Review of the Literature

Regarding Critical Information Needs of the American Public

submitted

to the Federal Communications Commission

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University of Southern California Annenberg School for Communication and Journalism

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ANNOTATED BIBLIOGRAPHY

This annotated bibliography is meant to serve as a supplement to the *Review of the Literature Regarding Critical Information Needs of the American Public*. It contains relevant references mentioned in the main document, but also includes a wide range of additional academic studies, reports, and resources identified by members of the Communication Policy Research Network (CPRN).

The structure of this document does not follow the outline of the literature review. The bibliography has its own set of subareas independent of sections in the main document. This has allowed us more flexibility in the selection and inclusion of pertinent works.

Many of the references on this list could fit into multiple sections as they provide valuable information across the research areas our team examined. That said, we have elected not to duplicate content but to select a single section for each study included here.

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Table of Contents

1. Critical Information Needs (CIN) and the Media that Serve Them

Bridges, J. A., Litman, B. R., & Bridges, L. W. (2002). Rosse's model revisited: Moving to concentric circles to explain newspaper competition. *Journal of Media Economics*, **15(1), 3-19.**

This paper reexamines the umbrella model of competition proposed by Rosse in the 1970s and applies it to the changed situation of the early 2000s newspaper market. It finds the market to be more fluid with different and separate advertising and circulation behaviors compared to those found previously. While the layer aspect of the Rosse's original model is applicable, the authors propose a concentric ring model which better reflects the variety and fluidity of newspaper market roles and metropolitan geographic relations. According to the ring model, the comfortable world of fixed market segmentation no longer exists. Instead, each newspaper competes differently at any level in its broad regional market for advertising, seeking to preserve its domain and product niche against the flood of new technologies and new media services.

Connolly-Ahern, C., Schejter, A., Obar, J., & Martinez-Carrillo, N. (2009, September). *A slice of the pie: Examining the state of the low power FM radio service in 2009.* **Paper presented at 37th Research Conference on Communication, Information and Internet Policy in Arlington, VA. Retrieved June 11, 2012, from ssrn.com/abstract=2000228**

This research looks at the state of low-power FM (LPFM) stations nearly ten years after the Federal Communications Commission created a new class of such stations in 2000. The study finds that the LPFM stations are not in congruence with the FCC's goals in establishing the LPFM licensing scheme to "give voice to the previously voiceless." Local programming makes up only a portion of the LPFM stations' offerings. Instead, large institutions – particularly religious ones – have taken on a sponsorship role in the LPFM radio service, with the LPFM operators defining their activity first and foremost not as members of local community but of their religious denomination. The author warns that this may result in the silencing of the very local voices – the voices of political activism, diversity and even dissent – that were supposed to be strengthened by the LPFM policy.

Greve, H. R., Pozner, J., & Rao, H. (2006). *Vox populi: Resource partitioning, organizational proliferation, and the cultural impact of the insurgent microradio movement.* **American Journal of Sociology, 112(3), 802-837.**

This study integrates the literatures on the production of culture and organizational ecology to analyze how low-power FM (LPFM) radio stations arose in response to increased consolidation in the radio industry, and to investigate the impact of LPFM stations on radio listening. One of the research findings is that the level of concentration of ownership of radio stations in a local market was a significant predictor of the number of applicants for a LPFM license.

Hood, L. (2007). Radio reverb : The impact of "local" news reimported to its own community. *Journal of Broadcasting & Electronic Media*, **51(1), 1-19.**

This study examines the impact of the trend towards outsourcing of local news operations in local radio via a qualitative case study of radio news operations in a single Midwestern market. The results suggest that the outsourcing of local radio news may affect the extent to which the news addresses genuinely local issues and events.

Hood, L. (2010). Radio recentered: Local news returns home. *Journal of Radio & Audio Media*, **17(2), 151-166.**

This study examines how the practice of outsourcing local radio news affects the content of the news via the analysis of a single radio market. The author compares data on outsourced and locally-produced news in a small radio market. The study finds significantly higher proportions of local (as opposed to national or international) news stories amongst stations that produce their news locally, rather than outsource their news. The study focuses on a market where local news, once outsourced, has been reconverted into an exclusively local enterprise.

Hood, L. (2011). News outsourcing: The producers' perspective. *Journal of Radio & Audio Media*, **18(2), 295-308.**

This study represents the latest in this author's examination of the outsourcing of local radio news. The article focuses on examining the perspective of news producers. It investigates questions such as: How does one choose local news for a community the producer may never have visited? What factors of newsworthiness are applied for ''local'' news in unknown locales? The results indicate a high degree of acceptance of the process of producing news from remote locations. This is primarily a consequence of the difficult financial situation facing many radio stations.

Kurpius, D. D. (2000) Public journalism and commercial local television news: In search of a model. *Journalism & Mass Communication Quarterly*, **77(2), 340-354.**

This research examines how local television news operations alter organizational routines by changing coverage expectations. It is a case study of eight top television news organizations in small, medium, and large television markets. The results suggest that there are some conditions under which public journalism is more likely to flourish in television. The key elements are the station's market position, organizational structure, the norms and routines of journalistic work, and the depth of commitment to public journalism.

Peer, L., & Ksiazek, T. B. (2011). Youtube and the challenge to journalism. *Journalism Studies*, **12(1), 45-63.**

This study analyzes online video to assess whether this form of journalism deviates from traditional journalistic standards. A content analysis of 882 YouTube materials reveals that most news videos adhere to traditional production practices (e.g., editing techniques, audio quality), but break from common content standards (e.g., use of sources, fairness). The authors find that these more relaxed content practices are rewarded with a higher number of views, while adherence to traditional production practices does not predict popularity. Online videos that are repurposed from broadcast platforms experience the greatest spike in viewership when breaking from those standards, suggesting that such deviations in traditional television news are especially valued by audiences. These results are discussed in the context of the possibility of a new set of institutionalized practices and their implications for the current and future state of journalism.

Rosse, J. N., & Dertouzos, J. (1978, December). Economic issues in mass communication industries. *Proceedings of the symposium on media concentration, vol. I* (pp. 40-192). Washington, DC: Bureau of Competition of the Federal Trade Commission.

In this report, the authors outline the details of their well-known "umbrella" model of newspaper circulation. Under the umbrella model, each newspaper would operate without competition within its assigned layer of the umbrella, handling the reader and advertiser needs in the geographic area it serviced. The metropolitan newspaper would encompass and over-cover the entire geographic segmentation, and the next smaller size newspaper would provide the same role in its geographic segment. Under this model, a newspaper's ability to compete outside of its geographic community for circulation — and by extension for advertising dollars — in proximate metropolitan areas is restricted by larger organizations that have the ability to take advantage of greater economies of scale.

Stearns, J., & Wright, C. (2011). Outsourcing the news. Washington, DC: Free Press. Retrieved June 11, 2012, from www.savethenews.org/sites/savethenews.org/files/Outsourcing%20the%20News.pdf

This report presents an overview and critical assessment of the proliferation of "shared service agreements" amongst local broadcast television stations. The report argues that these agreements lead to less diversity of viewpoints in local media markets and essentially circumvent the intent of the Federal Communications Commission local media ownership regulations.

1.A Civic and Political

Althaus, S. L., Cizmar, A. M., & Gimpel, J. G. (2009). Media supply, audience demand, and the geography of news consumption in the United States. *Political Communication, 26 (3),* 249-277.

The choice to seek out political information is a function of both individual traits of consumers and of the supply of news content in particular media markets. Previous research, however, has largely focused on the individual-level correlates of news exposure. This article explores how the size and complexity of local information markets influence levels of exposure to local, network, and cable television news, as well as exposure to talk radio, online news sources, and daily newspapers.

Using multilevel modeling and spatial lag regression, the analysis showed that the structure and demographic tendencies of local news markets were strongly correlated with patterns of individual-level news exposure even after controlling for demographic characteristics known to predict information-seeking behavior. The authors found consistent evidence of regional information cultures that influence demand for news beyond the impact of demographic and market-level factors.

Local TV news viewership was negatively associated with the proportion of non-Hispanic Whites, with the number of college graduates, and the percentage of foreign-born immigrants. Local TV viewership was positively associated with having an older population. The authors also conclude that market size stimulates demand for certain types of news products. Smaller markets show more partiality toward newspaper use than the very largest ones. Citizens living in larger markets tend to favor local television news, online news, and talk radio. Consistent with the countervailing tendencies suggested by the prior literature, the study finds that increasing the complexity of local media markets can be associated both with lower levels of exposure to non-local news media, and with increased interest in locally produced news broadcasts.

Althaus, S. L., & Tautman, T. C. (2008). The impact of television market size on voter turnout in the American elections. *American Politics Research*, 36(6), 824-856.

The turnout literature has identified individual, social, and institutional factors that increase citizen voting. This article shows that local television market size also affects turnout. Larger television markets tend to give disproportionate attention to higher-level races involving statewide or national offices. Voters in larger markets are thus exposed to less information about the lower-ticket races in which they are eligible to vote.

This article tests market size impact using a novel combination of aggregate turnout data for local voting areas, census data giving contextual information about these areas, and data detailing the boundaries of local television media markets. Using the *Record of American Democracy* data set, the aggregate-level analysis covers four election cycles (1986 to 1990) and nearly every county in the continental United States. The analysis shows that voter turnout is negatively associated with television market size, a relationship that is stronger in midterm election years.

Andrews, K. T., & Caren, N. (2010). Making the news. *American Sociological Review, 75(6),* **841-866.**

Scholars have suggested that news media largely influence the capacity of social movements to bring about broader social change. Drawing attention to movements' issues, claims, and supporters, media can shape the public agenda, influencing citizens, authorities, and elites.

In this article, Andrews and Caren investigate what makes some social movement organizations more successful than others at gaining media coverage. They examine the organizational, tactical, and issue characteristics likely to capture media attention. The study combines detailed organizational survey data from a representative sample of 187 local environmental organizations in North Carolina with complete news coverage of those organizations in 11 major daily newspapers in the two years following the survey (2,095 articles). The analyses reveal that local news media favor professional and formalized groups that employ routine advocacy tactics, mobilize large numbers of people, and work on issues that overlap with newspapers' focus on local economic growth and well-being. Groups that are confrontational, volunteer-led, or advocate on behalf of novel issues do not garner as much attention in local media outlets. These findings have important implications and challenge widely held claims about the pathways by which movement actors shape the public agenda through the news media.

Bertot, J. C., Jaeger, P. T., & Grimes, J. M. (2010). Using ICTs to create a culture of transparency: E-government and social media as openness and anti-corruption tools for societies. *Government Information Quarterly***, 27(3), 264-271.**

This article provides an extensive review of the literature examining efforts to promote transparency in government through information and communication technologies (ICTs). The paper identifies several barriers to successful implementation of transparency efforts through ICT systems. ICT's acceptance among government official varies. Adopting certain technologies can also privilege those who know how to use them. Governments have, furthermore, varying amounts of resources that can be dedicated to ICT implementation. Other barriers stem from citizen preferences. Some citizens, for instance, still prefer interpersonal or telephone interactions. ICT transparency efforts are additionally limited by website usability, searchability, and language.

In its conclusion, the article makes specific normative suggestions about what ICT transparency efforts should strive to do. Goals include: the provision of information about citizen rights and government rules, the provision of information about government decisions and actions, the ability to monitor government actions and expenditures, dissemination of information about government performance, the promotion openness of government processes, the identification of officials under investigation for corruption, and the disclosure of assets and investments of elected officials and civil servants.

Bertot, J. C., Jaeger, P. T., & Hansen, D. (2012). The impact of policies on government social media usage: Issues, challenges, and recommendations. *Government Information Quarterly, 29(1)*, 30-40.

This paper studies the barriers to social media use by government agencies. Connections with citizens through social media have the potential to extend government services, solicit new ideas, and improve decision-making and problem-solving. However, interacting via social media introduces new challenges related to privacy, security, data management, accessibility, social inclusion, governance, and other information policy issues. The rapid adoption of social media by the population and government agencies has outpaced the regulatory framework related to information, although the guiding principles behind many regulations are still relevant. This paper examines the existing regulatory framework and the ways in which it applies to social media use by the U.S. federal government. It highlights opportunities and challenges agencies face in the implementation, as well as possible approaches for addressing these challenges. The authors suggest that access to social media and digital literacy, both in the population and within the government, are substantial challenges for e-government.

Boulianne, S. (2009). Does Internet use affect engagement? A meta-analysis of research. *Political Communication*, 26(2), 193-211.

Even as Internet has become ubiquitous, scholars are far from a shared understanding of its impact on civic and political engagement. Some argue that Internet use will contribute to a civic decline, whereas others see digital platforms as playing a key role in reinvigorating civic life.

This study tests both hypotheses through a meta-analysis of existing works in the area. The author examined 38 studies with 166 effects. The meta-data provided strong evidence against the hypotheses that Internet has a negative effect on civic life. There was, however, no evidence of large positive impact on engagement either. The positive effects were, on average, small in size. They seemed to increase non-monotonically across time, and were larger when online news is used to measure Internet use, compared to other measures.

Chen, N.-T. N., Dong, F., Ball-Rokeach, S. J., Parks, M., & Huang, J. (2012). Building a new media platform for local storytelling and civic engagement in ethnically diverse neighborhoods. *New Media & Society*.

This study describes a multi-method ecological approach employed to identify gaps in the communication resources of a multi-ethnic city. It proposes the use of communication infrastructure theory as a framework driving efforts to strengthen the storytelling network in diverse residential areas with large new immigrant populations. The authors discuss the potential of new media to enhance engagement and intergroup dialogue. The case study described in the text focuses on the research-driven development of a local news website serving an ethnically heterogeneous community largely ignored by mainstream and regional media.

Exploring the network of connections between residents, organizations, and geo-ethnic media, the study uncovers a number of barriers to civic participation and community building. Challenges identified by the researchers include linguistic barriers, lack of local information and intergroup communication, low levels of perceived collective efficacy, and sensitivity to a subtle discrimination against minorities at the local level.

Guided by research results, the authors propose that a multi-lingual online platform for community news could provide a space for local information and discussion, enhancing levels of engagement across ethnic groups. Applying this in practice, the team reports on the development of "Alhambra Source", a research-driven hyper-local news website.

Chinni, D., & Gimpel, J. (2010) Our Patchwork Nation: The Surprising Truth About The "Real" America. New York, NY: Gotham Books.

The authors seek to disaggregate the overly generalized red/blue dichotomy of voting behavior by analyzing 3,141 counties with on-the ground reporting and statistical analysis. The study looks into a range of demographic, economic, and religious adherence indicators. Based on those factors, counties are classified into 12 categories. These community types provide a helpful heuristic used to identify subtler political, economic and cultural drivers for voting behavior. The authors note that these indicators also determine media consumer behavior. "Even exactly what constitutes "news" is a personal choice in twenty-first-century America. For some people it's facts and figures presented with as little bias as possible. For others, it's something that comes with a distinct point of view." (p. 195) They note that media consumption varies across different community types. It depends on community size, the population's socioeconomic status, cultural worldviews, as well as comfort and access to new technologies due to other demographic factors such as age and income. Therefore, "in the world of social media, the differences between community types are more about age and income than political belief or population density." (p. 199)

The authors point out problematic aspects of the "digital divide" concept which distinguishes between users and non-users but does not take into account exclusion due to patterns of information distribution. "In an already fragmented media environment the digital divide threatens to do more than leave some people out of the tech loop. … Community culture, its importance will grow in the next decade…" (p. 200)

Dawes, S. S. (2009). Governance in the digital age: A research and action framework for an uncertain future. *Government Information Quarterly, 26(2)*, 257-264.

Using qualitative "roadmapping" methods, this paper analyzes documents from the eGovRTD2020 website. The study identifies major themes and dimensions of e-government, each of which presents its own set of limitations and constraints. First, ideas about the role and purpose of government differ, and these disagreements constrain e-government development. Next, rapid shifts in technologies and information management provide their own challenges. The human element (both in the context of officials and citizens) also limits the success of e-

government. Finally, the inability to interact with other governmental agencies and citizens presents another set of constraints.

Dawes, S. S. (2010). Stewardship and usefulness: Policy principles for information-based transparency. *Government Information Quarterly, 27(4)*, **377-383.**

This article lays out two guiding principles for policy-making about the transparency of government information: stewardship and usefulness. The concept of stewardship implies that governmental information is a public good, and the government should provide for its safe-keeping as it would the air or water. The concept of usefulness stresses the utility of the information for its intended users. Dawes argues that government information suffers from several challenges when it comes to usefulness. First, data must be understood in the context of their collection, and this contextual information is rarely provided. Other challenges stem from the creation, design, management, and usability of government databases. Inter-agency information sharing presents its own set of barriers and challenges.

The author analyzes the government discourse about the future of information policy on Data.gov. Her findings suggest that current government officials consider stewardship to be more important than usefulness.

Druckman, J. M., Hennessey, C. L., Kifer, M. J., & Parkin, M. (2010). Issue engagement on Congressional candidate web sites, 2002-2006. *Social Science Computer Review, 28(1)*, **3-23.**

When candidates engage in a robust policy debate, they give citizens clear choices on issues that matter. This study examines issue engagement on congressional candidate websites, representative of both House and Senate campaigns. Findings show that the saliency of issues in public opinion is a primary determinant of candidate engagement. And, despite the unique capacity of the Internet to allow candidates to explain their positions on a large number of issues, candidates continue to behave strategically, selecting a few issues on which to engage their adversaries. This practice of strategic issue-taking serves as an information barrier to individuals seeking candidates' stances on a range of issues, particularly for undecided voters.

Dunaway, J. (2008). Markets, ownership, and the quality of campaign news coverage. *The Journal of Politics, 70(4)*, **1193-1202.**

This article argues that the quality of information found in political news is influenced by media ownership and market contexts. The author uses original data containing news coverage of competitive statewide races in 2004. Coverage provided by multiple media outlets is examined as a function of ownership structure and market context. The results indicate that corporate ownership and market contexts matter for the quality of information offered in political news coverage. Specifically, corporate ownership structures are likely to suppress issue coverage in political campaigns in both newspapers and television news.

Dunaway, J. (2011). Institutional effects on the information quality of campaign news.
*Journalism Studies***, 12(1), 27-44.**

This paper examines the quality of political news coverage by analyzing news coverage during statewide elections in 2004. It finds that corporate ownership and market contexts matter in determining the quality of information offered in political news. Data show that corporate ownership decreased coverage of political issues by 16% compared to private ownership in the newspaper industry, and 23% for television stations.

