairly consistently encouraged industry self-regulation rather than more aggressive government regulation. However, in December 2010, in light of growing concerns over how much consumer data is being gathered online (often without the consumer being aware), the FTC issued a report, Protecting Consumer Privacy in an Era of Rapid Change, which proposes more explicit government regulation of the data gathering practices of online entities. It remains to be seen whether the FTC moves forward with any of the proposals in its report, or whether the existing system of industry self-regulation will remain the status quo.

There have been various proposals for codes of ethics for bloggers, given their increasing prominence and influence, and associated concerns about whether bloggers adhere—or should adhere—to traditional journalistic codes of ethics. However, nothing has been formalized or widely adopted, as the blogger community has yet to become professionalized such that it is required to adopt and adhere to formalized codes of conduct or ethics. Given the breadth of the blogosphere, such a development may never take place.

## 7.3 Government Interference

### 7.3.1 The Market

The primary mechanism by which government officials have affected the contours and operation of media markets has been through ownership regulations. There is a very long and complex history of media ownership regulation in the U.S. These regulations generally have been focused on the ownership of broadcast (radio and television) stations, but have also extended into the ownership of broadcast networks, the ownership of newspapers, and, to some extent, the ownership of cable systems. Opponents of ownership regulations typically argue that Congress and the FCC have distorted media markets through their adherence to ownership regulations—particularly in today’s media environment, where the barriers to entry have in some ways been lowered, and technological convergence has diminished the meaningful distinctions that have existed across platforms.

---


Media ownership regulations have been reduced over time. This is due in large part to the ascendance of digital platforms and content providers—the presence of which has undermined some of the established logic for these regulations. Specifically, the prevailing logic within the FCC has been that, given the increasingly competitive media environment that has arisen thanks to the internet and other new media, it makes ever less sense to restrict ownership concentration in the traditional sectors of radio, television, and newspapers. This logic has become particularly pronounced in recent years, as these traditional media have increasingly fallen into financial turmoil due, at least in part, to the competition and business model disruptions that have accompanied the rise of new media platforms.

In the end, though, whether one sees these regulations as interference that distorts media markets or as necessary safeguards for competition and diversity in these markets tends to be very much a matter of one’s political orientation, with citizens and policymakers on the more liberal end of the political spectrum favoring such regulations and those on the more conservative end opposing them.

Another area where government plays a role in the structure and operation of media markets is in public broadcasting. The federal government provides a small percentage of the funding that supports the operation of public, non-profit, radio, and television broadcasting. This percentage is small, particularly in comparison to other countries. And, in fact, it has declined steadily over the years. Public broadcasting is a prime example of the politicization of media policy, in that conservative policymakers have generally been quite hostile to continued government funding of public broadcasting, not only on ideological grounds, but also due to the perception that public broadcasting has an overtly liberal orientation. For this reason, conservative efforts to defund public broadcasting have often been perceived as efforts to diminish or silence a significant liberal voice.

7.3.2 The Regulator

In the 1970s, the Nixon administration frequently tried to use the FCC’s licensing authority to put pressure on media outlets. No such similar accounts have emerged from more recent periods. Perhaps the closest example from a more recent period would involve criticisms that were leveled at Kevin Martin, FCC Chairman between 2006 and 2009, who very aggressively pursued regulation of the cable television industry on a number of fronts, to such an extent that accusations of distorting, suppressing, and manipulating policy-relevant data in order to construct effective justifications for further regulation were leveled against him. This is one of the few recent examples in which genuine concerns about an abuse of power by a communications regulator formed part of the public agenda.

348. For NPR it is less than 10 percent in total (see, for example, S. Coll, “Reboot”).
349. President Nixon paid very close attention to how he was portrayed in local and national media outlets. If, for instance, he was displeased with how his administration was portrayed in a newspaper story or editorial, he was known to covertly communicate to his appointees at the FCC to place increased scrutiny on any broadcast license renewals that were upcoming for the newspaper's parent company. (See D.M. Stone, Nixon and the Politics of Public Television, Garland Publishing, New York, 1985.)
7.3.3 Other Forms of Interference

Perhaps the most potent pressure that the government can exert in the contemporary media environment is one of access. Access to government officials and information remains a highly valued commodity for news outlets. Some of the most pointed criticisms of the American news media in recent years have focused on the extent to which news outlets have been willing to deviate from core journalistic principles in order to obtain—or maintain—privileged access to government officials or information, or to restricted locations. These criticisms were most acute in relation to news coverage of the U.S. military in Iraq and Afghanistan, where critics contend that major news outlets served largely as passive conduits for government (mis)information. The bulk of these criticisms do not assert that these behaviors involve explicit negotiations between government officials and news outlets. Rather, they argue that this state of affairs has resulted from a press system that has become increasingly intertwined with the government sources they cover, that has become increasingly under-resourced, and that has begun operating under diminished journalistic standards in the face of the competing sources that have emerged in today’s increasingly fragmented media environment.