Esterling, K. M., Lazer, D., & Neblo, M. A. (2011). Representative communication: Website interactivity and "distributional path dependence" in the U.S. Congress. Report for the Digital Government Program of the NSF. [online]. Retrieved June 1, 2012, from <u>tert.ucr.edu/tommy</u>.

This study examines the speed and extent to which members of the U.S. House of Representatives adopt emerging web-based communication technologies. Given the key role of communication in governance and the web's growing importance in elective public outreach, a rational actor approach would suggest that members of Congress should aggressively exploit online communication technology. According to the authors, this should be especially true for freshmen members of the House. The study tests these expectations using two waves of data coded from the social websites of the U.S. House of Representatives, for the years 2006 and 2007. Findings show considerable path dependence in incumbents' website technology adoptions. They are less likely to adopt new media technologies compared to freshmen members. The websites of House freshmen who won election in 2006 are largely independent of the web designs of their corresponding predecessors. This independence does not mean, however, that freshmen are fully exploiting communication technology. Instead, the web design practices of freshmen appear to be governed by the distribution of existing practices among incumbents, a process the authors label distributional path dependence. This unexpected finding suggests that members have web communication practices that are governed by informal norms socially constructed among Congress members. The institution is, furthermore, slow to adapt to emerging communication technologies. These practices constrain the distribution of political information about candidates and their policy stances. They point to some limitations of social media that may prevent it from overcoming existing informational barriers.

Filla, J., & Johnson, M. (2010). Local News Outlets and Political Participation. Urban Affairs Review, 45(5), 679-692.

This study investigates how access to local government information affects turnout in municipal elections. The authors propose that the availability of news focused on local public affairs in a municipality affects individual levels of political participation. Turnout is expected to be depressed by restricted access to local government news.

The analysis is based on survey data from the Los Angeles, CA Designated Market Area (DMA) collected by the Public Policy Institute of California. Additional data about the availability of

weekly and daily newspapers in municipalities surrounding Los Angeles is also used. The study finds that without local news, individuals are less likely to participate in elections.

Foot, K. A., Schneider, S. M., Xenos, M., & Dougherty, M. (2008). Candidate web practices in the 2002 U.S. House, Senate, and Gubernatorial elections. *Journal of Political Marketing, 8(2)*.

This study focuses on the extent to which political actors are adapting traditional campaign strategies for the web and/or developing innovative strategies that take advantage of the particular affordances provided by new media technologies. The article examines campaign characteristics (such as incumbency and major party affiliation), as well as race characteristics (such as statewide office and competitiveness). Those factors are used to explain the campaign's propensity to adapt old or develop new strategies for online technologies.

The study analyzed over a thousand candidate websites. Results showed that candidate websites had advanced since the 1990s, yet in 2002 most of them were still largely informational rather than interactive. Furthermore, the sites focused on the candidates themselves and provided little information about where to register and vote. Finally, the Senate was significantly more likely than the House to adopt web 2.0 interactive capabilities.

Fowler, E. F., & Ridout, T. N. (2009). Local television and newspaper coverage of political advertising. *Political Communication, 26,* 119-136.

How often do news media cover the advertising of political candidates? This study examines senate and gubernatorial campaign coverage by several newspapers and local television stations in five Midwestern states in 2006. The results indicate that coverage of advertising is quite extensive, most of it is low quality, and its volume depends both on the size of the market and the tone of the spots aired. Surprisingly, TV stations were not more likely than newspapers to cover advertising, although television did appear to be more sensitive to negative ads. The study further suggests that local news media are quite responsive to strategic communication campaigns by the candidates themselves.

Ganapati, S., & Reddick, C. G. (2012). Open e-government in U.S. state governments: Survey evidence from Chief Information Officers. *Government Information Quarterly, 29(2),* 115-122.

This paper examines the extent to which state governments in the United States have adopted open e-government initiatives. The adoption is examined in terms of the three pillars of open government identified by the current administration: transparency, participation, and collaboration. The analysis is based on surveys conducted with the Chief Information Officers (CIOs) of 24 state governments.

About 25% of the state CIOs participating in the survey did not think there were any barriers hindering the adoption of e-government. Some state CIOs believed that it was not a requirement of their state legislatures (20.8%). Another 12.5% pointed to lack of awareness among public officials, while 8.3% said public officials do not see the need for e-government. According to 8% of the CIOs, governmental agencies would resist the implementation of open

e-government policies. Studying the range of participatory methods adopted by government agencies, the authors found that states did not typically employ have real times updates or use social media, blogs, RSS feeds, or other new media technologies. Despite these obstacles, CIOs reported a relatively high level of inter-agency cooperation, as well as high levels of cooperation with citizens and the federal government.

Gentzkow, M., & Shapiro, M. S. (2010). *Ideological Segregation Online and Offline*. Retrieved June 1, 2012, from
faculty.chicagobooth.edu/matthew.gentzkow/research/pdf/echo_chambers.pdf

This white paper seeks to evaluate the impact of the Internet on the ideological segregation of the American electorate. It uses individual-level and aggregate data about news consumption (online and offline) and face-to-face social interactions. The analysis reveals that the ideological segregation of online news consumption is low in absolute terms, but higher than the segregation of most offline news consumption. The segregation in online news consumption was also significantly lower than the segregation of face-to-face interactions with neighbors, co-workers, or family members. The authors suggest that online news is vertically differentiated, with most consumption concentrated in a small number of relatively centrist sites. This and cross-visiting (the ability to consume news from multiple sources on the Internet) are among the factors limiting segregation. The study finds no evidence that the Internet is becoming more segregated over time.

Gershon, S. A. (2012). Press secretaries, journalists, and editors: Shaping local congressional news coverage. *Political Communication, 29*, 160-183.

News media vary in their coverage of representatives, presenting voters with more abundant and favorable information about some House members than others. This in turn is quite likely to influence voters' decisions at the polls. Although many scholars have examined the determinants of congressional news coverage, few have focused on the role of the actors who perhaps exert the most direct effect on such coverage: congressional press secretaries, journalists, and editors. This study explores the influence of these actors on the tone and frequency of local congressional news coverage. The study relies on data from two sources, (1) a content analysis of newspaper coverage of 100 representatives during the month prior to the 2006 election and (2) in-depth interviews with 51 congressional press secretaries and 22 journalists. These data highlight the important roles of both newspaper staff and congressional press secretaries in shaping the coverage House members receive.

Golbeck, J., Grimes, J. M., & Rogers, A. (2010). Twitter use by the U.S. Congress. *Journal for the American Society of Information Science and Technology, 61(8)*, 1612-1621.

With the buzz surrounding Twitter have come claims of its ability to transform the way people interact and share information. Public figures are often advised to start using the service. This study investigates the types of content posted on Twitter by members of the U.S. Congress. The

authors analyze the content of over 6,000 tweets posted from official accounts. The results demonstrate that Congress members were using Twitter primarily to disperse information. They were particularly likely to report on daily activities and tweet links to their own blog posts, as well as to news articles about themselves. Tweets of this kind rarely provided insights into government or the legislative process. These posts did not do much to improve transparency, rather they served as vehicles for self-promotion. The study also found that Twitter did facilitate direct communication between Congress members and citizens, though this was a less popular activity.

Gulati, G. J., & Williams, C. B. (2007). Closing the gap, raising the bar: Candidate web site communication in the 2006 campaigns for Congress. *Social Science Computer Review, 25(4),* 443-465.

This article examines the online campaigns of candidates for seats in the U.S. Congress in 2006. The authors found the growth of web presence for political figures had slowed, but minor-party candidates were closing the gap with major-party candidates in Senate races. The authors conducted a content analysis of the campaign web sites of every Senate and House candidate. The results revealed that basic informational web content and features had become standardized, but Senate sites were more technologically sophisticated. Multivariate analyses suggested that financial resources were required for the highest levels of content, which constituted a moving hurdle for disadvantaged candidates. Democrats, Greens, and challengers demonstrated more interest in relationship building, and the competitiveness of the race increased the likelihood of using the web site for mobilizing supporters. Features and functionality that allowed citizens to coproduce content and interact in two-way communication were not widely adopted. The way candidates could integrate new social networking tools into their campaign strategies remained an open question.

Hajnal, Z., & Trounstine, J. (2005). Where Turnout Matters: The Consequences of Uneven Turnout in City Politics. Journal of Politics 67 (2), 515-35.

There is a widespread concern that imbalances in voter turnout across race and class have led to biased outcomes in American democracy. Yet empirical tests have generally found that the unrepresentative nature of the electorate has little effect on who wins and loses elections. The authors challenge this finding by arguing that existing research minimizes the chances of finding bias because it focuses largely on national elections where turnout is relatively high and where minority groups are generally too small a percentage of the population to sway elections. The study focuses on city elections, looking at the mayoralty and the city council. The results indicate that lower turnout leads to substantial reductions in the representation of Latinos and Asian Americans on city councils and in the mayor's office. For African Americans, district elections and off-cycle local elections are more important barriers to representation

Hale, M., Olsen, T., Fowler, E. F. (2009). A matter of language culture: Coverage of the 2004 U.S. elections on Spanish- and English-language television. *Mass Communication & Society,* *12,* **12-51.**

This article fills a gap in the communication and political science literature by comparing Spanish- and English-language TV coverage of U.S. elections. A content analysis of more than 400 national network news stories and nearly 3,000 local news stories revealed that local and network Spanish-language stations provide less election coverage than their English-language counterparts. Although Spanish-language stations were more likely to focus election coverage on Latino issues or interests, the results revealed only moderate differences in the way stations in each language frame their election stories, with stations in both languages concentrating more coverage around campaign strategy and the horse race than substantive issues.

Hamilton, J. T. (in press) Measuring Spillovers in Markets for Local Public Affairs. In Kenski, K. & Jamieson, K. H. (Eds.), *The Oxford Handbook of Political Communication.* **New York, NY: Oxford University Press.**

Local public affairs information is in low demand. As media outlets cannot monetize many of the effects their coverage has on the local government, this important type of news is underprovided. The set of local issues in which media underinvest include education, the environment, health, and accountability.

This chapter provides an overview of literature on media effects in local markets. The author examines existing academic works demonstrating how media coverage generates spillovers that influence the election and actions of local politicians. For the purposes of the study, local politicians are defined as municipal, congressional, or state officials.

The analysis concludes that local media outlets do in fact generate both positive and negative spillovers in society. Positive effects, for instance, could arise from increases in voter turnout, changes in candidate selection, or alterations in policies. The author suggests that research on existing spillovers can inform policy-makers and elucidate the impact of policy on real-world outcomes.

Hampton, K. (2011). Comparing Bonding and Bridging Ties for Democratic Engagement: Everyday Use of Communication Technologies within Social Networks for Civic and Civil Behaviors. *Information, Communication & Society* **14(4), 510-528.**

This paper compares the role of different types of social relationships (strong vs. weak ties) and the use of different media for outcomes related to civic and civil participation (e.g., volunteering and informal social support). The study is based on an analysis of data collected from a large, random survey of American adults. The paper concludes that the most consistent and substantive predictor of civic and civil behaviors at the local level is the diversity of a person's social network. The use of a subset of Internet technologies – so called social media – in the maintenance of social relationships were found to have a positive relationship to the likelihood of engaging in some civic and civil behaviors. The behaviors most affected were at the neighborhood level. This runs counter to other theories about new communication and

information technologies, which suggest that these technologies promote increased privatism and home-centeredness, and a withdrawal from local engagement.

Hampton, K. (2003). Grieving for a Lost Network: Collective Action in a Wired Suburb. *The Information Society* **19(5), 417-428.**

This paper explores a case study of how the Internet was used as part of a grass-roots campaign by the residents of a local community to participate in local civic affairs, and to organize to deal with local problems. The study is based on a multi-year ethnography of a suburban community. The paper argues that the Internet affords the creation of large, dense networks of relatively weak social ties that can be accessed with greater ease and at a lower cost than traditional means for the successful organization of citizens to deal with a local problem.

Hampton, K. (2010). Internet Use and the Concentration of Disadvantage: Glocalization and the Urban Underclass. *American Behavioral Scientist,* **53(8), 1111-1132.**

This article argues that research on new communication technologies has failed to focus on the role of ecological context when exploring issues related to the digital divide and inequalities in civic behavior. The study is based on a 3-year, naturalistic experiment that examined the use of the Internet for communication at the neighborhood level. It used content analysis and Census data to measure local social cohesion and civic engagement across 50 case studies. The study finds that populations who are embedded within local settings where prior media, including the telephone, could not overcome contextual barriers to civic engagement, namely those in areas of concentrated poverty, unemployment and racial segregation, experience reduced social and civic inequality when basic issues of access to Internet technologies can be overcome.

Jeffres, L. W., Atkin, D., & Neuendorf, K. A. (2002). A model linking community activity and communication with political attitudes and involvement in neighborhoods. Political Communication, 19 (4), 387-421.

Although people tend to mobilize around local problems and restrict their political involvement at other times, the political communication literature has generally focused on national politics and elections. Pointing this out, the authors suggest that at the local level, mass and interpersonal communication are particularly significant - and people tend to feel more efficacious. The article examines these relationships in a community context.

The analysis is based on a survey of six inner-city neighborhoods and six suburbs classified on status using location and census data. Results pointed to a positive role for the media in community politics. Those most likely to rely on neighborhood newspapers as sources were less disillusioned with government, suggesting that the most "grassroots" of print media were more efficacious in their impact than the other channels. Readership of a daily newspaper was a particularly strong predictor of both community political involvement and faith in community civic involvement. Results of the macro analysis suggested that urban sprawl may have

consequences for the media impact on political involvement. In the data used for the study, distance from the center city and stratification were closely tied. The further out the community, the higher its status was. Results by neighborhood structure pointed to media specialization as well as a greater dependence on media versus interpersonal influence in the political arena. Thus, political involvement and attitudes were more strongly related to reading the daily newspaper in the more distant suburbs than in the center city.

Jensen, M. J., Danziger, J. N., & Venkatesh, A. (2007). Civil Society and Cyber Society: The Role of the Internet in Community Associations and Democratic Politics. *Information Society*, 23(1):39-50.

This paper explores the relationships between offline and online modes of associational life. It analyzes offline and online interactions with local governments in the U.S. Based on a survey of 12 geographically diverse metropolitan statistical areas, the authors set out to demonstrate that online participation is not simply an extension of offline participation, but can be distinguished in important ways. They find that political and community-oriented engagements cluster separately from more private social engagements (such as attending neighborhood events and being a member of local clubs). The analysis also reveals that participants in online democratic engagement are not characterized by the SES markers associated with offline engagement (e.g. higher income and age, longer residential tenure, etc.). The study finds significant links between democratic engagement in the political system and involvement with political associations (but not social and community-oriented associations).

Kaplan, M., Goldstein, K., & Hale, M. (2005). Local news coverage of the 2004 campaigns: An analysis of nightly broadcasts in 11 markets. Report of the Lear Center for Local News. [online]. Retrieved June 1, 2012, from www.localnewsarchive.org.

This study analyzes evening news broadcasts aired by 44 affiliates of ABC, CBS, Fox and NBC in 11 markets during the 29-day period from October 4 to November 1, 2004. The eleven markets included in the analysis are New York, Los Angeles, Philadelphia, Dallas, Seattle, Miami, Denver, Orlando, Tampa, Dayton and Des Moines. Together, they account for 23 percent of all television viewers in the country.

Sixty-four percent of the 4,333 broadcasts captured during the study contained at least one election story. Presidential coverage dominated. Fifty-five percent of the broadcasts captured contained a presidential story. By contrast, just eight percent of those broadcasts contained a story about a local candidate race, which includes campaigns for the U.S. House, state senate or assembly, mayor or city council seat, judgeship, law enforcement posts, education-related offices, and regional and county offices. Eight times more coverage went to stories about accidental injuries, and 12 times more coverage to sports and weather, than to coverage of all local races combined.

Although virtually every station in the study covered the vice-presidential and two presidential debates that occurred during the study period, most stations provided little else in prime-time

special election programming. Ninety-two percent of all special election programming captured was related to the presidential debates.

Kenix, L. J. (2008). The Internet as a Tool for Democracy? A Survey of Non-profit Internet Decision-makers and Web Users. *First Monday* 13(7).

This article examines the organizational use of the Internet as a democratic tool. The analysis is based on a survey of 688 individuals associated with nonprofits in the U.S. It studies how organizations use online instruments to interact with members, promote causes, reach donors, collect and disseminate information. The author examines the attitudes of nonprofit content creators and organizational members towards the benefits provided by the Internet and its capacity to promote democracy.

The results suggested that nonprofits were actively using the Internet, but relied on it mostly for education, information-gathering and dissemination. Contrary to previous findings, the majority of the study participants did not use online tools to promote their organization or to reach out to donors.

Kim, S. (2007). The development of wireless telecommunications and local governments' policy responses: The U.S. case. *Government Information Quarterly, 24,* 611-623.

The increasing popularity of wireless telephony creates a new set of challenges for local governments. The influx of new wireless providers poses problems for local governments as they carry out their traditional zoning and land use functions. Considering local governments' concerns related to the proliferation of wireless towers, this paper attempts to give a policy insight on the issue of "wireless facilities siting". This study suggests that the role of local governments should be to balance conflicting interests – specifically those of the federal government, the wireless providers, and their own citizens. It emphasizes that appropriate and timely presentation of wireless telecommunication initiatives by local governments is essential. The authors recommend revisions to FCC policy concerning wireless tower siting, and suggest that federal and state land be opened for access by wireless companies.

Kim, Y. C., & Ball-Rokeach, S. J. (2006). Civic engagement from a communication infrastructure perspective. *Communication Theory*, 16(2), 173.

This study is one of the main theoretical works developing the *communication infrastructure theory*. The main premise of the work is that access to storytelling resources is crucial for local engagement. The article describes key storytellers, focusing on actors that operate at the meso-level (geo-ethnic media and local organizations) and micro-level (residents).

The study defines an integrated neighborhood storytelling network (NSN): a system in which local media, organizations, and residents are interconnected and each storyteller stimulates others to talk about the community. Previous research in seven Los Angeles neighborhoods is used to demonstrate that key civic outcomes are enhanced by the existence of an integrated storytelling network.

A related individual-level measure – *integrated connectedness to the storytelling network* (ICSN) – reflects the extent to which a resident interacts with the major community storytellers. Individual connections to neighbors, geo-ethnic media, and organizations have a positive association with civic engagement. Civic engagement is defined as a three-dimensional construct, incorporating levels of neighborhood belonging, perceived collective efficacy, and civic participation. Those components measure how attached the residents are to their community, how they perceive its ability to collectively solve local problems, and how engaged they are in civic actions like voting or donating.

Kim, Y. C., & Ball-Rokeach, S. J. (2006). Community storytelling network, neighborhood context, and civic engagement: A multilevel approach. *Human Communication Research*, 32(4), 411-439.

Based on 2000 Census data and a survey conducted in Glendale, CA, this study tests a multilevel model incorporating media use and civic engagement. At the individual level, the paper explores *ICSN*: the integrated connections of residents to their neighborhood storytelling network. The ICSN index encompasses individual ties to geo-ethnic media, local organizations, and other residents.

At the neighborhood level, the analysis looks into the impact of ethnic heterogeneity and residential stability on civic outcomes. Civic engagement is operationalized as having three components: neighborhood belonging, collective efficacy, and civic participation.

The study confirms that ICSN is the most important individual-level factor associated with civic engagement, controlling for other relevant variables (age, gender, income, education, residential tenure, home-ownership, ethnicity, immigration generation, spatial dependence, etc). The results suggest that residential stability is positively associated with ICSN, neighborhood belonging and collective efficacy. Ethnic heterogeneity is negatively associated with collective efficacy. ICSN is found to have a particularly strong impact on civic participation in unstable and ethnically heterogeneous areas.

Kim, Y. C., Jung, J. Y., & Ball-Rokeach, S. J. (2006). "Geo-Ethnicity" and Neighborhood Engagement: A Communication Infrastructure Perspective. *Political Communication*, 23(4), 421-441.

The article unpacks the concept of geo-ethnicity and explores its impact on neighborhood engagement. Geo-ethnicity refers to the idea of an ethnic group placed in a specific cultural, spatial and temporal context. Neighborhood engagement is seen as composed of four variables: neighborhood belonging (neighborly feeling and behaviors), intensity of participation in interpersonal neighborhood storytelling (the extent to which individuals talk with other neighbors about their community), scope of local organization participation (how many different types of community organizations individuals participate in), and neighborhood news importance (the extent to which individuals consider neighborhood news more important than other types of news).

The geo-ethnic differences in neighborhood engagement are established through a comparison of variable levels across ethnicities in the same area, and across areas within the same ethnicity. Three ethnic groups – Anglos, Latinos, and Armenians – are included in the analysis The study finds within- and between-area variations in levels of neighborhood belonging (controlling for income, education, age, gender, immigration history, home ownership, and residential tenure). The analysis uncovers significant differences in interpersonal neighborhood storytelling and neighborhood news importance between residents of the same ethnicity living in different areas. The within-area comparison also reveals differences in interpersonal neighborhood storytelling and neighborhood news importance.

Lazer, D., & Binz-Scharf, M. C. (2012). *Information sharing in e-government projects: Managing novelty and cross-agency cooperation*. **Report prepared for the IBM Endowment for the Business of Government [online]. Available at <u>www.umass.edu/digitalcenter</u>.**

This report examines the management of e-government projects. The authors identify two major challenges: *novelty* and *cross-agency cooperation*. E-government is *novel* because it offers some fundamentally new possibilities. The management of e-government is often a management of ideas, creativity, and knowledge. E-government requires *cross-agency cooperation* because of functional needs for scale, consistency, and integration. The authors argue, therefore, that a hierarchical, silo-based model of management would be doomed to failure in the case of e-government.
The study examines four governments (two U.S. state and two Swiss cantonal) that have adopted a project-based approach. The report investigates how those administrations have coped with the challenges of novelty and cross-agency collaboration. The authors conduct interviews with all members of the core project team for each of the four cases. The interviews focus on identifying how team members shared knowledge and organized their efforts, how they dealt with the multiple types of expertise required by the project, and how they engaged the agencies affiliated with the project. The findings suggest that interpersonal contact, peer-to-peer collaboration, expansion of project networks, and finding a balance between centralization and decentralization were key factors in the success of inter-agency cooperation.

Macedo, S., Alex-Assensoh, Y., Berry, J. M., Brintnall, M., Campbell, D. E., Fraga, L.R. et al (2005). *Democracy at Risk: How Political Choices Undermine Citizen Participation, and What We Can Do About It*. **Washington DC: Brookings Institution Press.**

The book discusses the future of representative democracy, focusing on dangers for civic engagement and ways to avoid them. According to its authors, the work has three major objectives: documenting recent trends in civic engagement, exploring the influence that the design of political institutions and public policies have had on those trends, and recommending steps that will increase the amount and quality of civic engagement in America. The book focuses on three main domains: the electoral process, including elections and the way people get involved; the impact of location, including demographic shifts and changing development

patterns; and the critical role of nonprofit organizations and voluntary associations, including the philanthropy that help keep them going.

Marchi, R. (2009). Z-Radio, Boston: Teen journalism, political engagement, and democratizing the airwaves. *Journal of Radio & Audio Media*, **16(2), 127-143.**

This article analyzes a youth organization's struggle to start a low-watt community radio station. The project was envisioned as a way to encourage at-risk youth to become media producers and gain technical and communication skills. It was also seen as a medium through which to communicate about important social and political issues affecting the station's predominantly low income and minority constituency—concerns not prominently covered in the commercial media. Funding, organizational, logistical, and regulatory issues are discussed, along with obstacles and successes of this initiative and the potential for such programs to engage youth in larger issues of democracy and non-commercial expression.

Napoli, P. M., & Karaganis, J. (2010). On making public policy with publically available data: The case of U.S. communications policy-making. *Government Information Quarterly, 27(4),* **384-391.**

This article emphasizes the necessity of grounding public policy in publicly available data. It identifies barriers to governmental transparency and challenges to the accessibility of communications policy-relevant data.

One major obstacle discussed by the authors involves commercially-sensitive data. In October 2009, the FCC issued a protective order against data-mining of proprietary commercial information. Another policy barrier to open government is an exemption for intra-agency deliberation among policy-makers. In 2004, the FCC set a precedent by denying Georgetown University about 1400 pages of internal deliberations requested under the FOIA. A third obstacle to transparency stems from the fact that governmental agencies often outsource their data collection efforts to private companies. The contracts the government signs with these companies often restrict public access to the data. A related constraint is that any private organization can submit data for consideration by the FCC, and access to that data may be restricted. The authors go on to make several policy recommendations, including mandatory access for all policy research – both public and private – if it is being used in decision-making processes. They also point to the need for improved access to data, a more realistic assessment of commercially-sensitive data, the inclusion of information about internal deliberations under the FOIA, and the creation of a federal agency to oversee data management.

Oberholzer-Gee, F., & Waldfogel, J. (2009). Media markets and localism: Does local news en Espanol boost Hispanic voter turnout? *American Economic Review, 99(5)*, **2120-2128.**

This paper examines the effect of local television news on civic behavior in Hispanic communities. The analysis investigates Latino voting patterns and the extent to which they are affected by the availability of Spanish-language news coverage.

According to the study, local television news programming in Spanish was available in 14 U.S. metropolitan areas in 1994 and 25 areas in 2002. The analysis finds that Hispanic voter turnout increased by 5 to 10 percentage points in markets where local news in Spanish became available. Spanish-language programs were much more likely to report political information of interest to Latinos. The authors suggest that this availability of relevant information was the main driver behind the increase in participation among the Hispanic population. These results highlight the need of regulatory policies promoting localism

Rackaway, C. (2007). Trickle-down technology? The use of computing and network technology in state legislative campaigns. *Social Science Computer Review 25(4)***, 466-483.**

This study examines whether state legislative campaigns have followed the example of congressional campaigns and become users of voter files, web sites, and other forms of electronic voter communication. Using a survey of state legislative candidates in two states from the 2006 election cycle, the author probes candidates on their use of 18 technological elements.
The study results suggested that legislative professionalism, party affiliation, professionalism of a campaign, and money raised were not significantly related to technology use in campaigns. Technology was, furthermore, not in widespread use for elections to state houses. Campaign success seemed to be strongly related to the use of online fund-raising, suggesting an incentive for candidates in the future to become more aggressive users of technology.

Schaffner, B. F., & Sellers, P. J. (2003). The structural determinants of local congressional news coverage. *Political Communication***, 20(1), 41-57.**

This article examines 40 local newspapers to explore the factors that influence legislators' local newspaper coverage. The study finds that local newspapers do not provide more coverage to congressional leaders and that independent papers write more frequently than chain-owned competitors about the local House delegation. Additionally, the extent to which a legislator's district geographically overlaps with the newspaper's market has a strong effect on legislators' mentions.

Shah, D. V., Cho, J., & Eveland, W. (2005). Information and expression in a digital age: Modeling Internet effects on civic participation. Communication Research, 32(5), 531

This article examines the role of the Internet as a source of political information and a sphere for public expression. Informational media use, whether traditional news sources or online public affairs content, is expected to foster interpersonal political discussion and online civic messaging, contributing to increased civic participation. Using two-wave national panel survey data, three types of synchronous structural equation models are tested. All models reveal that online media complement traditional media to foster political discussion and civic messaging. These two forms of political expression, in turn, influence civic participation.

St. Cyr, C., Carpenter, S., & Lacy, S. (2010) Internet competition and US newspaper city government coverage. *Journalism Practice*, 4(4), 507-522.

This study used data from a survey of city government reporters at U.S. metropolitan daily newspapers to test the Lowrey and Mackay (2008) model of occupational competition. The results indicate that as the quality of Internet competition (as perceived by the U.S. city hall reporters) increased, reporters were more likely to report stories they might have missed and were more likely to increase the number of city government stories. This study also suggests that the perceptions of the reporters as well as the perceptions of editors play a role in the reaction to occupational competition and that city government reporters were affected more by the perceived quality of competitors' coverage than by the number of news outlets providing that coverage.

Subervi-Vélez, F. A. (Ed.). (2008). The Mass Media And Latino Politics: Studies Of U.S. Media Content, Campaign Strategies And Survey Research: 1984-2004. New York, NY: Routledge.

The Latino population plays an increasingly important role in U.S. political life. This edited volume examines political campaigns and their media coverage for Latino audiences in the United States.

Chapters 1-3, 15 & 17 of the book discuss a range of theoretical frameworks and data explaining the key role of English and Spanish-language media for Latino political knowledge and participation.

Chapters 5-7 present data revealing the limited political coverage of presidential campaign news on Spanish-language TV networks. Chapters 10 & 11 do the same regarding English-language network TV news about the campaign related to the Latino community. Print media in Spanish and English are also examined in the book.

Exposure to relevant coverage, when available, can contribute to Latinos' political knowledge and engagement. Yet, the authors suggest that many Latinos experience a lack of politically relevant news and information.

Sussman, G., & Estes, J. R. (2005). KBOO community radio : Organizing Portland's disorderly possibilities. *Journal of Radio Studies*, 12(2), 223-239.

This case study focuses on four major community functions served by KBOO, a community radio station in Portland, Oregon: community radio: public transmission, radio training, political education and mobilization, and community building and outreach. This study illustrates how KBOO was the outcome of a Portland grassroots activist movement that initially sought to restore classical music on the local airwaves and eventually concurred on a more extensive mission to serve the underserved and to cater to communities at the margins in the metropolitan listening area and beyond.

Tewksbury, D. (2003) What do Americans Really Want to Know? Tracking the Behavior of News Readers on the Internet. *Journal of Communication* 53(4):694-710

This paper examines the discrepancy between the stated interest of Americans in public affairs information and their low levels of political knowledge. The author discusses key changes that may potentially be triggered by a widespread use of the Internet for news and political information. The study explores key implications of the enhanced capacity of Internet users to select specific content on the Web.

The analysis was based two sources of data. One was a survey about news consumption in the U.S., collected by the Pew Research Center for the People and the Press. The other included Internet page view records obtained from Nielsen NetRatings. The main finding highlighted by the author is that online news readers do not display a marked preference for public affairs content. Less than half of the readers accessed a public affairs topic during the 2-month study period, even though it coincided with a contested primary election campaign period.

Tolbert, C. J, Mossberger, K., & McNeal, R. (2008). Institutions, policy innovation, and e-government in the American states. *Public Administration Review, 68(3)*, **549-563.**

This study examines the use of e-government websites by states. It uses data collected from state government websites in 2000 and 2004, and analyzes the characteristics of these sites at two points in time. E-government implementation is evaluated along 12 criteria: online publications, online databases, audio clips, video clips, foreign language or language translation, advertisements, premium fees, user payments or fees, disability access, several measures of privacy policy, multiple indicators of security policy, presence of online services, number of online services, digital signatures, credit card payments, e-mail addresses, comment forms, PDA accessibility, readability level, automatic e-mail updates, and web site personalization. Tennessee, Maine, Utah, New York, and Illinois rank among the top 5 in terms of e-government implementation, while New Mexico, Nebraska, Wyoming, Mississippi, and West Virginia are the bottom 5 states. Regression analysis reveals that citizen demand does not drive e-government implementation, but rather institutional capacity for IT management, the median income level of the state, and the level of diversity in the state are significant predictors of e-government adoption.

Watson, B.R., & Riffe, D. (2011). Structural determinants of local public affairs place blogging: Structural pluralism and community stress. *Mass Communication & Society, 14*, **879-904.**

This study examines the relationship between community-level characteristics and the presence of public affairs place blogs in 232 U.S. cities. Two models to predict the presence of these sites are tested: a structural pluralism model, which suggests that the presence of one of these sites reflects more pluralistic voices, and a community stress model, which suggests that the presence of these sites reflects citizens' efforts to cope with community problems. Analysis of demographic and crime data using logistic regression suggests that the community stress model is the stronger predictor. Public affairs place blogs are more likely in cities with higher murder rates, poverty rates, more physical decay, and more residents with professional occupations. It is these residents—with more education and income, living on the periphery of

the most affected urban neighborhoods—who are most likely to go online to write about obtrusive community problems.

Woods, N. D. (2009). Promoting participation? An examination of rule-making notification and access procedures. *Public Administration Review, 69(3)*, **518-530.**

Using data from a 2000 survey of state administrators from 15 states, the author assesses the relationship between rule-making notification and the perceived influence of external actors. The results suggest that public notification and public access to legislative and administrative rule-making may increase the perceived influence of interest groups and other non-governmental agencies on rule-making processes.

Yanich, D. (1996/1997). Making the Movies Real: The Death Penalty and Local TV News. *Crime, Law & Social Change.* **26(4), 303-328**

Media organizations, particularly the broadcast media, are extremely important actors on the public stage. It is, therefore, essential to study what new outlets choose to cover and how they choose to cover it. That is particularly true when media turn their attention to a public policy issue like the death penalty that already has profound social significance.

As very few people have first-hand knowledge of the matter, the public understanding of issues surrounding capital punishment is virtually always communicated through media organizations. This paper explores how television stations cover the imposition of the death penalty. It examines how the coverage is carried out, the themes that are conveyed, and what the public learns from those stories.

Zaller, J. (2003). A new standard of news quality: Burglar alarms for the monitorial citizen. Political Communication, 20(2), 109-130.

This article argues that much criticism of news is based on an ideal of citizenship and a standard of quality that are neither realistic nor necessary for the functioning of democracy. The article therefore proposes a new, less demanding standard of quality (the "burglar alarm" standard) and defends it as adequate to the informational needs of citizens in a democracy.

1.B Community and Individual Health

Ball-Rokeach, S. J., & Wilkin, H. A. (2009). Ethnic Differences in Health Information-Seeking Behavior: Methodological and Applied Issues. *Communication Research Reports*, **26(1), 22-29.**

This article explores data collection strategies in the area of health communication. It looks into different survey methodologies and evaluates their impact on resulting recommendations

about the best communication channels that health practitioners may use to reach different ethnic populations.

The authors discuss discrepancies between phone and online survey samples. They compare surveys conducted in English with ones where the respondent's preferred language is used. The analysis focuses on patterns found in two different ethnic groups – Anglos and Latinos. Results suggest that a geo-ethnic sampling strategy, along with bilingual survey administration, is less likely to produce coverage errors. Internet-based English-only surveys also appear to be less representative.

The authors recommend that practitioners should study geo-ethnic communities in order to understand their specific communication ecologies for health goals. The analysis demonstrates that bilingual gathering and dissemination of information is crucial when attempting to reach new-immigrant and low-SES Hispanic communities. The importance of identifying differences between Internet users and offline populations before conducting a survey on the Web is emphasized. The article also suggests that practitioners need to expand the scope of media they deploy in campaigns or interventions to include geo-ethnic along with mainstream media.

Caburnay, C., Kreuter, M. W., Cameron, G., Luke, D. A., Cohen, E. L., McDaniels, L., … Atkins, P. (2008). Black newspapers as a tool for cancer education in African American communities. *Ethnicity & Distance*, 18, 488-495.

This report looks at Black newspapers' coverage of cancer information and readers' perception of coverage. It looks at stories from 24 Black newspapers and community-matched general audiences, and also conducts reader surveys. The results show Black newspapers to publish more cancer stories than general audience newspapers. Cancer stories in Black papers were more likely to contain locally-relevant stories, address disparities, focus on prevention and include calls to action for readers and refer readers to cancer information sources. Interestingly, readers thought health issues other than cancer were more serious for Blacks, yet cancer was the most important health issue for them personally.

Clayman, M. L., Manganello, J. A., & Viswanath, K. (2010). Providing health messages to Hispanics/Latinos: understanding the importance of language, trust in health information sources, and media use. *Journal of Health Communication*, 15(S3), 252-263

Social groups have different information-seeking patterns. Language, race and ethnicity are among the factors that predict individual reliance on media, interpersonal, and online sources. Based on data from the 2005 Health Information National Trends Survey, this study investigates differences in trust and media use among Hispanics with high and low English proficiency.

Latino respondents who were comfortable speaking English had higher levels of trust in health information from newspapers, magazines, and the Internet. English-speakers also reported more media exposure, measured in hours per day consuming radio, television, and newspapers. Their levels of Internet use were much higher: 54% users vs. 14% among those who were not comfortable speaking English.