Formal government requirements related to news diversity within programs have been largely eliminated and are unlikely to return. Moreover, the case of WikiLeaks suggests that despite a clear desire to prevent the distribution of some of its material, the U.S. government was unable to prevent it. In particular cases, government agencies have claimed national security, indecency, or copyright infringement as rationales for demanding the closure of particular content sites, as was the case in November 2010, when the U.S. Department of Justice and the U.S. Department of Homeland Security’s Immigration and Customs Enforcement (ICE) obtained a court order to seize the domain names of some 82 websites suspected of selling copyright-infringing consumer goods. Such interventions are observed closely and challenged by civil liberties groups. In summary, while an internet-enabled world has made it more difficult for government to interfere, it is adapting and in many respects escalating policies aimed at protecting national security and enforcing copyright.

7.4 Assessments

U.S. policymakers have not taken a proactive stance toward digital transition. It is true that in some contexts, such as mandating television broadcasters’ transition to digital transmission, and in the recent incremental step by the FCC on behalf of preserving network neutrality, government actions have responded to some degree to the transition. But it is perhaps more common that the process of digitization has been interpreted by policymakers as an appropriate justification for scaling back existing regulatory systems (e.g. the case of media

---


ownership). Regulatory activities directed at preserving and promoting competition, free and independent news production, diversity, pluralism, etc. in the digital space have yet to emerge in any meaningful sense in the U.S.

The nature and degree of interference by state authorities has not changed appreciably over the past five years, beyond those ongoing efforts by the FCC to ensure some form of network neutrality and to increase the rate of broadband deployment. Of course, the term “interference” has, in these contexts, a connotation that is contentious. That is, many of the commercial firms involved in the provision of broadband access services certainly view these initiatives by the FCC as interference. Members of the public interest community, however, see these efforts as necessary, though to some extent inadequate, efforts on behalf of crafting a digital media system that effectively serves the needs of the citizenry.

Very recently, the dynamics of the new media environment have led both the FCC and the FTC to solicit public comment on a broad range of questions related to the future of media and journalism. These proceedings are particularly significant in that they are not oriented around or motivated by specific policy proposals, but rather seek to prompt a more open-ended, wide-ranging discussion about the changing dynamics of the contemporary media environment and the appropriate role for policy to play in ensuring a media system that effectively serves the needs of communities in a democracy. In this regard, new media technologies are broadening the range of issues around which policymakers engage the public. The FCC has also notably just redesigned its website in order to expand public interaction and the use of social media platforms, soliciting user feedback along the way.352

Finally, new media have facilitated new forms of policy advocacy and social movement building and organization. A growing and active public interest and advocacy community has developed in the U.S. (at both local and national levels) around media and communications technology policy.353 The internet has been vitally important to the growth and development of this growing social movement, just as it has been to other social movements. Online tools and platforms facilitate a wide range of movement-building activities, ranging from fundraising to recruitment to mobilization to publicity and public relations. In these ways, the public interest and advocacy community is better able to mobilize its constituencies and better able to engage with the policy process on a variety of fronts.

It is somewhat disappointing to conclude that the U.S. transition to digital broadcasting was not accompanied by any meaningful policy initiatives related to pluralism and diversity. As noted above, pluralism, diversity, and localism concerns were a central topic of debate and discussion in the years leading up to the switch-over—