The study findings have important implications for health campaigns. The authors suggest that reaching Hispanics who are not proficient in English may be difficult for more reasons than just the linguistic barrier. Interventions targeting this group may be less effective because of their low levels of trust in media, as well as the low use of various information channels.

Davis, K. C., Uhrig, J., Rupert, D., Fraze, J., Goetz, J., & Slater, M. (2011). Effectiveness of a mass media campaign in promoting HIV testing information seeking among African American women. *Journal of Health Communication*, 16(9), 1024-39.

African Americans in the U.S. have been disproportionately affected by HIV/AIDS. In 2006, they accounted for 12% of the country's population and half of the diagnosed AIDS cases. This study evaluates the impact of a media campaign promoting HIV testing among African American women. The intervention was piloted in Cleveland and Philadelphia in 2006-2007.

The authors analyzed the association of market-level promotion activities with the volume of calls and web traffic received by the campaign. The health message was disseminated through radio, print publications, billboards, and posters in public transportation. The study confirmed that those modes of distribution did generate an increase in HIV information seeking among target audiences. Radio and total advertising measures were significantly associated with an increase in hotline call volume, controlling for demographic characteristics and geographic factors.

The study further suggests that the time interval between the exposure to media messages and the resulting information-seeking behavior is relatively short. The authors highlight the importance of supplemental sources of high-quality health information – in this case a website and a hotline. Given the immediate and potentially short-term effects of campaign ads, it is important that individuals can easily access information which would reinforce the supportive attitudes related to the targeted health behavior.

Dutta-Bergman, M. J. (2004). Primary Sources of Health Information: Comparisons in the Domain of Health Attitudes, Health Cognitions, and Health Behaviors. *Health Communication*, 16(3), 273-288.

This work explores patterns of health information seeking and their associations with individual attitudes and behavior. Based on a national dataset from the 1999 Porter Novelli HealthStyles surveys, it studies the role of traditional media, the Internet, and interpersonal communication as resources about health-related issues. The author employs four individual-level indicators of health-orientation: health consciousness, health information orientation, health-oriented beliefs, and healthy activities. Those measures capture the extent to which respondents are concerned about health issues, integrate health concerns into their daily activities, have positive attitudes towards preventive measures, and tend to seek health information.

The analysis demonstrates that active communication channels (interpersonal discussion, print media, and the Internet) serve as primary resources for health-conscious, health information-seeking individuals interested in prevention and engaged in health-related activities. Passive

consumption channels (radio and television) on the other hand are the main source of information for individuals who are not health-oriented.

The study findings have implications for media planning and outreach. The author suggests that broadcast entertainment is best suited as a platform for preventive campaigns. The Internet, print, and interpersonal networks are better channels for communication with individuals who are already active in the area of personal health.

Dutta-Bergman, M. J. (2005). Developing a profile of consumer intention to seek out additional information beyond a doctor: The role of communicative and motivation variables. *Health Communication*, 17(1), 1-16.

Active and autonomous patients engaged meaningfully in the making of medical choices tend to seek health-related information from a variety of sources. This study examines media use, Interpersonal discussion, and civic participation as predictors of individual health information-seeking practices. The author suggests that the relationship between those factors and health-related information seeking is mediated by the respondents' level of health consciousness, an index of their intrinsic motivation to maintain good health.

An analysis of the DDB Needham consumer survey demonstrated that individuals concerned about health and wellness were more likely to seek out health information. Additionally, people's intent to obtain that information was significantly predicted by five communicative activities. Those included interpersonal discussion, community participation, newspaper and magazine consumption, and Internet use. Television viewing did not have an effect on either health consciousness or health information orientation. Health consciousness did mediate the relation between information orientation and four of the communicative variables: interpersonal discussion, community participation, newspaper and magazine consumption.

Detailing the implications of these findings, the author suggests that in order to reach active individuals with health information, organizations should target social networks, community activities, newspapers, magazines, and the Internet for message delivery.

Gibbons, M. C., Fleisher, L., Slamon, R. E., Bass, S., Kandadai, V., & Beck, J. R. (2011). Exploring the potential of Web 2.0 to address health disparities. *Journal of Health Communication*, 16(S1), 77-89.

Disparities related to race, ethnicity and socioeconomic status are found in both healthcare and technology use. This theoretical work builds on existing research to examine the potential of health-related uses of the Internet and Web 2.0 by minority populations. The study identifies a series of opportunities and challenges in the following areas:

> Identifying strategies to integrate social media into health promotion interventions focused on major issues that affect medically underserved groups.
> Amalgamating techniques to leverage and connect social-media technologies to other evidence-informed online resources.

> Integrating health communication best practices, including addressing health literacy issues.
>
> Capitalizing on social networking to enhance access and communication with health care providers.
>
> Advancing current efforts and ongoing expansion of research participation by individuals from underserved communities.

The authors note that while Internet penetration is lower among minorities, use of social networking platforms, particularly through mobile devices, is accepted within those populations. This provides one avenue for addressing health information disparities. The study suggests that health care providers need to identify critical needs among disadvantaged social groups and seek to determine whether Web 2.0 may contribute to addressing them.

Ginossar, T., & Nelson, S. (2010). Reducing the Health and Digital Divides: A Model for Using Community-Based Participatory Research Approach to E-Health Interventions in Low-Income Hispanic Communities. *Journal of Computer-Mediated Communication*, **15(4), 530-551.**

Low-income Hispanics in the U.S. are one social group particularly affected by the digital divide and the online participation gap. This article proposes a community-based participatory research approach aimed at increasing Latino access to online health resources. The authors suggest that community media maintained by local residents can serve as a platform for relevant information exchange.

The paper presents a case study conducted in a metropolitan area with high levels of crime and poverty. The project is designed as a collaboration between academic researchers and community organizers. The intervention employs promotoras de salud: community members previously trained in computer skills and website development, serving as health and technology educators.

Initial observations, a literature review, and focus group results suggested that an intervention was needed to serve the residents' information needs related to child mental health services. For that purpose, the study proposes an online platform developed and promoted by promotoras, with content provided by health experts. The authors outline an evaluation design that could be used to test the impact of similar e-health interventions.

Jang, S. M., & Park, Y. J. (2012). The Internet, selective learning, and the rise of issue specialists. *First Monday*, **17(5).**

This article explores the impact of education levels, personal issue interest, and different information channels on individual knowledge about health issues. The analysis relies on secondary data from the Kaiser Family Foundation health tracking survey. The study identifies factors predicting whether respondents would be well-informed about the health care reform bill signed in March 2010. The authors suggest that new media is likely to foster in-depth specialized knowledge, while traditional sources may ensure familiarity with a broader range of issues.

According to the 2010 survey results, the Internet did indeed have an important role in fostering issue specialists rather than generalists. Relying on digital sources was a major driver helping people translate their interest in a health issue into issue-specific knowledge. Among traditional sources, only reliance on cable TV was a significant (though not as strong as the Web) positive predictor of in-depth knowledge about health care. Having an interest in the particular issue was also a key driver motivating knowledge acquisition. Respondents who found health care issues personally relevant (rather than those who were more educated in general) were more likely to be well informed.

In their discussions of the study's implications, the authors point out that the selectivity allowed by the variety of new media platforms and cable TV channels may allow interested individuals to become information specialists in the area of health.

Johnson, J. Q., Sionean, C., & Scott, A.M. (2011). Exploring the presentation of news information about the HPV vaccine: A content analysis of a representative sample of U.S. newspaper articles. *Health Communication, 26*(6), 491-501.

This study examined the news information presented about the HPV vaccine in major U.S. newspapers over the 19 months following its Food and Drug Administration (FDA) approval. To answer the question of how news information is presented in ways that might influence public health, the study explored the frequency of cancer prevention and sexually transmitted infection prevention message frames used to describe the HPV vaccine, the extent to which journalists relied on official sources, and the presence of personal examples. A content analysis of 547 newspaper articles revealed that less than half of the articles provided detailed health information. Overall, the findings suggest that U.S. newspaper coverage lacked detailed information about both HPV and the HPV vaccine in spite of federal approval of the vaccine, legal mandates for the vaccine, and a widespread information campaign. Implications for public health are discussed.

Katz, V. S., Ang, A., & Suro, R. (2012). An Ecological Perspective on U.S. Latinos' Health Communication Behaviors, Access, and Outcomes. *Hispanic Journal of Behavioral Sciences.*

Latinos living in the U.S. have limited access to formal health care resources which contributes to their higher incidence of preventable diseases compared to the general population. This article examines the association between health-related factors and Latino communication ecologies, defined as the array of interpersonal, mediated and organizational communication options available to individuals to achieve everyday goals. A diverse set of informal health connections – to friends, family, radio, TV, Internet, magazines, churches and community organizations – can potentially lead to better health outcomes.

The analysis conducted in this study was based on a nationally representative telephone survey of Latino adults conducted by the Pew Hispanic Center/Robert Wood Johnson Latino Health in 2007. The results demonstrated that informal communication ecologies were important for overall health. Diversified informal health ecologies were associated with health care access (regular doctor visits, uninterrupted health insurance, and regular health care location) and

favorable health outcomes (self-ratings of general health, health-related efficacy, and knowledge of diabetes symptoms). Higher social status was found to also have a significant relationship with the diversity of the individual communication ecology.

Kim, Y. C., Moran, M. B., Wilkin, H. A., & Ball-Rokeach, S. J. (2011). Integrated connection to neighborhood storytelling network, education, and chronic disease knowledge among African Americans and Latinos in Los Angeles. *Journal of Health Communication*, **16(4), 393-415.**

This article examines the relationships between education levels, access to communication resources, and health knowledge. Based on a survey conducted among African Americans and Latinos living in Los Angeles, the study investigates predictors of knowledge about four chronic diseases: diabetes, hypertension, breast cancer, and prostate cancer. The authors emphasize the importance of a key communication variable: an integrated connection between individuals and local storytellers. This construct measures the connectedness of residents to their neighbors, as well as to media outlets and local organizations. The variable is tested as a mediator and moderator of the relation between education and health knowledge.

The results indicated that the integrated access to local communication resources played a mediating role in the case of breast cancer and diabetes knowledge, but not in hypertension and prostate cancer knowledge. Higher education was linked to increased levels of integrated connectedness to communication resources. When other conditions were met (such as the presence of enough health information diffused through community storytellers), the individual's knowledge of chronic diseases was also enhanced. The authors suggest that the lack of significant effect for hypertension and prostate cancer knowledge was due to general lack of locally disseminated information about those conditions.

Kreuter, M. W., & Haughton, L. T. (2006). Integrating Culture Into Health Information for African American Women. *American Behavioral Scientist*, **49(6), 794-811.**

This work evaluates different communication strategies aimed at making health messages culturally appropriate for a specific social group. The main premise of the article is that culturally tailored information may be more effective in capturing attention, stimulating information processing, and motivating changes in health behavior.

The authors report results from an intervention meant to increase the rate of cancer screening and the intake of fruits and vegetables among low-income African-American women living in St. Louis, Missouri. Study participants were divided into four groups: a control group with no intervention, and three groups which received six issues of a tailored health care magazine over 18 months. The women in one of the experimental groups received a publication where health messages were individually tailored based on personal scores on four cultural constructs: religiosity, collectivism, racial pride, and time orientation. Another group received magazines designed through a standard intervention technique called behavioral construct tailoring (BCT). In this case information was customized based on answers to survey questions assessing knowledge, interest, self-efficacy, stage of readiness, perceived barriers, perceived risk,

perceived importance, personal and family histories. The last experimental group received messages tailored on both cultural and behavioral constructs.

The follow-up assessment indicated that only the combined cultural and behavioral customization had led to a significant positive behavioral change. The findings suggested that health communication based on behavioral constructs may be particularly effective when presented in a more meaningful cultural context.

Kreuter, M. W., & Wray, R. J. (2003). Tailored and targeted health communication: Strategies for Enhancing Information Relevance. *American Journal of Health Behavior*, 27(Suppl 3), S227-S232.

Discussing a range of communication strategies aimed at increasing the relevance of health information to a given audience, this theoretical article provides a comparative overview of tailored and targeted campaigns. The two approaches fall in different places along a spectrum ranging from entirely generic messages to ones perfectly adapted for specific individuals. While targeted messages are meant to be relevant to a social group, tailored ones are customized for each receiver. In spite of the differences in their design, the rationale for both approaches is similar: knowing more about the intended recipients of health communication allows for a better selection and framing of relevant information.

The article identifies and discusses three broad research questions which need to further be investigated in order to extend existing knowledge in the area:

> *How does message relevance vary by level of customization?* Better customization is expected to enhance the level of relevance. Still, more research is needed on specific behavioral and cultural characteristics to be used in the tailoring of messages.
>
> *What is the relationship between perceived relevance and subsequent behavior change?* Enhancing the message relevance has been shown to increase the likelihood of behavioral changes. What is needed is a more specific investigation of the mechanisms through which relevance mediates the effect of exposure on behavior.
>
> *What are the comparative effects of tailored vs. targeted messages on perceived relevance and other outcomes?* The authors suggest that targeting would be useful and cost-effective for homogeneous groups. In contrast, the more expensive tailoring approach may be superior in cases where high variability of the key determinants is observed.

Matsaganis, M. D., & Wilkin, H. A. (2012). *The Communicative Construction of Civic Engagement and Access to Health-Enhancing Resources in Residential Communities*. Presented at the Annual Meeting of the International Communication Association, Phoenix, AZ.

This paper investigates determinants of health disparities, focusing on access to health-enhancing resources in residential community environments. It explores the role of communication as a social determinant of those disparities. The notion of access to health

resources is extended beyond health and medical care services to include access to healthier food options and recreation areas where residents can exercise. The text explores individual consequences of being integrated into a local communication network that includes local and ethnically targeted media, neighbors, and community organizations.

Based on data collected in 2009 from a sample of South Los Angeles residents, the analysis revealed multiple paths of influence of communication on access to health resources. Contrary to expectations, being more integrated into the indigenous communication network had a significant and negative effect on health care access. The more connected residents were to the storytelling network, the more difficult they felt it was for them to access health-enhancing resources. One explanation proposed by the authors was the extensive negative media coverage of the decrease in local health-care resources. Another factor was the critical role of health insurance and health status as predictors of access to health resources. Important to note, being integrated into the local communication network also had positive effects, as it increased residents' sense of collective efficacy.

McNeill, L. H., Kreuter, M. W., & Subramanian, S. V. (2006). Social environment and physical activity: a review of concepts and evidence. *Social Science Medicine*, 63(4), 1011-1022.

This theoretical work outlines a number of important dimensions of the social environment and discusses their influence on health outcomes. To exemplify relevant points, the authors focus on outcomes related to physical activity. The study thus seeks to identify social determinants that are (1) commonly studied in the research literature, (2) associated with physical fitness, and (3) amenable to change trough health interventions.

The social dimensions identified in the article broadly cover the following areas: interpersonal relationships (social support and social networks), social inequalities (socioeconomic position and income inequality, racial discrimination), and neighborhood and community characteristics (social cohesion and social capital, neighborhood factors). The authors suggest that those characteristics should be considered along with individual-level factors in order to understand the drivers behind health-related behavior. As each dimension operates through a different set of mechanisms, consideration needs to be given when deciding which aspect to target in programs and policies seeking to promote physical activity. For example, interventions may focus on racial discrimination which influences physical activity through residential segregation. Alternatively, campaigns may focus on income inequality which operates though reduced social spending on public health programs.

Mittman, R., & Cain, M. (2001). The future of the Internet in healthcare: a five-year forecast. In R. E. Rice & J. E. Katz (Eds.), *The Internet and health communication: Experiences and expectations* (pp. 47-73). Sage Publications.

Even though this chapter was written over a decade ago, many of the considerations and conclusions it presents about the role of new technologies in the area of health are still relevant. The authors discuss the potential of new media as a healthcare platform. They also identify barriers to the implementation and diffusion of health care applications.

The factors presented as potential drivers of e-health development include growing consumer demand; increasing experience with online shopping and other digital tools; market pressures in the healthcare industry; and the characteristics of Internet which make it, in many ways, a suitable healthcare platform.

Security and privacy concerns, especially with regard to sensitive medical and financial information, are one of the major barriers to the adoption of online health services. Another problem comes from the divergent technological standards used in a number of legacy information systems. Digital inequalities and the low-bandwidth connections in some homes may also prevent universal adoption. The authors detail concerns related to the uneven quality of online information and the digital literacy required to identify false or fraudulent content. E-health adoption may further be hindered by the reluctance of physicians, the conservative medical culture resisting changes in doctor-patient relationships, and the lack of resources for information system development.

Noar, S. M. (2006). A 10-year retrospective of research in health mass media campaigns: where do we go from here? *Journal of Health Communication*, **11(1), 21-42.**

Media campaigns are one of the key ways to promote public health. This article provides an overview of the research in the area, discussing media effects and their health outcomes. The author suggests that a targeted, well-executed media campaign can have small-to-moderate effects on health knowledge, beliefs, attitudes, and behaviors. Among the principles of effective campaign design, Noar includes:

> Conducting formative research and pretesting messages with the target audience
> Using theory as a conceptual foundation for the campaign
> Segmenting the audience into meaningful subgroups based on important characteristics (e.g. demographic variables, risk factors, experience, personality, etc.)
> Using a message design approach that is targeted to and likely to be effective with the audience segment. Developing creative messages that will spark interpersonal discussions.
> Placing messages in channels widely viewed by the target audience; strategically positioning the messages within the selected channels.
> Conducting process evaluation. Making sure there is high message exposure, both in terms of reach and frequency, among members of the target audience.
> Using a sensitive outcome evaluation design that reduces threats to internal validity and allows for causal conclusions about the campaign's influence on attitudes and behaviors.

Rains, S. A. (2007). Perceptions of traditional information sources and use of the World Wide Web to seek health information: Findings from the health information national trends survey. *Journal of Health Communication*, **12(7), 667-680.**

This article examines the use of Internet for medical information seeking. Using data from the 2002-2003 Health Information National Trends Survey, the author investigates how perceptions of traditional interpersonal and mediated sources predict the use of online tools to answer health-related questions.

The analysis indicated that distrust of traditional information sources (and particularly health care providers and broadcast media) was associated with increased use of the Internet for medical searches. Distrust of print publications also increased the odds of turning to the Web first before looking for any other information source. The analysis also revealed an association between people's perceptions about the information obtained through different channels. Respondents who distrusted their health care provider were more likely to use the Web, but less likely to perceive the information they acquired online to be useful.

These findings provide some evidence of the interdependencies between different media use. They also underline the relevance of trust as a variable motivating health information seeking. The study finds support for the idea that the media and social environment in which a person is situated influences perceptions of the Web as a source of health information.

Schwitzer, G. (2009, March). The state of health journalism in the U.S. Menlo Park, CA: Henry J. Kaiser Family Foundation. Retrieved June 11, 2012, from www.kff.org/entmedia/upload/7858.pdf

The report is based on a literature review of more than 100 published pieces of research on health journalism; on a recently released survey of members of the Association of Health Care Journalists (AHCJ), conducted by the Kaiser Family Foundation (KFF) and AHCJ; and on informal one-on-one interviews conducted by the author of this report with more than 50 journalists who work (or worked) for newspapers, radio and TV stations, magazines, and Web sites in markets both small and large. This report is intended to provide a snapshot of the current state of health journalism in the U.S. today. The primary focus is on how the changes in America's newsrooms are affecting the way journalists cover health—for better and for worse—and what impact that may have on consumers of health news.

Snyder, L. B., Hamilton, M. A., Mitchell, E. W., Kiwanuka-tondo, J., & Fleming-milici, F. (2010). A Meta-Analysis of the Effect of Mediated Health Communication Campaigns on Behavior Change in the United States. *Journal of Health Communication*, 9(S1), 71-96.

The capacity of media outreach to bring about changes in health behavior is a key research area. This study performs a meta-analysis of the relevant literature to examine effect sizes and compare them across different characteristics of health campaigns. The article uses evaluation information from 48 campaigns with a total of 168,362 respondents across cases.

The results indicate that mediated health campaigns tend to have small but tangible short-term effects. The average effect size was in the range of .07 to .10, and changed the behavior of about 8% of the targeted population. Important to note, even this relatively small percentage may have an important impact on public health, as it constitutes a large number of people in the context of state or a nation-wide campaigns. While media campaigns seem to have smaller

effect than interventions in clinical settings, they are considered more cost-effective when the goal is to reach a large population.

The most important predictor of the success in a media outreach was the topic of the campaign. Seat belt, oral health, and drinking campaigns tended to perform slightly better than those with other topics. The cessation of addictive behaviors (e.g. smoking) on the other hand was particularly difficult to attain in interventions. Campaigns also had a larger effect when they were related to the enforcement of existing policies or regulations.

Squiers, L., Rutten, L. J. F., Treiman, K., Bright, A., & Hesse, B. (2005). Cancer Patients' Information Needs across the Cancer Care Continuum: Evidence from the Cancer Information Service. *Journal of Health Communication*, **10(S1), 15-34.**

This study investigates the information needs of cancer patients in the U.S. The analysis is based on records from 19,030 phone calls received by the National Cancer Institute cancer information hotline in 2002-2003. The inquiries were analyzed to determine differences in topics of interest for different demographic and medical subgroups.

Findings indicated that females were more likely than males to ask about cancer screening, diagnosis, support services, psychosocial issues, and general cancer site information. Males were more likely to seek specific cancer treatment information. Older patients were more likely than younger patients to seek specific treatment information, but they were less interested in support services, psychosocial issues, prevention, and risk factors. Compared with White callers, Hispanics were more likely to seek support service information, and African Americans were more likely to have questions related to psychosocial issues.

According to the authors, one important aspect that needs further investigation is the way patients learn about and decide to contact this information resource (e.g. referrals from medical professionals, friends, family, media or online sources).

Viswanath, K., Breen, N., Meissner, H., Moser, R. P., Hesse, B., Steele, W. R., & Rakowski, W. (2006). Cancer Knowledge and Disparities in the Information Age. *Journal of Health Communication*, **11(S1), 1-17.**

Many major diseases disproportionally affect certain social groups. Factors like education, occupation, and income are strongly associated with the prevalence and mortality rate of some types of cancer. This article suggests that there is widening gap in health knowledge among people with different socioeconomic status (SES). This gap provides one explanation of the health disparities and risk behavior differentials between populations.

The study uses data from the 2005 Health Information National Trends Survey to examine respondent knowledge levels about two factors linked to cancer: smoking and sun exposure. Findings demonstrated that income and education levels predicted knowledge about causes of lung and skin cancer. Attention to media also played a significant role in health knowledge. In particular, attention to newspapers was positively related with the respondent's level of information on both topics, while television only boosted knowledge about sun cancer.

Based on those results, the authors emphasize the need to take into account SES variations within different racial and ethnic groups. It is suggested that treating all members of a race or ethnicity as a homogenous population may mask important distinctions.

Viswanath, K., & Kreuter, M. W. (2007). Health Disparities, Communication Inequalities, and e-Health: A Commentary. *American Journal of Preventive Medicine,* **32(5 Suppl), S131-S133.**

This commentary briefly outlines barriers in the area of e-health which, if not addressed, may turn existing digital inequalities into deepening disparities in health status. The authors suggest that populations traditionally underserved by the healthcare system are also likely to have limited access to computers and Internet technologies. In order to avoid restricting the benefits of e-health to more privileged high-resource groups, a series of issues need to be considered by researchers and policymakers. These include identifying specific inequalities in equipment availability and digital literacy, as well as enhancing survey sampling and measurement to better understand those disparities. Health and communication policies should be adjusted to remove the obstacles impeding the effectiveness of health interventions among socioeconomically disadvantaged populations.

Viswanath, K., Wallington, S. F., & Blake, K. D. (2009). Media effects and population health. In R. L. Nabi & M. B. Oliver (Eds.), *The Sage Handbook of Media Processes and Effects* **(pp. 313-330).**

Media content and consumption are important factors shaping individual health beliefs and attitudes, as well as public and institutional agendas. This chapter provides a comprehensive overview of media effects on individual and community health. After outlining the historical context of health and media studies, the authors describe major individual-level theoretical frameworks applicable in the area: social cognitive theory, the theory of reasoned action, the health belief model, the extended parallel process model, and the transtheoretical model. Theories providing insight into the design of health campaigns are also discussed. Those include approaches such as social marketing, message tailoring, and entertainment education.

In addition to individual-level strategies in health communication, the text covers macro-level theories from the literature produced in media studies and epidemiology. These areas of research emphasize the importance of structural, social and community influences on health behaviors and outcomes.

The chapter identifies a number of methodological challenges in health and media studies. The most important one among them is finding a robust way to measure exposure to health messages from competing sources in a crowded media environment. Measuring exposure and its association with health and risk behaviors is crucial when evaluating intervention effectiveness and designing subsequent campaigns.

The authors address both the promise and the perils of new media with regard to public health. The Internet may enhance access to tailored health information and services. It may allow medical professionals and community organizers to rapidly distribute and update content. At the same time, online health information can be incomplete, misleading, or fraudulent. Another

key barrier identified in the chapter is the differential access to new technologies among various socioeconomic groups.

Wang, Z., & Gantz, W. (2007). Health content in local television news. *Health Communication*, 21(3), 213-21.

This study examined 1,863 news stories that aired on 4 English-language channels and 1 Spanish channel in 7 U.S. markets during a composite week in 2000. About 10% of news stories focused on health topics. Specific illnesses/diseases and healthy living issues received the most frequent coverage. Health news stories generally were less than 1 min long. Most health news stories were neutral in tone. Few offered contrasting viewpoints or follow-up information. Many stories were likely to require a 10th grade education to be understood. Implications for health professionals, policy makers, and health communication researchers are discussed.

Wang, Z., & Gantz, W. (2010). Health content in local television news: a current appraisal. *Health Communication*, 25(3), 230-7.

This study, designed to update and expand upon earlier efforts, examined 1,382.5 hours of newscasts that aired on seven channels in four markets between December 2004 and June 2005. The four markets were a major-, a large-, a medium-, and a small-size market in the Midwestern United States. In total, 40,112 news stories were coded. About 8.1% of the news stories were devoted to health content. Health stories covered a large array of topics. Physical illnesses/diseases and healthy living issues received the most frequent coverage, while mental health and aging-related content were covered least frequently. Most health stories were neutral in tone and rather brief, with an average duration of less than 1 minute. One in eight (12.4%) health stories provided follow-up options. This is primarily due to an increase in the number of health news stories presented with a website URL compared to previous findings. Market differences emerged, although, interestingly, stations in the larger markets were not the leaders in health coverage.

Wilkin, H. A., & Ball-Rokeach, S. J. (2011). Hard-to-reach? Using health access status as a way to more effectively target segments of the Latino audience. *Health Education Research*, 26(2), 239-253.

This article proposes a methodology allowing campaigns and organizations to better target hard-to-reach audiences. The authors point out that some segments of the U.S. population are disproportionately affected by health problems. The failure to reach and persuade those high-risk groups with appropriate messages intensifies health disparities. The study examines the connections of Latinos to key communication resources (interpersonal, media outlets, and local organizations). Based on a survey conducted among Hispanic residents of Los Angeles neighborhoods, the authors identify the communication resources used by individuals reporting different levels of difficulty in accessing healthcare.

The analysis suggested that respondents connected to integrated communication resources had a marginally greater ease in finding healthcare. Latinos who had health access problems tended to rely more upon Spanish-language television for health information. Those without healthcare access problems were more likely to report that they received health information from medical professionals, the Internet, mainstream TV and printed materials.

Wilkin, H. A., & Ball-Rokeach, S. J. (2006). Reaching at-risk groups: The importance of health storytelling in Los Angeles Latino media. *Journalism*, 7, 299-320.

This article explores the connections of Latinos living in the U.S. to communication channels (mediated and interpersonal) for health information. The authors point out that the Hispanic population is at high risk for many health problems, but is often missed by traditional health campaigns aired through general audience channels.

The analysis conducted for this study was based on a survey of Latinos living in two Los Angeles neighborhoods. The results indicated that Latinos had strong connections to the media outlets targeting their ethnic group or local community, to interpersonal networks, and to health professionals. The study suggests that health information could better reach Hispanic residents through their ethnic media. The authors highlight the need for these outlets to provide information about local medical resources, as well as to frame health stories in a way that would encourage interpersonal discussion.

Wilkin, H. A., Moran M. B. Ball-Rokeach, S. J. Gonzales, C., & Kim, Y-C. (2010). Applications of communication infrastructure theory. *Health Communication*, 25(6), 611-612.

This theoretical article outlines the health applications of the communication infrastructure theory (CIT): an ecological framework developed by Ball-Rokeach and colleagues. The authors highlight the benefits of investigating how neighborhood communication patterns are intertwined with the health of communities and their residents. A central concept of CIT, the neighborhood storytelling network, incorporates the connections among three key players: residents, community organizations and local/ethnic media. The authors suggest that taking into account (and empirically exploring) this multilevel structure provides a useful way for health practitioners to understand, reach, and impact their communities.

1.C Economic Development and Opportunity

Buist, E., & Mason, D. (2010). Newspaper Framing and stadium subsidization. *American Behavioral Scientist*, 52(10), 1492-1510.

The study points to existing literature demonstrating that the "intangible benefits" of publicly subsidized sports facilities come nowhere near financially justifying the subsidies. Yet taxpayers

continue to approve such initiatives by way of public referenda. The authors cite previous studies that found 20 out of 26 (77%) of subsidy referenda passed between 1990 and 2000. Since these referenda are non-partisan, local newspapers play a key role in educating citizens about the costs and benefits of subsidized sports facilities. This study looked at two Cleveland-based initiatives: an unsuccessful one in 1984, and a successful one in 1990. The findings support previous claims that news coverage is shifting towards the "intangible benefits" reasoning for supporting a referendum.

Delaney, K., & Eckstein, R. (2008). Local Media Coverage of Sports Stadium Initiatives. *Journal of Sport and Social Issues,* 32.

The authors looked at media coverage of 23 publicly-financed stadium projects in 16 U.S. cities from 1990 to 2004. The results of the analysis indicated that local media would typically offer support for such initiatives. Exceptions exists, such as the New York media's skepticism of a new Jets stadium. A more frequently found case, however, is that of the Indianapolis Star which mainly "echoed" a pro-stadium government agency report. Such support is in line with local media's tendency to favor community growth coalitions and initiatives. Local growth theory suggests that cities will typically pursue development strategies that intensify land use, increase land values and offer pro-tax policies to corporations. These strategies are often favored over neighborhood-centric policies, such as public safety, transportation and public school funding. Ultimately, then, stadium support in local media editorials and broader coverage is consistent with a news agenda that generally emphasizes local growth initiatives.

DiMaggio, P. & Bonikowski, B. (2008). Make Money Surfing the Web? The Impact of Internet Use on the Earnings of U.S. Workers. *American Sociological Review*, 73 (2), 227-250

This article tests the hypothesis that adults who do not use the Internet are economically disadvantaged. It discusses a number of mechanisms that may result in difference in earning between the online and offline segments of the population.
The analysis was based on data from the Current Population Survey (CPS) of the U.S. Census Bureau collected between August 2000 and September 2001. The authors found a significant positive association between Web use and earnings growth, indicating that some skills and behaviors associated with Internet use were rewarded by the labor market. Current Internet use at work had the strongest effect on earnings, although workers who used the Internet only at home also did better. The positive association between computer use and earnings seemed to reflect the effect of Internet use, rather than use of computers for offline tasks. The authors concluded that inequality in access to and mastery of technology was a valid concern for students of social stratification.

Eshbaugh-Soha, M., & Peake, J. (2005). Presidents and the Economic Agenda. *Political Research Quarterly*, 58(1), 127-138.

This analysis looked at weekly measures of presidential, congressional and media attention to the economy from 1981 through 2000. The authors examined institutional attention to the economy overall, including spending issues (such as deficits, debt, tax, and budget issues), inflation and unemployment, and international economic issues (including trade). These measures were compared against media attention to the same issues.

In general, the authors found support for media's ability to set a news agenda independent from institutional sources. They found that presidents did not typically influence the media agenda on economic issues, but were instead responsive to media coverage. The media were able to direct presidential attention to domestic economic issues, while presidents were able to influence media coverage of international economic issues, inflation and unemployment. The White House was also unlikely to influence media coverage of economic issues during times when the economy was struggling.

Fountain, C. (2005). Finding a job in the Internet age. *Social Forces,* 83(3), 1235-1262.

Using longitudinal data about unemployed job searchers in 1998 and 2000, the author examines establish the rise of the Internet as a job-search strategy. Results suggest the Internet's contribution to an unemployed searcher's information pool may afford a small advantage only to the extent that other job searchers are not using it Through an analysis of data from the Current Population Survey (CPS) by the U.S. Census, Fountain found that the early advantages for Internet job searchers have essentially disappeared as Internet use became more frequent. Fountain The author highlights the capacity of the Internet to enhance weak tie relationships, found to be helpful during job searches. The study goes on to discuss the limitations of the Internet in matching employers and workers.

Galloway, L. and Mochrie, R. (2005). The use of ICT in rural firms: a policy-oriented literature review. *The Journal of Policy, Regulation and Strategy for Telecommunications, Information and Media*, 7(3), 33-46.

This study examines rural small and medium enterprises (SMEs) and technology use. The results indicate that SMEs tend to lag behind larger firms in awareness and implementation of information and communication technologies (ICTs). In rural areas, ICT use is even less prevalent – a paradox considering the significant potential of these technologies in helping rural business owners to overcome location disadvantages.

The authors find that the low levels of ICT can often be attributed to the poor technological infrastructure in rural areas. While most rural areas do have dial-up access to the Internet, these lines are overloaded as higher data demands are placed on them by SMEs. Access to ICT expertise is also problematic in these areas. Rural SMEs have difficulties not only in obtaining these technologies, but also in maintaining them. Maintenance staff is less readily available and costs are often higher than in urban contexts. The study outlines a public sector role for promoting business in rural areas. The authors advocate for policies that raise awareness of ICT and broader support for technical infrastructure development. They also advise more

assistance in making ICT expertise available to rural businesses, which is consistent with other studies that find SMEs in general need more ICT support.

Greve, A., & Salaff, J. (2008). Can the Internet Help? How Immigrant Women from China get jobs. In Khun Eng Kuah-Pearce (Ed), *Chinese Women and the Cyberspace.* **Amsterdam University Press.**

The authors surveyed 300 female Chinese immigrants in Toronto, Canada, and reported how these women were using Chinese-language websites to find employment. For immigrants, the Internet was a key way of finding employment, as most did not have extensive social networks in their new home city. Internet applications allow immigrants to mask features that could invite discrimination; for example a foreign accent.

The authors found that the immigrant women faced unique challenges in their online job searches. For example, while many of these women were highly educated and worked as professionals in China, most Chinese-language websites listed low-skill, manual labor positions. In general, online job postings were bifurcated into the highest and lowest salary brackets, with few positions in between. Though other studies have indicated that Internet job searches can reduce unemployment durations, this study found slow turnaround times for the immigrant women. Ultimately, though online job searching increased the women's access to job information, the process could not overcome traditional prejudices and institutional limitations once women began interviewing for positions.

Hindle, K., & Klyver, K. (2007). Exploring the relationship between media coverage and participation in entrepreneurship: initial global evidence and research implications. *International Entrepreneurship and Management Journal,* **3(2), 217-242.**

This article looked at national entrepreneurial participation rates in 37 countries from 2000 to 2003 and looked for associations between trends in that participation and media coverage of entrepreneurship in those countries. The authors found that stories about successful entrepreneurs were not significantly associated with the rate of start-up activity, but a positive association did exist between the volume of entrepreneurship media stories and the volume of people running a business that was less than 42 months old. The authors interpret these findings as evidence for the "reinforcement model" of mass communications, which helps to enhance the commitment to start a business by already motivated.

Kuhn, P., & Mansour, H. (2011). *Is Internet Job Search Still Ineffective?* **Institute for the Study of Labor, Working Paper 5955.**

This study explores the impact of Internet use on the labor market. The major finding presented by the authors is that Internet job seeking appears to reduce unemployment durations for younger U.S. job seekers (age 23-29) by about 25%.

The authors found a large increase in Internet job seeking over the last decade. Between 1990 and 2009, the number of young, unemployed workers who searched for jobs increased from

24% to 74%. Unemployed individuals with a bachelor's degree were over 40 percent more likely to look for work online than high school dropouts. Though earlier studies suggest that non-Hispanic Whites were more likely to look for jobs online than African-Americans or Hispanics, this work found no evidence of a current racial gap in Internet job searching among unemployed individuals. The analysis also looked at currently employed workers who searched for a new position online. No evidence was found that these individuals were finding better paying jobs via online searching. Few young job seekers were using the Internet to connect with friends and relatives about job openings, though the authors found those who did use the Internet for this purpose were especially effective in securing jobs. This was consistent with other job-seeking research that emphasizes the key role of social networks in job searching.