352. S. Coll, “Reboot.”

353. Organizations such as Free Press and Public Knowledge have, in recent years, emerged at the national level to play an influential role in communications policymaking and in mobilizing and informing the citizenry on communications policy issues. At the local level, there has been a marked increase in grassroots organizations, particularly since 2003, when the issue of media ownership concentration mobilized citizens and citizens’ groups to an unprecedented extent. See A. Dichter, “Together, We Know More: Networks and Coalitions to Advance Media Democracy, Communication Rights, and the Public Sphere 1990–2005,” Media Action Grassroots Network, Center for Media Justice, Oakland, CA, 2005, available at http://www.mag-net.org/content/together-we-know-more-networks-and-coalitions-advance-media-democracy-communication-rights-a (accessed 28 July 2011).
primarily within the context of the activities of the President’s Advisory Committee on the Public Interest Obligations of Digital Broadcasters. However, none of the public interest-oriented recommendations that came out of this committee’s work were ever acted upon, due in large part to: 1) the change in presidential administration that coincided with the conclusion of the Committee’s work; and 2) the sense among many policymakers that the transition to digital broadcasting represented a sufficiently risky and expensive investment for broadcasters that any meaningful public interest obligations would represent an undue burden. It follows that digital broadcasting operates along lines that are virtually identical to those that characterized analog broadcasting—with the recent history of analog broadcasting being one in which policies to promote and maintain pluralism and diversity have been in steady decline.

8. Conclusions

8.1 Media Today

Most people now have access to more information than at any previous time, but the decimation of traditional print and broadcast newsrooms and a lack of viable methods for financing in-depth reporting in the digital age means the nation is at a delicate moment in communications, news, journalism, and free speech. It also unfortunately remains the case that race, gender, income, education, geography, age, disability, and sexual orientation all continue to unjustly shape Americans’ opportunities for both accessing and being represented in high-quality reporting. Many communities, both of identity and geography, have never been well-served by existing media outlets and infrastructure. Communities of color, Native Americans, and those living in rural areas have often been excluded from access to robust infrastructure and emerging technologies, and the issues affecting them have too often been unexplored by professional journalists.

Simultaneously, the digital revolution has upset old business models. As a consequence, there exists a looming—though not certain—market failure in the production and circulation of publicly relevant news, especially at the local level. Traditional media are scrambling to maintain balance in the new environment, but have been slow to adapt.

8.1.1 Positive Developments

Three developments strike us as particularly positive. First, new communication technologies have drastically expanded the space for new entrants to the “mediascape”; second, these technologies, combined with the economic crisis in news, have spurred innovative models for public media; and third, new technology reveals great potential for wide-scale participation of the public in the newsgathering, production, and distribution processes.

Regarding the expansion of the mediascape, cable television and the internet now allow people who were shut out of media production by the historically high cost of entrance to participate, via outlets such as PEG channels, blogs, and social media. While much of this content is personal or entertainment-oriented, the range of voices and viewpoints certainly has expanded since the “broadcast era”.355 Insofar as a platform

---


---
such as a blog offers multiple ways for both reporters and citizens to engage, the range of viewpoints is also likely to expand accordingly.\textsuperscript{356} Experimentation with these new platforms by both traditional outlets and citizen entrepreneurs is supporting an expanded sphere of public media projects—which rely not only on federal or local government funding and/or set-asides, but hybrid forms of support, including individual and philanthropic donations, online ads, and volunteer energy. Add to this the highly visible and influential digital activism that is occurring not just in service of elections but in areas such as aggregating volunteer efforts in response to natural disasters and in service of social causes. This offers significant hope that communities will be able to create media and communicate in ways never before imagined.

\subsection*{8.1.2 Negative Developments}

On the negative side of the ledger, it is clear that the traditional journalism infrastructure is crumbling, and outlets are privileging the creation of eyeball-grabbing content and politically polarized news over expensive investigative and accountability news reporting. Moreover, the convergence of all forms of media onto broadband-enabled devices coincides with a rapid increase in demand for spectrum necessary to facilitate mobile broadband. High-speed wired connectivity is lacking in much of the country, and we are unlikely to see the connection speeds in the U.S. match those of many of the country’s economic competitors under the current policy framework.

Furthermore, without substantial policy change, the mergers in the commercial media and telecommunications industries threaten to permit a small group of powerful commercial gatekeepers to control the future path of communications policy and infrastructure development. The merger in 2010 creating Comcast–NBC may well be followed by other similar attempts. The proposed merger between AT&T and T-Mobile would leave the cell-phone network provider market dominated for the most part by two providers. This raises issues of cost, diversity of content and ownership, editorial bias, and fears of censorship.