Lin, W. Y., Song, H., & Ball-Rokeach, S. (2010). Localizing the global: Exploring the transnational ties that bind in new immigrant communities. *Journal of Communication*, 60(2), 205-229.

This study explores the transnational practices of Chinese, Korean, and Latino immigrants living in the United States. It captures tensions between local and global processes through an examination of the economic and communication ties between immigrant groups and their home countries. Transnational aspects of geo-ethnic media content are analyzed and reported. An important set of transnational ties compared across locations and ethnicities includes financial remittances, work connections, and location of friends and family. Information relations examined by the study include the production and consumption of news in the ethnic press.

According to survey results, immigrants aimed to stay on top of their local community, but also wanted to be informed about events happening in their country of origin. Ethnic media were the primary source of news serving both of those needs. Yet a content analysis of the ethnic press revealed that more than half of its content consisted of home-country news, while local coverage accounted for less than 15%. Interviews conducted with ethnic media publishers suggested that a large proportion of their news stories were syndicated from a home-country version with modifications to meet local needs. The authors concluded that the small percent of local news in ethnic newspapers could be largely attributed to the ownership structure and the financial hardships encountered by many ethnic media organizations.

Loane, S. (2006). The role of the Internet in the internationalisation of small and medium sized companies. *Journal of International Entrepreneurship*, 3, 263–277.

The author conducted 53 in-depth interviews with business owners and managers in Ireland, Canada, New Zealand and Australia—locations that were selected for their advanced economics, technical infrastructure and "Anglo" business cultures. According to all of the CEOs interviewed, Internet speed was crucial, and a lack of high-speed Internet access was highlighted as a constraint for small businesses trying to engage in e-commerce. Overall, the in-depth interviews revealed that small business owners did not hesitate to use the Internet, but had to consider how best to leverage digital technologies. This process looked slightly different

in each company. Mostly, firms were using Internet technologies to assist in business processes, but few were fully reliant on those technologies, though this did not appear to be because of lack of interest on the part of CEOs.

Parker, C., & Castleman, T. (2007). New directions for research on SME-eBusiness: Insights from an analysis of journal articles from 2003 to 2006. *Journal of Information Systems and Small Business***, 1, 21-40.**

This article presents an extensive literature review of 120 articles on electronic business (eBusiness) in small and medium enterprises (SMEs) published between 2003 and 2006 in 53 academic journals. The review examined the state of research on SME eBusiness and outlined a number of key trends. The he largest proportion of articles included in the study sample looked at SMEs in the United Kingdom. According to the authors, this is a result of the government funding provided in the UK for this research that could help stimulate eBusiness adoption and use in various areas. One finding of particular relevance involved the need for more research on SME dissatisfaction with ICT vendors, consultants and Internet service providers (ISPs).

Research indicates that SMEs do not know who to turn to and trust for eBusiness information. Some SME owners did not experience the benefits they anticipated from eBusiness solutions and believed vendors and consultants cost too much for the information provided. Studies also found a mismatch between SME owners and ISPs in terms of expectations. Few papers examined at the role of governments and industry associations in promoting ICT use, indicating a gap in knowledge about the ways in which SMEs learn to navigate these technologies.

Uy, M. (2004). Tax and Race: The Impact on Asian Americans. *Asian Law Journal***, 11.**

A key point of this article is that low-income taxpayers and individuals with limited English-language proficiency find the tax code to be overwhelmingly complex. Navigating changes to the code or figuring out how to take advantage of tax benefits is particularly difficult for these groups.

1.D Education

Alvarez, C. L. (2010). Familial negotiation of the Latina college choice process: An exploration of how parents and their daughters obtain and utilize information to navigate the process. *Enrollment Management Journal, 4(4), 57-81***.**

Alvarez unpacks factors that influence Latina students in their decisions about college. This qualitative study explores how Latina/o parents and their daughters living in a small town in a rural location in southern California make sense of the college choice process. Although the participating families had a complex college choice process, this paper focused on the role of

information and how it is obtained and utilized in each step of the process by the young Latinas as compared to their parents. Information from peers and the media plays a large role in the early stages of the process, while information from guidance counselors and other sources plays a bigger role later in the process.

DiGiorgio, C. (2010). Choices of students, parents, and teachers and their effects on schools and communities: A case study of a new enriched high school program. *Journal of School Choice, 4,* **278-292.**

This work is an ethnographic case study of two schools as they implemented an enrichment program. The sample included students, parents, teachers, school administrators, and board and government personnel. Data was drawn from interviews and observations of participants, curriculum analysis, and communication between school, home, and the public. The study found the following: (a) motivation to enter the program came largely from parents, (b) participating educators perceived changes to their stature in the school and a lack of creativity in course planning and execution, and (c) international and local students had differing academic and social experiences.

Fonteine, H., Zijlstra, H.P., Vlaskamp, C. (2008). Transfer of information between parents and teachers of children with profound intellectual and multiple Disabilities at special educational centres. *Journal of Applied Research in Intellectual Disabilities*, **21(5), 477-483.**

Communication between parents and teachers play an important role in the case of children with profound intellectual and multiple disabilities (PIMD). Communication logs are often used at Dutch special educational centers as a form of communication between parents and teachers. The main function of the logs is to share information about events occurring at home and at the center. The study explored the nature of information transferred between teachers and parents, the form in which it was conducted, and the topics discussed in it. In spite of some problems, the authors argue that the benefits of the exchange of experiences should not be underestimated because it keeps parents and teachers involved with the child. Special attention needs to be given to immigrant parents who have language difficulties.

Garcia, D. R. (2011). The Achilles' heel of school choice policy: The obstacles to reporting school accountability results to parents. *Journal of School Choice*, **5, 66–84.**

This study examines the conflict facing state education officials in reporting the yearly progress results required by No Child Left Behind and how those challenges obfuscated the transmission of school choice information to parents. To comply with school accountability mandates, state education officials transformed test scores into school performance labels using complicated accountability systems. Then, to meet school choice requirements, state education officials were required to explain the results in a way that parents can understand. The conflict reveals a critical shortcoming of future education policies that link school accountability and choice.

Goldrick-Rab, S. (2010). Challenges and Opportunities for Improving Community College Student Outcomes. *Review of Educational Research.* 80(3): 437-469.

According to the author, many of the democratizing opportunities provided by community colleges are diminished in the eyes of policy makers by inadequate rates of success. In particular, large proportions of students who enter community colleges do not persist for longer than a semester, complete a program, or attain a credential.

This study examines academic and policy research in search of explanations, emphasizing challenges stemming from three levels of influence: the macro-level opportunity structure; institutional practices; and the social, economic, and academic attributes students bring to college. The article provides examples of how factors operating at each level affect rates of success at key times, including the initial transition to college, the experience of remedial education, and persistence through credit-bearing coursework. Goldrick-Rab discusses potential and ongoing reforms that could increase rates of community college success by addressing one or more areas of influence (the macro, the institutional, or the individual). The study concludes that increasing success in the open-access, public 2-year sector requires reforms directed at multiple levels and cannot be achieved with either student- or institution-focused incentives alone.

Graham, R., Hall, R., & Gilmer, G. (2008). Connecting the dots: Information sharing by post-secondary educational institutions under the Family Education Rights and Privacy Act (FERPA). *Education and the Law*, 20(4), 301-316.

Misunderstanding of privacy laws and regulations impedes appropriate information sharing by post-secondary educational institutions under the Family Educational Rights and Privacy Act of 1974 (FERPA). Post-Virginia Tech regulatory amendments allow institutions to 'connect the dots' regarding a student's behavior and to be proactive in problem resolution. The article encourages university officials to re-examine FERPA, to eliminate restrictive information sharing barriers not required by the law or regulations, to educate faculty and staff on the scope of student information dissemination and offers a clear and concise policy and process to help fill this crucial gap in campus crisis action planning documents.

Hastings, J. S., & Weinstein, J. M. (2008). Information, school choice, and academic achievement: Evidence from two experiments. *The Quarterly Journal of Economics*, 123(4), 1373-1414.

This study examines a natural experiment and a field experiment that provided direct information on school test scores to lower-income families in a public school choice plan. Receiving information was found to significantly increase the fraction of parents choosing higher-performing schools. Parents with high-scoring alternatives nearby were more likely to choose non-guaranteed schools with higher test scores. Using random variation from each experiment, the authors find that attending a higher-scoring school increased student test scores. The results imply that school choice will most effectively increase academic

achievement for disadvantaged students when parents have easy access to test score information and good options from which to choose.

Helling, M.K. (1993, April). *School-based information to parents and parents' educational/occupational aspirations for their children*. **Paper presented at the Annual Meeting of the American Educational Research Association, Atlanta, GA.**

The study aims to identify the information that parents receive about their children's school experiences and to investigate the relationship between this information base and parents' aspirations and expectations regarding their children. The sample used in the study included 93 parents of first and fourth graders. The parents were interviewed and completed questionnaires collecting information on:

> Family characteristics,
> The content and quality of parental expectations for their children's academic performance,
> Aspirations regarding children's occupational and educational goals,
> Sources and level of information received regarding the children's development, grades and tests, and school events and policies.

The main findings of the study are summarized below:

> 33% of the parents reported receiving considerable information about school events,
> 45% of the parents reported receiving no information about their child's physical development,
> Parental perception of the consistency of information was significantly related to their commitment to aspirations,
> Parents of first grade girls reported significantly higher degree of commitment to expectation than those of first grade boys.

Los Angeles Times Staff. (2011). Grading the teachers: Value-added analysis. *Los Angeles Times.* **Retrieved May 29, 2012, from www.latimes.com/news/local/teachers-investigation**

The series is a joint project between the *LA Times* and the Hechinger Institute on Education and Media to look at the effectiveness of more than 6,000 teachers in the L.A. Unified district. This project is one of several supported by the Institute, which pairs media members with academics specializing in education topics to produce materials that would help reporters and the public understand issues related to school performance and policy.

Maeroff, G. (1998). *Imaging education: The media and schools in America.* **New York: Teachers College Press.**

According to the authors: "[T]he media, too, play an undeniable role in fixing impressions about education in the public consciousness … Images of schooling are formed as readers and viewers

mingle the impressions they glean from the media with their own personal experiences, producing a mélange of opinions about education." The book investigates patterns and implications of media coverage about education. It discusses topics such as newspaper responsibility and the "lamentable alliance" between the media and school critics. The text reports survey results revealing media effects on public perceptions of schools. It also reviews the impact of media on testing, learning, and desegregation.

Nicholas, D., & Marden, M. (1998). Parents and their information needs. A case study: Parents of children under the age of five. *Journal of Librarianship and Information Science*, 30, 35-48.

This article reports results of a study conducted by City University to examine the information needs of parents with young children residing in the London Borough of Haringey, UK. The parents' needs were studied using group and individual interviews. The study participants included 53 parents and five representatives of parents' organizations. Most parents needed information about child development, school, children's behavior and careers, training and education. The most commonly cited need was for information on health and child care. Significant differences were found between the needs of single mothers, older women, fathers and ethnic minority parents. Information currency and authority was found to be important. Parents turned to a wide variety of sources but oral information sources (professionals, friends and family) were the most important. Even though a large proportion of the parents used public libraries, those institutions were not considered a key source of parental information. The study concludes that parents' needs for information on schools, finance and child behavior are largely unmet.

Schneider, M., Teske, P., Roch, C., & Marschall, M. (1997). Networks to Nowhere: Segregation and Stratification in Networks of Information about Schools. *American Journal of Political Science*, 41(4), 1201-1223.

This paper analyzes networks as a strategy of information gathering. The authors propose that the quality of networks in districts with school choice should be higher than in other school districts. Network quality is also expected to increase with parental education levels. Networks are also expected to be segregated by race.

The analysis reveals that, despite the extreme claims of both its partisans and its critics, school choice is operating on the margins of established individual and social patterns of behavior. This is evident in the way parents construct their networks of discussion about education - one of the main ways in which they gather information about schools. The study also finds that dyadic discussions about education are highly segregated: Blacks speak mostly to Blacks, Hispanics to Hispanics, and Whites to Whites. Income and education effects also point to stratification in networks: higher status individuals are embedded in networks that provide more efficient sources for school-related information. This social group thus relies less on formal sources of information, such as newspapers. The authors conclude that - like so many other social

processes - in shopping for information about schools, race and class matter. School choice does not alter this fact.

Schneider, M., Teske, P., Roch, C., & Marschall, M. (1998). Shopping for Schools: In the Land of the Blind, The One-Eyed Parent May be Enough. *American Journal of Political Science,* **42(3), 769-793.**

This article examines how much information inner-city parents have about schools. The analysis is based on a survey of parents whose children are enrolled in public elementary schools in two inner-city school districts of Manhattan, New York.

The results suggest that, on average, parents have very little accurate information about the objective conditions in their local schools. Even in the absence of objective information, however, there is evidence of a matching process such that children are enrolled in schools that are higher on dimensions of education that the parents think are important. Parents seem to rely on cues provided by others when choosing a school. Yet there is little evidence that the majority of inner-city residents engage in extensive interpersonal communication about education. Evaluations of schools also appeared infrequently in the media. The authors conducted an extensive examination of newspapers in search of stories about schools in the districts under study. They found less than a dozen stories published within five years. Most were about the turmoil in a district's community school board. Television programs are even less likely to carry coverage of the performance of individual elementary schools.

Tornatzky, L.G., Cutler, Richard, Jongho, L. (2002). *College knowledge: What Latino parents need to know and why they don't know it.* **Tomas Rivera Policy Institute.**

To help their children make a successful transition between high school and college, parents need to be familiar with about the process and the actions that need to be taken at each point in time. This study aims to examine how and to what extent Latino parents acquire such information, dubbed "college knowledge." This refers to basic knowledge about the college experience, different kind of colleges, relative costs and advantages.

The findings are based on a telephone survey of 1,054 Latino parents in Chicago, New York, and Los Angeles and in-depth interviews with 41 of them. The survey included an eight-item "mini-test" of factual college knowledge. About two-thirds of respondents missed at least half of the items. The findings showed that knowledge deficits were significantly more evident among parents with lower incomes and educational levels and among first-generation immigrants. The main sources of information for Latino parents were counselors, teachers, family members, printed materials, and the Internet. Both English and Spanish mass media were conspicuously absent as sources of information.

Tym, C., McMillion, R., Barone, S., & Webster. J. (2004). *First-generation college students: A literature review.* **Research and Analytical Services, Texas Guaranteed Student Loan Corporation.**

This literature review looks at research on first-generation college students: their individual characteristics, retention issues, pre-college and during-college intervention efforts. According to the authors: "Research indicates that students whose parents did not attend college are more likely than their non-first-generation counterparts to be less academically prepared for college, to have less knowledge of how to apply for college and for financial assistance, and to have more difficulty in acclimating themselves to college once they enroll. They are also more at risk for not completing a degree because they are more likely to delay enrollment after high school, to enroll in postsecondary education part-time, and to work full-time while enrolled."

West, D.M. (2012). *How Blogs, Social Media, and Video Games Improve Education*. Washington, DC: Brookings Institution. Retrieved June 1, 2012, from www.brookings.edu/research/papers/2012/04/24-education-technology-west

The author highlights the way in which collaboration tools like blogs, wikis, social media, and video games have lowered information costs and altered the dynamics of information dissemination. It is estimated that there are more than 5000 education blogs in the U.S. covering a range of topics from school finance and education news to instructional technology and pedagogical techniques. Personal interactivity and the large reach of social media help school officials, nonprofit organizations, and advocacy groups to engage people and drive civic conversations. The author observes that amidst political polarization and ideological ferment, people turn to their personal networks for fact-checking and up-to-date information. Mobile applications and handheld devices are useful for sharing education and research-related information. In conclusion, the study draws attention to the multiple streams of information in the contemporary world and argues that through digital communications, students, teachers, parents, and administrators can share insights and develop a better understanding of instructional activities.

Yettick, H. (2009). *The research that reaches the public: Who produces the educational research mentioned in the news media?* Boulder, Colorado: The National Education Policy Center. Retrieved June 1, 2012, from nepc.colorado.edu/publication/research-that-reaches

The paper draws attention to the fact that even people who know or care deeply about schools often lack the time or inclination to consult academic journals on education. Instead, the trade and popular press become their main sources of information. This study, therefore, sets out to identify the various sources of research cited in different media. The author examined education-related stories from two prominent national newspapers (the *New York Times* and *Washington Post*) and an influential education publication, *Education Week*. An analysis of 864 articles from the three sources revealed that the education publication most often cited academic research, while the mainstream newspapers most often referenced research produced by government entities. The paper concludes with several recommendations for education reporters and editors, including broader source lists, better source vetting, and full disclosure of information sources.

1.E Emergency and Public Safety

Beady, C., & Bolin, R. (1986). The role of the black media in disaster reporting to the black community. *Natural Hazard Research.* **Working paper 56.**

This report is among the first attempts to analyze the impact and potential of black in media in reporting and responding to natural disasters. The study traces a sequence followed by black media operators in Mobile, Alabama, to select, gather, and disseminate information about pre- and post-disaster activities. The report includes findings from surveys of media operators and analysis of hurricane coverage 10 years before and 2 years after Hurricane Frederic in 1979. Their results suggest that the black media can play an important role in reporting for the black community during an actual disaster. The authors highlight the need for further research examining when, why and how members of black community evacuate during a disaster.

Blanchard-Boehm, D. (1997). Risk communication in southern California: Ethnic and gender response to 1995 revised, upgraded earthquake probabilities. Boulder, CO: Natural Hazards Research and Applications Information Center.

In January 1995, a working group released a report containing increased earthquake probability estimates for Southern California. Following the report, the U.S. Geological Survey (USGS) and Southern California Earthquake Center (SCEC) developed and distributed a publication for the general public that presents and explains the increased risk from the earthquake hazard in the area.

The purpose of this study was to visit one ethnically diverse community in southern California, gather preliminary data on the background and initial impact of the revised earthquake probabilities for southern California, and observe the role that the new information handbook played in educating the public of its risk to the earthquake hazard.