\subsection*{8.2 Media Tomorrow}

However, while there is much cause for concern about the ability of the new media environment to meet the needs of a democratic society, there are also innovations currently underway in newsrooms. While many are in their infancy, they hold the promise for enhancing both production of information as well as engaging communities and individuals in creative new media endeavors. For example, new tools such as DocumentCloud provide news consumers with direct access to the source materials behind an investigation and, in some cases, involve those consumers in parsing related data.\textsuperscript{357} Newsrooms are actively engaged in inventing and refining content management and commenting systems in order to improve users’ interaction with reporters; a recent partnership between the Knight Foundation and Mozilla is aimed at placing journalist-

\begin{itemize}
\item \textsuperscript{357} See http://www.documentcloud.org/home for more information.
\end{itemize}
technologists into traditional news organizations to tackle these and similar issues. An explosion in data visualization and infographics is driving new reporting creativity.

Additionally, new journalistic and civic engagement ecosystems are sprouting up in local news markets across the country, although these systems are emerging in a halting and uneven fashion. As has been widely noted, many new digital media outlets do little or no original reporting. What’s worse, “digital redlining”, the practice of building out high speed internet connectivity in more affluent neighborhoods and ignoring less affluent ones, coupled with the consequences of the migration of legacy news organizations to more affluent suburban markets, have the potential to replicate patterns of clustered “information paucity” from the pre-digital era.

Of most concern, though, is the combination of all these changes resulting in the emergence of a digitally disconnected subset of the population that is unable to participate in the two-way media ecosystem due to no or slow digital access and low levels of media literacy.


9. Recommendations

9.1 Policy

9.1.1 Spectrum Policy

9.1.1.1 Protection of Public Access to the Airwaves

Issue
Access to the airwaves or spectrum allocated through auctions can, with proper safeguards, be a transparent and efficient process. However, to ensure that allocation decisions and assignments are fair and to maximize the public benefit, it is critically important to look beyond auctions as a sole solution. Communications regulators and policymakers have a responsibility to examine efficient and equitable outcomes in an effort to maximize social welfare and ensure that all sectors within a democratic society have access.

Recommendation
We propose six new approaches to spectrum allocation that the regulators should consider in addition to traditional auctions involving one-time payments from the highest bidder for the exclusive use of a frequency. These approaches are:

- Annual and revenue-sharing fees: regular (e.g., annual) payments for the exclusive use of a frequency.
- Micropayments and real-time auctions: pay-for play for the use of specific frequencies at a specific time.
- Licensing “lite”: requirement to license a transmitter but providing no primary or exclusive use of a frequency.
- Primary and secondary shared use: allowing high power and low power uses to coexist on the same frequencies.
- Unlicensed: opening a specific frequency to all devices that meet a specific set of technical specifications and requiring no licensing of transmitters.
- Opportunistic (re)use: Allowing devices to opportunistically identify unused frequencies and transmit on those frequencies.
In addition, we propose two further public interest obligations should be imposed on those entities with an exclusive license to spectrum to provide wireless broadband:

- Openness: Require those who gain spectrum licenses to adhere to non-discrimination rules for internet content, applications and devices. Such rules are crucial to preserving the free flow of information, including community media, through the airwaves.

- Universal Service: Require service and build-out across the entire geographic area of the license.

Spectrum policy should ensure that communities are able to access the airwaves directly. We recommend that a minimum of 40 percent of all re-purposed spectrum should be allocated for unlicensed use and that 500MHz of spectrum under 5GHz should be made available for opportunistic spectrum access.

9.1.2 Internet Policy

9.1.2.1 Strong Open Internet Rules

Issue
The essential connection between public access to communications infrastructure and the sustainable production of diverse and local content is the reason why open internet policies are critical. Without such policies, corporate-controlled “walled gardens” of gated communications will pose a threat to a healthy and diverse media ecosystem.

Recommendation
Open internet requirements must be enforced to prevent internet service providers (ISP) from acting as gatekeepers and determining which content, applications, and services users may access. These same protections must also apply equally to all forms of internet access, including wireless communications.

9.1.2.2 Increase in Federal Funding for Broadband Access

Issue
There are two key areas of potential federal funding for access: first, the Universal Service Fund (USF). To date this has provided funding for telephone lines in high cost areas build-out (typically rural) as well as subsidies for the cost of service for low-income consumers. It also includes a second component of funding, the E-Rate program, which subsidizes internet access and telephone connectivity for schools and libraries.