Almost 52% of the respondents were aware of the upgraded earthquake probabilities that indicated increased chances of a major earthquake happening in Southern California. The primary media channel by which respondents learned of the low-key warning message was television (73%). The secondary channels by which the respondents learned of the message were radio (33%) and newspaper (30%). Fifty-nine percent of Black and 58% of White respondents were aware of the upgraded earthquake probabilities indicating increased chances of a major earthquake happening in southern California - followed by Hispanic (46%) and Asian (44%) respondents. All groups learned of the low-key warning message mainly by watching television news stories, a range of 60-85%. A very high percentage of Black (85%) and Asian (85%) respondents rely on this media type. When broken down by ethnic group, the secondary channel by which the message was heard was by radio. Hispanic (60%) and Black (50%) respondents reported the radio as their secondary source of information. Hispanic respondents (40%) also reported that family and friends were a secondary source of information.

Blendon, R. J., Benson, J. M., DesRoches, C. M., Raleigh, E., & Taylor-Clark, K. (2004). The public's response to severe acute respiratory syndrome in Toronto and the United States. *Clinical Infectious Disease, 38*, 925–931.

Using data from 13 regional surveys, this article examines the public response to severe acute respiratory syndrome (SARS). It compares results across different Canadian provinces and the United States - regions with substantial variation in the number of SARS cases. Findings suggest that efforts to educate the public about the risk of SARS and appropriate precautions had mixed success. Some of the community-wide problems with SARS might have been avoided with better communication by public health officials and clinicians. The levels of public knowledge about SARS were similar in the Toronto metropolitan area and the United States. Although 9 in 10 survey participants knew that SARS was contagious and that there was no vaccine against it, only a half knew that there was also no effective treatment for people who had contracted SARS. More than one-third thought that such a treatment existed.

The findings highlight the range of effects that media coverage about an infectious disease outbreak may have. News can inform people about the ways in which a disease spreads, about the necessary precautions, and the availability of a vaccine. On the other hand, national and international news coverage of an outbreak may cause unnecessary concerns. People who are far from the site of the outbreak may start taking precautions as if they were in the affected area.

Butterworth, R. E., Klossel, K. A., & Veil, S. R. (2010). An assessment of broadcasters' use of new media and radar technology in TV severe weather coverage: Benefits, challenges, and a need for training. Paper presented at the 38th Conference on Broadcast Meteorology, Miami, FL.

This article examines how news media respond to severe weather threats. The researchers conducted extended interviews with broadcast meteorologists around the country. According to the study, meteorologists make use of online chat features and simulcast their information via the radio and Internet. The main challenge to the communication of severe weather crises lies in public understanding of the graphics and figures presented with new media and radar technology.

Callanan, V. (2012) Media consumption, perceptions of crime risk and fear of crime: Examining race/ethnic differences. *Sociological Perspectives* 55(1), 93-115.

This study compares the impact of multiple forms of crime-related media on white, Latino, and African American respondents. The analysis identifies differences in people's fear of crime and their perception of the crime risk in their neighborhoods. The data used in the article comes from a state-wide survey of 3,712 Californians.

The findings point to some differences in the impact of crime-related media, both among media formats and across racial/ethnic groups. Consumption of local television news significantly

elevated perceptions of risk and fear of crime for all groups. Crime-based reality programs produced equivalent fear, but the effects of newspaper and crime drama consumption were more variable. Realistic television content about crime was more influential on viewers' perceptions of and responses to crime than fictional accounts or newspapers.

Chiricos, T., & Eschholz, S. (2002). The racial and ethnic typification of crime and the criminal typification of race and ethnicity in local television news. *Journal of Research in Crime and Delinquency* **39(4), 400–420.**

Local news programming from three television stations in Orlando, Florida was analyzed for racial and ethnic content in relation to crime. The results indicated that Blacks were not overrepresented among TV news suspects relative to their proportion in the population or among those arrested in Orlando. Hispanics were slightly overrepresented in relation to their numbers in the population. Qualitatively, blacks and especially Hispanics who appeared as crime suspects did so in more threatening contexts than Whites. Blacks were more likely to appear as criminal suspects than as victims or positive role models, but this pattern was especially amplified for Hispanics. These results suggest that local TV news may contribute to the social construction of threat in relation to blacks and Hispanics, a condition that is associated with fear of crime, "modern racism," and the mobilization of various social controls and exclusions.

Cohen, E. L., Ball-Rokeach, S. J., Jung, J. Y., & Kim, Y. C. (2003). Civic actions after September 11: A communication infrastructure perspective. In A. M. Noll (Ed.), *Crisis Communications: Lessons from September 11* **(pp. 31–43). Chicago, IL: Rowman & Littlefield Publishers, Inc.**

Interpersonal and media storytelling were crucial for information dissemination about the September 11 attacks. This study investigates changes in the scope and intensity of media connections and local discussion among Americans in the aftermath of the tragedy. It identifies the multilevel communication resources that served as key drivers of civic engagement around 9/11. One major finding detailed in the article is the importance of mainstream media rather than community and ethnic news outlets during a national crisis.

More than two-thirds of the respondents surveyed in this study reported that after the attacks they were spending an increased amount of time with newspapers, TV, radio, the Internet, or in conversations with other community members. Participation in neighborhood storytelling and local discussions made people more likely to take civic actions in response to 9/11. Respondents who spent more time reading newspapers and talking with others also engaged in a broader range of civic activities.

Dearstyne, B. (2007). The FDNY on 9/11: Information and decision making in crisis. *Government Information Quarterly, 24,* **29-46.**

This article reviews and analyzes the essential lessons from the New York City Fire Department's use of information on 9/11/01. It draws heavily on an oral history archive

compiled by the Department after the event but withheld until 2005 and released only under court order. Analysis of the interviews shows that coordination and communication were serious problems; securing information early in the emergency was difficult; commanders lacked solid information to direct efforts; information was contradictory and difficult to interpret; the collapse of the WTC towers was difficult to conceptualize; improvisation was common; and false information compounded confusion. The oral history archive also offers insight into the information-processing and decision-making processes of commanders and front-line responders. The oral histories were useful in FDNY analysis of performance on that critical day but they do not provide definitive answers to critical questions such as the timeliness of the order to evacuate the towers. The use of information on 9/11 also provides other insights into the optimal use of information by emergency service departments. Specifically, more efficient inter-agency coordination (e.g. between FDNY and NYPD), facilitated by better communications tools, is recommended.

Durham, F. (2008). Media ritual in catastrophic time: The populist turn in television coverage of Hurricane Katrina. *Journalism, 9(1),* 95-116.

Television news coverage of Hurricane Katrina's impact on New Orleans and Mississippi presented viewers with broadcast journalists who were on the scene but largely left without access to traditional government sources. Through a textual analysis of transcripts of cable and network news reports, this study examines news media's performance during the six days following Katrina's landfall. Results suggest that the ritual of coverage was altered, and the sphere of consensus that surrounded coverage of 9/11 did not characterize coverage of Katrina. This was largely because journalists were left to their own devices to frame messages in the absence of government sources. As a result, the media largely focused on stories of common people rather than on the messages of elites.

Eisenman, D. P., Cordasco, K. M., Asch, S., Golden, J. F., & Glik, D., Long, A. (2007). Disaster planning and risk communication with vulnerable communities: Lessons from Hurricane Katrina. *American Journal of Public Health, 97*(suppl. 1), S109–S115.

The authors conducted 58 interviews with randomly selected evacuees living in Houston's major evacuation centers from September 9 to 12, 2005. The goal was to understand the factors influencing evacuation decisions in the impoverished, minority communities that were most severely affected by Hurricane Katrina.

The article suggests that effective disaster plans must account for the specific barriers encountered by vulnerable and minority populations. Removing the more apparent obstacles of shelter and transportation will likely be insufficient for improving disaster plans for impoverished, minority communities. The important influence of extended families and social networks demand better community-based communication and preparation strategies.

Eschholz, S., Chiricos, T., & Gertz, M. (2003). Television and fear of crime: Program types, audience traits, and the mediating effect of perceived neighborhood racial composition. *Social Problems* **50(3), 395–415.**

Recent media research suggests that both program content and audience traits are important factors in predicting fear of crime. Working from these premises, this article explores the relationship between watching television and fear of crime among twelve different audience sub-samples and six program types. Additionally, the authors examine whether respondents' perception of the racial composition of their neighborhood provides a mediating context for the television/fear relationship. Using a random telephone survey of 1,490 adults in Leon County, Florida, the authors found that program content and audience traits influence the television/fear relationship. More importantly, these findings demonstrate that perceived racial composition of neighborhood is a crucial dimension in structuring the TV/fear relationship, with television effects for several different program types located primarily among individuals who perceive they live in a neighborhood with high percentages of blacks. Results are discussed in terms of "social threat."

Fedorowicz, J., Gogan, J. L., & Williams, C. B. (2007). A collaborative network for first responders: Lessons from the CapWIN case. *Government Information Quarterly, 24,* **785-807.**

It is increasingly important for government agencies to collaborate across jurisdictional and functional boundaries. Inter-organizational systems supporting interagency collaboration must accommodate a wide range of factors from the external environment and participating organizations as part of their design and operation. This paper presents the findings from a case study of CapWIN, a collaborative network created to enable first responders to share information across jurisdictional and functional boundaries as they work together during emergencies and other critical events.

CapWIN was designed to increase inter-organizational communication and information sharing between local and federal authorities in Virginia, Maryland, and Washington, D.C. The study examines how aspects of the external environment and the agency context impeded or facilitated the CapWIN collaborative network and the inter-organizational system (IOS) that supports it. The authors identify factors affecting information sharing and collaborative processes, and describe how these factors interact to enable and constrain an IOS. Beyond economic, political, and strategic limitations of CapWIN, the implementation of IT technology was a major obstacle to the efficiency of CapWIN. The paper concludes with suggestions for further research on the interplay of environmental, organizational, and technical aspects of interagency collaboration networks as they evolve over time.

Gilliam, F., & Iyengar, S. (2000). The influence of local television news on the viewing public. *American Journal of Political Science***, 44(3), 560-573.**

Local television news is the primary source of public affairs information in the U.S. Stories about crime dominate local news programming because they meet the demand for "action news". The prevalence of this type of reporting has led to a crime narrative or "script" that includes

two core elements: crime is violent and perpetrators of crime are non-white males. The authors show that this script has become an ingrained heuristic for understanding crime and race. Using a multi-method design, they assess the impact of the crime script on the viewing public. Their central finding is that exposure to the racial element of the crime script increases support for punitive approaches to crime and heightens negative attitudes about African-Americans among white, but not black, viewers.

Henstra, D. (2010). Evaluating local government emergency management programs: What framework should public managers adopt? *Public Administration Review, 70,* **236–246.**

Local governments play a key role in emergency management. It is their task to develop the necessary policies and procedures to deal with community emergencies and their consequences. Public managers, however, find it difficult to evaluate and assess the quality of existing emergency management programs. This is because under most jurisdictions, emergency measures are rarely, if ever, activated.

This work draws on existing literature to identify best practices for emergency management. In an emergency, the demand for information rises quickly and dramatically, as citizens and news media turn to public authorities for information and advice. Questions quickly multiply regarding the causes of the emergency, the level of danger to the public, and what can be done to avoid harm. A local government that has developed an emergency communications plan is better able to transmit hazard information and to advise citizens concerning protective actions. At a minimum, an individual should be designated as the community's public information officer, who can serve as a consistent point of contact between the local government and citizens and the media.

Heverin, T., & Zach, L. (2010, May). *Microblogging for crisis communication: Examination of Twitter use in response to a 2009 violent crisis in the Seattle-Tacoma, Washington area.* **Paper presented at the 7th International Conference of the International Association for Information Systems for Crisis Response and Management, Seattle, WA.**

This research-in-progress paper reports on the use of microblogging as a communication and information sharing resource during a recent crisis. The goal of the larger research effort is to investigate the role microblogging plays in crisis communication during violent events. The case study examined in this work is the shooting of four police officers that took place in the Seattle-Tacoma area of Washington in 2009.

For the purposes of the analysis, a stream of over 6,000 publically available messages on the popular microblogging site Twitter was collected. Individual messages (or *tweets*) were categorized as information, opinion, technology, emotion, and action-related. The coding and statistical analyses of the messages suggest that citizens use microblogging as one method to organize and disseminate crisis-related information. Additional research is in progress to analyze the types of information transmitted, the sources of the information, and the temporal trends of information shared.

Unaffiliated citizens accounted for 82.3% of tweets about the crisis, showing that ordinary people rather than officials or organizational elites drove Twitter use during the crisis. The rest of the messages predominantly came from local media (8.3%), local organizations (about 4%) or alternative news sites (about 3%). Most tweets (79%) were coded as "informational" while fewer (16.8%) were "opinionated." Almost half of the information-sharing tweets provided URLs to photos, local and national news websites, audio files, videos, and other types of resources.

Jasso, H., Hodgkiss, W., Baru, C., Fountain, T., Reich, D., & Warner, K. (2009). Using 9-1-1 call data and the space-time permutation scan statistic for emergency event detection. *Government Information Quarterly, 26,* **265-274.**

During medium to large-scale emergency events such as fires or earthquakes, emergency response teams must be deployed to the location of the event in a timely fashion. Information gathered from 9-1-1 call makers is useful for this, but is not always accurate. This paper shows how the space–time permutation scan statistic can be used to detect the presence and location of such events by monitoring the overall spatiotemporal pattern of 9-1-1 emergency calls instead. In an analysis of 9-1-1 call data, the top detected clusters were found to correlate with emergency events as reported on the news, demonstrating the algorithm's usefulness for automatically estimating their location and temporal extent. The authors show how the detection procedure works in cases where the emergency event generates a small but statistically significant increase in the number of 9-1-1 calls, as well as cases where events must be detected against a large background activity of 9-1-1 calls.

Koliba, C. J., Mills, R. M., & Zia, A. (2011). Accountability in governance networks: An assessment of public, private, and nonprofit emergency management practices following Hurricane Katrina. *Public Administration Review, 71*, **210–220.**

This article proposes an accountability model organized around democratic (elected representatives, citizens, and the legal system), market (owners and consumers), and administrative (bureaucratic, professional and collaborative) relationships. This model draws from 2005 events following Hurricane Katrina. Multiple failures of governing networks to plan for and respond to Katrina include a breakdown in democratic, market, and administrative accountability as well as a pervasive confusion over trade-offs between accountability types emerging from crises. This work criticizes the local authorities in Louisiana for their failure to clarify emergency roles between various agencies and nonprofits, failure to have pre-contracted the provision of emergency goods, and poor communication with the Red Cross. Specific to communication, this article implies that local authorities should develop better inter-agency communication and coordination practices, as well as develop better communication with federal, nonprofit, and private organizations.

Lee, K. L., Meyer, R. J., & Bradlow, E. T. (2009) Analyzing risk response dynamics on the Web: The case of Hurricane Katrina. *Risk Analysis, 29(12),* 1779-1792.

This study explores the dynamics of information gathering as Hurricane Katrina developed and hit South Florida and the Northern Gulf Coast. The authors use a data set documenting the hourly web-surfing behavior of over 140,000 Internet users in five southeastern states in August 2005. Through elementary statistical methods and advanced techniques from functional data analysis, the study examines how storm events (such as the posting of warnings) affected traffic to weather-related websites. It also inspects how this traffic varied across locations and by characteristics of the web user. A general finding was that spatial-temporal variation in weather-site web traffic generally tracked the timing and scale of the storm threat experienced by a given area. There was, however, considerable variation in this responsiveness. Residents in Florida counties that had been most directly affected by Hurricane Dennis just a month earlier, for example, displayed more active visitation rates than those who had been less affected. The study also finds evidence of a gender effect where male users displayed a disproportionately larger rate of visitation to weather sites given the onset of storm warnings than females.

Liu, B. F. (2007). *Playing politics. Why the U.S. government inadequately communicates Spanish-language disaster information.* Berlin, VDM Verlag.

Based on interviews with government representatives, this study explores the limitations in official communication of critical emergency information to Hispanic communities in the U.S. The book identifies:

> The channels used by the U.S. government to communicate disaster information to Hispanics.
>
> The entities responsible for communicating Spanish-language disaster information according to government officials.
>
> The entities that government officials believe are most capable of producing Spanish-language disaster information.

Liu points out that government PR practitioners are challenged in their work not only because of limited resources, but also due to the wide audiences that they need to address. Focusing on reaching large demographic groups, government communication often leaves out minorities.

McGuire, M., & Silva, C. (2010). The effect of problem severity, managerial and organizational capacity, and agency structure in intergovernmental collaboration: Evidence from local emergency management. *Public Administration Review, 70,* 279-288.

Like most public managers nowadays, local emergency managers operate within complex, uncertain environments. Rapid changes in the scope and severity of current challenges increase the extent of intergovernmental collaboration necessary to address them. This study was based on large data set from a national survey of county emergency management agency directors. Results indicated that variations in intergovernmental collaboration depended on the problem severity, managerial capacity, and structural factors. Public managers who perceived problems as severe, possessed specific managerial skills, led high-capacity organizations, and operated in

less complex agency structures, did collaborate more often and more effectively across governmental boundaries. These results suggest two potential barriers for crisis communication: 1) the impact of the perceived severity of the crisis by government officials and 2) the complexity of intergovernmental structure.

Nelson, L. D., Spence, P. R., & Lachlan, K. A. (2009). Learning from the media in the aftermath of a crisis: Findings from the Minnesota Bridge collapse. *Electronic News, 3(4)*, 176-192.

This study builds on previous examinations of social and mediated learning, expanding the scope to the context of crises. The authors argue that mediated learning might be particularly important during crises. It could serve to ameliorate the negative emotional consequences of such events as well as to prompt the learning of information that might be important in future emergencies. Using data collected from residents of Minneapolis after the collapse of the I-35W Mississippi River Bridge, the study demonstrates that individuals might have the capacity to learn from the media in the midst of a crisis. The results also suggest that women report learning more than men from crisis media coverage.

Perry, R. W., Lindell, M. K., & Greene, M. R. (1982). Crisis communication: Ethnic differentials in interpreting and acting on disaster warnings. *Social Behavior and Personality, 10*(1), 97–104.