Historically, the former two have been subsidies to telephone providers and have not been available to broadcast entities or community anchor institutions. Supporting access to public computer centers and training through leveraging a larger network of anchor institutions, and spreading affordable, high-speed broadband access will all increase the ability of underserved communities to communicate, both within a community and with the outside world.
**Recommendations**

Community anchor institutions and community networks should be eligible for USF and E-rate funds. 10 percent of USF funds should be allocated to aid broadband adoption programs and training, including media production. Using 2009 figures, this would provide US$ 730 million of funding per annum.362

Federal rules should also affirm the authority of state, tribal and local jurisdictions to own and to be compensated for use of public rights of way. This will result in funds for local authorities who permit cable and telecommunications companies that lay cable under public roads or hang cable on city owned poles to provide for sustainable access funding for community media.

9.1.2.3 Local Internet Development

**Issue**

To aid the “information health” of local communities, it is necessary for local municipalities to treat information conduits as essential infrastructure like roads and community institutions.

**Recommendations**

Municipalities should be able to construct their own networks when communities determine that is the best way for them to meet local needs. Specifically states should refrain from passing laws that prohibit municipalities from building their own networks, or putting in place barriers and requirements that make it difficult to raise bond issues with the support of local residents.

Municipalities should prioritize broadband adoption to bring new communities online and expand their ability to distribute their own content and increase their stake in the local broadband infrastructure and the internet.

9.2 Media Law and Regulation

9.2.1 Media Ownership

9.2.1.1 Media Diversity

**Issue**

Commercial media are obliged by law to broadcast in the public interest as a condition of the broadcast license they hold. Media diversity is put at risk by the consolidation of media entities and the emergence of local news-sharing agreements.

---

Recommendation

The Federal Communications Commission (FCC) should maintain local media ownership limits, and prevent any contractual circumvention of its media ownership rules. These efforts should include additional information collection to enable better analyses of media ownership issues.

9.2.2 Media Regulation

9.2.2.1 Addressing the Move from Mass Advertising to Personalized Advertising in Commercial Media

Issue

Major media companies are transitioning from business models based on mass media advertising to advertising tailored to the individual consumer. The transition has obvious privacy implications as individual user behavior is monetized by tracking user activities on news sites and triangulating these activities with other user behavior, both online and off. The possibilities for data-mining the activities and preferences of media consumers raise ethical issues related to user privacy and user control over online identities.

Meanwhile, smaller media organizations lack the skills for transitioning from mass market-advertising to personal advertising. The implications for the economics of news entities is considerable as producers of journalism may be reliant upon a small set of data aggregators for advertising and other online revenue streams.

Recommendation

The FCC and the Federal Trade Commission must explore the policy implications of this transition to personalized advertising, in relation both to news producers and to consumers, with a special focus on those most vulnerable to the exploitation of their personal data. Subsequently, both policy changes and engineering and software design changes should be developed.

9.2.2.2 Support for Community Media

Issue

The community media sector, in transition in some parts and expanding in others, should take on new roles while its traditional role is reaffirmed. Federal policy can support comprehensive community media—citizen journalism, provided via blogging, public and government access cable channels (PEG), low power FM radio stations, and other volunteer-produced or hybrid-model efforts. An important source of support is the funds provided to the Corporation for Public Broadcasting (CPB).

Recommendations

CPB rules should be changed to expand possible recipients of CPB funds and support universal broadband access. User-driven content, however, can and should be supported as a necessary complement to those existing public broadcasting institutions. 10 percent of federal public media appropriations should be allocated to community media institutions, an estimated US$ 43 million dollars at current funding levels. Partnerships between such organizations and existing public broadcasting entities should be incentivized.
Specifically the FCC should

- Implement policies that encourage provision of and access to PEG channels on a basis equivalent to ordinary cable channels.
- Rapidly implement the provisions in the Local Community Radio Act to increase the number of low-power radio stations across the U.S.

Community media centers should

- Re-envision their role in communities to maintain their positions as local anchor institutions.
- Advocate for policies that lower the cost of broadband and extend access to information.

Community foundations and other grant-makers should support innovation within the community media sector, such that community media centers

- Embrace a multi-platform future that involves not only cable access, but also online and radio platforms serving multiple community needs.
- Receive support for running digital literacy programs through leveraging their established track record as training providers.

9.3 Public Service in the Media

9.3.1 Holding Commercial Media to High Standards

Issue
Commercial media must broadcast in the public interest as a condition of the broadcast license they hold. All broadcast licensees need to be held to standards that protect localism and diversity.

Recommendations
The FCC should review commercial broadcast public interest obligations and implement the comprehensive online disclosure rules currently under consideration. They should reform the sponsorship identification rules, and implement modified reporting requirements including machine-readable online public file requirements for local broadcasters. These reforms would provide increased transparency and accountability. The FCC should enforce sanctions on broadcasters who fail to adequately provide programming in the public interest.

9.3.2 Increased funding and incentives for public media to innovate

Issue
The public media sector needs to innovate and fill in gaps left by commercial media as it has retrenched, especially in the areas of local and investigative reporting, and in socially relevant applications of increasingly popular media platforms/devices.
**Recommendations**

In order to support a healthier and more sustainable public media, government funding should move to a trust fund model established from annual spectrum fees or a share of auction payments rather than annual appropriations.

Firewalls that protect the Corporation for Public Broadcasting from disbursing funds subject to political influence need to be strengthened. These could be achieved by modifying the composition of the board of CPB or the appointment process to the board. Alternatively, appointment terms could be modified or an advisory board of trustees appointed.

In the public broadcasting field, technological innovation should be supported via an assignment of 5 percent of annual funding to innovation, with an emphasis on adoption of a two-way rather than broadcast model.

Priority for funding should be given to public broadcasting institutions that partner with community media institutions and focus on increasing the diversity of content and services to a wider audience.
### List of Abbreviations, Figures, Tables, Companies

#### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3G</td>
<td>Third-Generation Mobile Telecommunications</td>
</tr>
<tr>
<td>ADS</td>
<td>Alternate delivery system</td>
</tr>
<tr>
<td>AOL</td>
<td>America Online</td>
</tr>
<tr>
<td>APM</td>
<td>American Public Media</td>
</tr>
<tr>
<td>ASNE</td>
<td>American Society of Newspaper Editors</td>
</tr>
<tr>
<td>ATSC</td>
<td>Advanced Television Systems Committee</td>
</tr>
<tr>
<td>AWS-1</td>
<td>Advanced Wireless Auction Services</td>
</tr>
<tr>
<td>BTOP</td>
<td>Broadband Technology and Opportunities Program</td>
</tr>
<tr>
<td>CAR</td>
<td>Computer assisted reporting</td>
</tr>
<tr>
<td>CDMA</td>
<td>Code division multiple access</td>
</tr>
<tr>
<td>CPB</td>
<td>Corporation for Public Broadcasting</td>
</tr>
<tr>
<td>COPE</td>
<td>“Create once, publish everywhere”</td>
</tr>
<tr>
<td>CR</td>
<td>Cognitive radio</td>
</tr>
<tr>
<td>DBS</td>
<td>Digital-broadcast satellite</td>
</tr>
<tr>
<td>DNS</td>
<td>Domain name system</td>
</tr>
<tr>
<td>DOJ</td>
<td>Department of Justice</td>
</tr>
<tr>
<td>DSL</td>
<td>Digital subscriber line</td>
</tr>
<tr>
<td>DTV</td>
<td>Digital television</td>
</tr>
<tr>
<td>DVR</td>
<td>Digital video recorder</td>
</tr>
<tr>
<td>EEO</td>
<td>Equal Employment Opportunity</td>
</tr>
<tr>
<td>FCC</td>
<td>Federal Communications Commission</td>
</tr>
<tr>
<td>FTC</td>
<td>Federal Trade Commission</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GNI</td>
<td>Gross National Income</td>
</tr>
<tr>
<td>GRCMC</td>
<td>Grand Rapids Community Media Center</td>
</tr>
<tr>
<td>GPS</td>
<td>Global positioning system</td>
</tr>
<tr>
<td>GSM</td>
<td>Global system for mobile communications</td>
</tr>
<tr>
<td>Acronym</td>
<td>Full Form</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>HD</td>
<td>High definition</td>
</tr>
<tr>
<td>IAB</td>
<td>Internet Advertising Bureau</td>
</tr>
<tr>
<td>ICE</td>
<td>Immigration and Customs Enforcement</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communication Technologies</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>IPTV</td>
<td>Internet Protocol television</td>
</tr>
<tr>
<td>ISP</td>
<td>Internet service provider</td>
</tr>
<tr>
<td>ITU</td>
<td>International Telecommunication Union</td>
</tr>
<tr>
<td>LGBTQ</td>
<td>Lesbian, Gay, Bisexual, Transgender, and Questioning</td>
</tr>
<tr>
<td>LPFM</td>
<td>Low power FM</td>
</tr>
<tr>
<td>LSU Fiber</td>
<td>Louisiana Municipal Fiber Company</td>
</tr>
<tr>
<td>LTE</td>
<td>Long-term evolution</td>
</tr>
<tr>
<td>MMDS</td>
<td>Multipoint multichannel distribution service</td>
</tr>
<tr>
<td>MVPD</td>
<td>Multi-channel video program delivery</td>
</tr>
<tr>
<td>NBCU</td>
<td>NBC/Universal</td>
</tr>
<tr>
<td>NCTC</td>
<td>National Cable Television Cooperative</td>
</tr>
<tr>
<td>NICAR</td>
<td>Computer Assisted Reporting Conference</td>
</tr>
<tr>
<td>NOI</td>
<td>Notice of Inquiry</td>
</tr>
<tr>
<td>NPR</td>
<td>National Public Radio</td>
</tr>
<tr>
<td>NPRM</td>
<td>Notice of Proposed Rule Making</td>
</tr>
<tr>
<td>NTIA</td>
<td>National Telecommunications and Information Administration</td>
</tr>
<tr>
<td>O&amp;O</td>
<td>Owned-and-operated</td>
</tr>
<tr>
<td>OMB</td>
<td>Office of Management and Budget</td>
</tr>
<tr>
<td>PBS</td>
<td>Public Broadcasting System</td>
</tr>
<tr>
<td>PC</td>
<td>Personal computer</td>
</tr>
<tr>
<td>PDA</td>
<td>Personal digital assistant</td>
</tr>
<tr>
<td>PEG</td>
<td>Public, Educational, and Government Access Television</td>
</tr>
<tr>
<td>PEJ</td>
<td>Project for Excellence in Journalism</td>
</tr>
<tr>
<td>PRI</td>
<td>Public Radio International</td>
</tr>
<tr>
<td>RSS</td>
<td>Really Simple Syndication</td>
</tr>
<tr>
<td>SDR</td>
<td>Software defined radio</td>
</tr>
<tr>
<td>SEIU</td>
<td>Service Employees International Union</td>
</tr>
<tr>
<td>SMATV</td>
<td>Satellite master antenna television</td>
</tr>
<tr>
<td>TAO</td>
<td>Transparent, accountable and open</td>
</tr>
<tr>
<td>UGC</td>
<td>User-generated content</td>
</tr>
<tr>
<td>URL</td>
<td>Unique resource locator</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
</tr>
<tr>
<td>UV</td>
<td>Unique visitor</td>
</tr>
<tr>
<td>VNR</td>
<td>Video news release</td>
</tr>
<tr>
<td>WSD</td>
<td>White space device</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
</tbody>
</table>
Figures

Figure 1. Rural-urban breakdown (% of population) ............................................................. 12
Figure 2. Ethnic composition (% of total population) ........................................................... 12
Figure 3. Linguistic composition (% of total population) ...................................................... 13
Figure 4. Religious composition (% of adult population) ...................................................... 13
Figure 5. Daily paid circulation of daily newspapers in the U.S., 2006–2010 ...................... 26
Figure 6. Broadcast network news audience, 2005 vs. 2010 (millions) ............................. 27
Figure 7. Media ownership and employment diversity across platforms ............................. 28
Figure 8. Current rankings (and primetime audience figures) for cable news .................... 28
Figure 9. Government appropriations for the media (US$ million), 2005–2012 ................... 86

Tables

Table 1. Economic indicators ............................................................................................... 14
Table 2. Households owning equipment in the United States, 2005–2010 .......................... 16
Table 3. Platform for the main TV reception and digital take-up ......................................... 18
Table 4. Internet and mobile penetration rates .................................................................... 19
Table 5. The most popular online news sites in the U.S. (in million estimated unique monthly users), 2005–2011 ........................................................... 27
Table 6. Most popular websites in the United States, July 2011 ......................................... 44
Table 7. Ownership and employment (% people of color) in new digital media .............. 83

Companies

170 Million Americans
ABC
Access Humboldt
ACORN
Al-Jazeera
Allbritton Communications
Amazon
American Public Media
The Amsterdam News
AOL
Apple
AT&T
BBC
BIA Financial
BlackPlanet
Bloomberg
Cablevision
The Carnegie Foundation
CBS
CCTV
Charter
Christian Science Monitor
Cingular
CivicApps
CNBC
CNN
Coca-Cola
Comcast
comScore
Connecticut Mirror
Corporation for Public Broadcasting
Cox Communications
Craigslist
Crisiscamps.org
CTIA The Wireless Association
Current
Dallas Morning News
dataMine
Data.sf.org
Democrat and Chronicle
Detroit News/Free Press
deviantART.com,
Digg
DirecTV
The DISH Network
Dow Jones
El Tiempo Latino
Facebook
Flickr
Flixster
Fox
Free Press
Frontier
Gawker
General Electric
Google
Grand Rapids Community Media Center
Harper's
HLN
Hulu
The Huffington Post
Indymedia
iWatch News
Knight Ridder
Lightsquared
LinkedIn
Louisiana Municipal Fiber Company
MacNeil/Lehrer Productions
MapLight.org
Match.com
McClatchy
Meetup.com
MinnPost.com
Monster
MoveOn
Mozilla
MSNBC
MySpace
NBC
NBC/Universal
New Haven Independent
NewAssignment.net
News Corporation
News 12 New Jersey
News of the World
Newsweek
New York 1
New York Newsday
New York Post
The New York Times
National Public Radio
Nielsen
One Economy
OpenGovernment.org
PatientsLikeMe
PayPal
Perez Hilton
Philly.com
Politico
PQ Media
Procter & Gamble
Public Broadcasting System
Public Knowledge
Public Media Corps
Public Radio International
Reddit
reinventNYC
RTV
Seattle Post-Intelligencer
Sirius/XM
Spectrum
Sprint
StatCounter
St. Louis Beacon
St. Petersburg Times
StumbleUpon
Sunlight Foundation
Sunshine Review
TalkingPointsMemo
Technorati
Texas Tribune
Time Warner
T-Mobile
Townhall.com

Tribune Company
Twitter
Universal McCann
Verizon
Viacom
Voice of San Diego
Wall Street Journal
The Washington Post Company
WikiLeaks
Wikipedia
Yahoo!
Yelp
YouTube
Mapping Digital Media is a project of the Open Society Media Program and the Open Society Information Program. The preparation of the report on the United States has been assisted by the U.S. Programs Transparency and Integrity Fund.

Open Society Media Program
The Media Program works globally to support independent and professional media as crucial players for informing citizens and allowing for their democratic participation in debate. The program provides operational and developmental support to independent media outlets and networks around the world, proposes engaging media policies, and engages in efforts towards improving media laws and creating an enabling legal environment for good, brave and enterprising journalism to flourish. In order to promote transparency and accountability, and tackle issues of organized crime and corruption the Program also fosters quality investigative journalism.

Open Society Information Program
The Open Society Information Program works to increase public access to knowledge, facilitate civil society communication, and protect civil liberties and the freedom to communicate in the digital environment. The Program pays particular attention to the information needs of disadvantaged groups and people in less developed parts of the world. The Program also uses new tools and techniques to empower civil society groups in their various international, national, and local efforts to promote open society.

U.S. Programs Transparency and Integrity Fund
The Transparency and Integrity Fund of the Open Society Foundations supports efforts to increase government transparency and accountability at the U.S. state and federal levels. The fund envisions an engaged public with equal access to information and institutions, and active participation in democracy and public life.

Open Society Foundations
The Open Society Foundations work to build vibrant and tolerant democracies whose governments are accountable to their citizens. Working with local communities in more than 70 countries, the Open Society Foundations support justice and human rights, freedom of expression, and access to public health and education.

For more information:
Open Society Media Program
Open Society Foundation
4th Floor Cambridge House, 100 Cambridge Grove
London, W6 0LE, United Kingdom
mappingdigitalmedia@osf-eu.org
www.mappingdigitalmedia.org
www.soros.org/initiatives/media

Cover Design: Ahlgrim Design Group
Design and Layout: Judit Kovács | Createch Ltd.