This report examines the problem of communicating emergency information to multi-ethnic communities. The researchers conducted a survey of flood evacuation warning recipients from a small western U.S. town with a large segment of Mexican-American citizens. Analyses of these data revealed three primary differences by ethnicity. First, Mexican-Americans were more skeptical than whites about believing warning messages, no matter how specific the message. Second, Mexican-Americans interpreted the same warning messages as indicating lower levels of personal danger. Third, Mexican-Americans were less likely to evacuate than whites.

Perry, R. W., & Nelson, L. (1991). Ethnicity and hazard information dissemination. *Environmental Management, 15*(4), 581–587.

Citizens from two communities were interviewed about the sources where they had previously obtained information about environmental hazards and their preferences for different communication channels. Three ethnic groups – non-Hispanic Whites, African-Americans, and Mexican-Americans – were represented among those interviewed.
While all three groups described similar patterns of past information gathering, Mexican-Americans relied on interpersonal contacts more than the other two groups. Ethnic differences also emerged when citizens were asked about their preferred sources of environmental information. While radio was preferred by all three groups, only minority citizens expressed a preference for local television as a dissemination mode and only Mexican-Americans favored neighborhood meetings. Mailed dissemination and newspapers were preferred primarily by non-Hispanic Whites and African-Americans.

Piotrowski, C., & Armstrong, T. R. (1998). Mass media preferences in a disaster: A study of Hurricane Danny. *Social Behavior and Personality, 26(4)***, 341-346.**

This study uses a survey to assess individual reliance on various media formats in obtaining information and news during Hurricane Danny in July 1997. The results suggest that most people relied heavily on local television, cable weather stations, and local radio stations. The next most popular group of media included cable television news and the local newspaper. The Internet was used less frequently for information about the storm as compared to other media (an unsurprising finding since the study was conducted in the 90s when Internet penetration was low).

Romer, D., Jamieson, K. H., & Aday, S. (2003). Television news and the cultivation of fear of crime. *Journal of Communication***, 53(1), 88-104.**

Cultivation theory suggests that public fear of crime is fueled in part by heavy exposure to violent dramatic programming on prime-time television. This study examines the extent to which fear of crime may be produced by local television news.

The paper describes three separate studies conducted with different datasets. One of them was based on a national survey of perceived risk. Another relied on a 5-year span of the General Social Survey (1990–1994). The last study used a survey of 2,300 residents of Philadelphia conducted by the researchers.

The results indicated that across a wide spectrum of the population, and independent of local crime rates, viewing local television news was related to increased fear of and concern about crime.

Schooley, B. L., & Horan, T. A. (2007). Towards end-to-end government performance management: Case study of interorganizational information integration in emergency medical services (EMS). *Government Information Quarterly, 24,* **755-784.**

A recent line of e-government research has emphasized the importance of interorganizational information sharing in the public domain. This study focuses on information sharing relative to service performance. It utilizes a time-critical information services (TCIS) conceptual framework as an analytical lens. TCIS highlights multiple dimensions of information sharing, including operational, organizational, and governance factors as well as timeliness and quality as key performance metrics. A case study approach was employed to examine the exchange of performance-related information in a key time information critical service: a county-wide emergency medical services (EMS) system in San Mateo, CA.

The paper discusses performance measures in emergency medical services (EMS), describes the TCIS analytical lens, the study methodology, and the case study under investigation. The case study illustrates promising factors that can enhance information sharing across organizations, while noting that considerable gaps remain in achieving an end-to-end IT-enabled performance approach. The dynamic, complex, time-critical, and multivariable nature of emergency and

trauma care work creates a number of technology usability issues and challenges, which cause emergency professionals to take a conservative approach to new information and technologies to support EMS. The case study provides support for the thesis that interorganizational alignment including a shared set of goals and cooperative agreements can facilitate information sharing. Case study examples illustrate that clear lines of interorganizational authority and accountability tend to enhance information sharing and technology.

Skogan, W. G. (2006). *Police and Community in Chicago: A Tale of Three Cities*. **Oxford University Press**

This longitudinal study explores the shifts in police work happening in Chicago over a period of 13 years. The author discusses three major aspects of community policing: decentralization, citizen involvement, and problem solving. Through surveys with residents and interviews with police officers, Skogan identifies a series of challenges facing the city. Key findings detailed in the book reflect the important racial differences in perceptions of civic life and the role of the police. Describing police-community relations in the city through the 90s, the author talks about the "three Chicagos", referring to the diverse images of the city as seen through the eyes of African-American, Latino, and White residents.

Spence, P. R., & Lachlan, K. A. (2009). Serving the public interest in a crisis: Radio and its unique role. *Journal of Radio & Audio Media, 16*(2), 144-159.

During times of crisis, radio stations frequently operate in the public interest, disseminating critical information about events and remedial steps that can be taken by the affected public. This work examines the level of preparedness across varying stations, as well as self-perceptions concerning the role of radio in these instances. The analysis is based on a survey of 127 radio stations. The study finds that many stations do not invest much time in crisis training and preparedness, relying instead on the Emergency Alert System. The authors identify differences in findings across market size, format, and frequency are discussed. Findings suggest that radio stations in larger markets are less likely to have a communications plan in place.

Spence, P. R., & Lachlan, K. A. (2010). Disasters, crises, and unique populations: Suggestions for survey research. *New Directions for Evaluation, 26*, 95-106.

This study compares differences in crisis preparation, information-seeking patterns, and media use across racial groups in the aftermath of Hurricane Katrina. Surveys are collected from 935 Katrina evacuees relocated in different areas of the United States. Results indicate differences in crisis preparation and information seeking across races. The findings highlight the continued need to create messages encouraging crisis preparation, especially among at-risk subpopulations.

Spence, P. R., Lachlan, K. A., Burke, J. M., & Seeger, M. W. (2007). Media use and information needs of the disabled during a natural disaster. *Journal of Health Care for the Poor and Underserved, 18*(2), 394-404.

This study examines differences in evacuation, crisis preparation, information-seeking patterns, and media use among the communities of disabled and non-disabled evacuees in the aftermath of Hurricane Katrina. Surveys were collected from 554 Katrina evacuees temporarily relocated in different areas of the United States. The analysis finds differences in crisis preparation and evacuation plans, with disabled subpopulations being more likely to prepare emergency supplies but less likely to have an evacuation plan. Differences between the disabled and non-disabled subpopulations also emerged in information-seeking habits. Media use patterns were similar between the two groups.

Subervi, F. (2010) An Achilles Heel in Emergency Communications: The Deplorable Policies and Practices Pertaining to Non-English Speaking Populations. Emergency Communications Project, McCormick Foundation.

This study finds that during emergencies, government agencies may not be fully prepared to reach non-English-speaking populations via broadcast media. The report focuses on Central Texas. In this region, most Spanish-language broadcast stations do not have a news department. They lack the needed staff, policies and procedures to inform their audiences of emergencies. This may be particularly problematic when an emergency happens during evenings or weekends. At those times, stations do not have the personnel to promptly air emergency related news or alerts.

Subervi, F., & Correa, T. (2008). *Assessing the Diversity of News Voices in the Latino-Oriented Broadcast Media in Central Texas.* **Report presented to the Necessary Knowledge for a Democratic Public Sphere Program of the Social Science Research Council.**

Using metrics suggested by Lloyd & Napoli (2007), this study documents the narrow range of broadcast news options in Central Texas. The report suggests that this lack of media diversity is especially detrimental in the Latino-oriented market. A large percent of the Hispanic audience does not have access to general market media voices due to language barriers.

A case study demonstrating the emergency communications problems caused by this lack of broadcast options was informally documented by Federico Subervi in 2011.

On Sunday, September 4 2011, Central Texas suffered from devastating wildfires. The region most affected by the disaster was Bastrop County, an area with approximately 33% Latino population. On the day of the disaster, no news stories about it were reported by the regional Spanish-language radio and TV stations. Subervi identifies two major problems that caused this news blackout:

> Spanish-language radio stations in the area do not have news department staff and do not produce original reporting.

> Spanish-language TV stations have news staff, but they do not have news programs on weekends.

Tanner, A., Friedman, D., Barr, D., & Koskan, A. (2008). Preparing for Disaster: An Examination of Public Health Emergency Information on Local TV Web Sites. *Electronic News*, 2(4), 218-234.

This article examines the volume and scope of public health emergency information published by local television websites. Stories about chemical agents, health pandemics, weather-related disasters and other threats identified by the Center for Disease Control and Prevention are collected and analyzed. The sample selected by the authors includes five large, five medium, and five small television markets randomly chosen from the Nielsen-defined designated market areas.

The vast majority (96%) of websites included in the sample contained some emergency preparedness information. Half of those stories were local, while a third were national. Examining the articles for interactivity, the authors found that less than a quarter (24%) contained links to other information. Stories including hyperlinks mostly encouraged people to visit other items on the same website (44%) or government sites like those of the CDC or FEMA (23%). Government sources were also the most quoted in the stories. Stations positioned in small markets were more likely to cover health emergency content, while larger market stations focused more on infrastructure issues.

The study also points out that public health information, while generally available, was not always easy to locate within the local TV websites. Furthermore, online articles rarely provided more information than what was presented in news broadcasts. The authors suggest that more resources need to be invested in making local TV websites truly useful for public health emergency preparedness.

Tanner, A., Friedman, D. B., Koskan, A., & Barr, D. (2009). Disaster communication on the internet: a focus on mobilizing information. *Journal of health communication*, 14(8), 741-755.

This article is based on the content analysis reported in Tanner et al (2008) and summarized above. It uses the same sample of public health emergency stories from local TV station websites. The focus in this case is on investigating the presence of mobilizing information (MI), which may cue an individual to action concerning a particular health behavior. The study focuses on three types of MI identified by previous research. Those include location information (times and places for particular activities), identification information (names and contacts relevant to the story) and tactical information (instructions for certain actions).

The analysis found mobilizing information in less than half (44%) of the analyzed stories. When MI was provided, it was most likely to be identification-related (40%), followed by tactical (36%) and location (24%). Mobilizing information was also more likely to be included in syndicated and wire service stories.

The authors conclude that more attention needs to be paid to overcoming the digital divide, and more resources dedicated to providing mobilizing information on the Web. A major problem discussed by the study is the lack of staff training for covering major public health emergencies.

Taylor-Clark, K., Koh, H., & Viswanath, K. (2007). Perceptions of environmental health risks and communication barriers among low-SEP and racial/ethnic minority communities. *Journal of Health Care for the Poor and Underserved, 18*(4 suppl.), 165–183.

Lower socioeconomic positions (SEP) and racial/ethnic minority communities experience a disproportionate burden of environmental hazards. Research suggests that such communities may have concerns about environmental risks different from those of their high-status and/or White counterparts. These groups also face disproportionate barriers to accessing and utilizing public health information.

This paper reports the results of seven focus groups conducted in three low-SEP Massachusetts communities, with a large proportion of racial/ethnic minorities. Focus group participants mentioned a variety of environmental problems stemming from their living conditions. They also noted several challenges related to the finding and processing of environmental health information effectively. These include information overload, frequent dissemination of contradictory information given the uncertain nature of science, and complex language. The results suggest that strategic communications about environmental and health issues must take into account the local media mix when planning an outreach.

Taylor-Clark, K. A., Viswanath, K., & Blendon, R. J. (2010). Communication inequalities during public health disasters: Katrina's wake. *Health Communication, 25*(3), 221-229.

This study evaluates the effects of low socioeconomic position (SEP) and social networks among Black Hurricane Katrina victims on access to and processing of evacuation orders, and abilities to evacuate before the storm hit. The authors also explore whether SEP, moderating conditions, and communication outcomes affected risk perceptions of the storm's severity and compliance with evacuation orders.

The analysis was based on survey data collected in September 2005 among African-American respondents in shelters throughout Houston, TX. Results indicated that having few social networks, being unemployed, and being younger were factors significantly associated with having heard evacuation orders.

Vanderford, M., Nasoff, T., Telfer, J., & Bonzo, S. (2007). Emergency communication challenges in response to Hurricane Katrina: Lessons from the Centers for Disease Control and Prevention. *Journal of Applied Communication Research, 35*(1), 9–25.

In response to Hurricane Katrina's extensive destruction and related public health threats, the Centers for Disease Control and Prevention (CDC) deployed more than 1,000 staff to its emergency operations center and to affected areas. Among them were members of CDC's Emergency Communication System.

This paper describes the strategies and tactics used by health communication specialists during the pre-event, response, and post-event stages to address a range of emergency communication exigencies. It highlights three difficult challenges for CDC communication

specialists during Hurricane Katrina: rapid dissemination of health messages; adaptation of health messages for diverse audiences, locations, and circumstances; and phasing of key risk messages during the emergency response.

Veil, S. R., & Ojeda, F. (2010). Establishing Media Partnerships in Crisis Response.
***Communication Studies, 61*(4), 412-429.**

Prominent crisis communication researchers have suggested that practitioners should work with the media as partners when managing a crisis. This study provides an example of a crisis case in which the media was embraced as a partner in the crisis response. It examines the crisis response following the bombing of the Alfred P. Murrah Federal Building in Oklahoma City.
Interviews with media and government representatives revealed that organizations that were are forthcoming with information were less likely to be targeted for criticism by the media. Media outlets were shown to act not only as information sources, but also as resource managers in times of crisis. The authors emphasize that better relationship between the government and the media provides more effective crisis communication.

Wray, R., Rivers, J., Whitworth, A., Jupka, K., & Clements, B. (2006). Public perceptions about trust in emergency risk communication: qualitative findings. *International Journal of Mass Emergencies and Disasters, 24*(1), 45–75.

Four Schools of Public Health conducted focus groups across the U.S. with different ethnic groups to inform the development of public messages and strategies in the event of an emergency. This study conducted a secondary analysis of the transcripts to explore factors related to trust in government.
Local officials and emergency responders were more trusted than federal officials, and were associated with greater levels of disclosure and empathy. Past experience contributed to perceptions of trust. Urban groups were more concerned about officials' honesty; whereas rural groups were concerned about resource allocation. Local organizations and agencies were most trusted, as well as the United States Centers for Disease Control and Prevention (CDC), United States Federal Emergency Management Agency (FEMA) and the American Red Cross (ARC). The findings lead to recommendations related to allocation of emergency response resources for underserved areas; integration of local and federal agencies in emergency response preparedness and communication; and an emphasis on full disclosure, action steps, and leadership in emergency response communication.

Yanich, D. (2001). Location, location, location: Urban and suburban crime on local TV news.
***Journal of Urban Affairs, 23*(3/4), 221-241.**

This study examines how the media, and particularly local television news, portray the urban-suburban dimensions of crime in two major television markets in the US. Findings show that local newscasts in the markets differed significantly along the urban-suburban dimension of crime coverage. They were consistent in the message that the city was a dangerous place. The

article further discusses how this type of message influences the shape of public policy responses.

Yanich, D. (2004). Crime Creep: Urban and Suburban Crime on Local Television News. Journal of Urban Affairs. 26(5), 535–563

While crime rates in the U.S. have gone down in the past eight years, public opinion polls still indicate that crime and public safety are overriding concerns of citizens and communities. Polls also tell us that a significant majority of U.S. citizens get most of their information from local television news and, in general, they believe what they are being shown and told. In short, these newscasts play a pre-eminent role in the social construction of reality and, by extension, in forming the cognitive maps that citizens use to understand their communities.

This article examines how the media, particularly local television news, portray the urban/suburban dimensions of crime in 20 television markets across the US. The study is a major extension of an earlier analysis of two markets. Findings show that local newscasts consistently focused on suburban crime in spite of the fact that the suburban crime rate was about one-half of the crime rate of urban areas. The newscasts also conveyed the message that the city was a dangerous place.

Yanich, D. (2005). Kids, Crime and Local TV News. Crime & Delinquency. 51 (1), 103-132

The vast majority of crime reporting occurs on local television news and in newspapers. Although crimes are extraordinary events, they assume an ordinariness that only daily reporting can give them. The obvious question is what does the news tell us about crime. This article compares the coverage of adult crime and the coverage of what the author has termed "KidsCrime," defined as a story in which a juvenile was either the suspect or the victim (or both). The study investigates the nature of that coverage and reports how it compares to official statistics. The analysis tests for differences between adult crime and KidsCrime coverage regarding offenses, victimization, production techniques, and other attributes. This examination of the crime coverage revealed (a) significant differences between KidsCrime and adult crime coverage, (b) a portrait of crime that was consistent on some parameters and inconsistent on others with the official statistics, and (c) there was a presentation approach that discouraged critical viewing.

1.F Environment and Planning

Abel, T. (2008). Skewed riskscapes and environmental injustice: A case study of metropolitan St. Louis. *Environmental Management,* 42, 232–248.

This article is a case study of the risk for air pollution exposure across metropolitan St. Louis, Missouri. The analysis found that minority and low-income residents were disproportionately closer to industrial pollution sources. The study illustrates that air quality continues to be a challenge for urban communities, especially for minorities and low-income populations. The author argues that information about these kinds of environmental justice disparities can better help advocates and policy-makers develop specific strategies. He also advocates for better "within community" environmental justice efforts that emphasize community member involvement in combating disproportionate pollution.

Al-Kodmany, K. (1999). Using visualization techniques for enhancing public participation in planning and design: process, implementation, and evaluation. *Landscape and Urban Planning*, **45(1).**

This article describes three visualization tools employed during a participatory planning process in Chicago's Pilsen neighborhood in different phases of the planning process to maximize public input. In the initial neighborhood design workshops, a GIS visualization along with an artist provided interactive map images of the neighborhood. The artist encouraged citizen participants to discuss ideas and gave instant feedback sketches. This exercise was useful for problem identification and brainstorming. The third tool employed in the project was computer photo-manipulation. It was used to view photorealistic examples of proposed design prototypes within the neighborhood, and was useful for previously defined design problems.

Al-Kodmany, K. (2001). Bridging the gap between technical and local knowledge: Tools for promoting community-based planning and design. *Journal Of Architectural And Planning Research*, **18(2).**

This project was a follow-up to Al-Kodmany's previous work discussed above. The tools employed for participatory planning in this case were expanded to include GIS map images, an artist, a scale model, and paper maps. The GIS visualization helped to organize and display vast amounts of complex information. It allowed designers incorporate cultural features, and helped participants bridge their diverse perceptions. This form of data presentation made residents more engaged in the planning process. One weakness of this approach is that it can potentially disempower citizens through lack of control over the technology and the lack of local knowledge in GIS databases.

California Local Government Commission. (2012) *Participation tools for better community and land use planning toolkit*. **Retrieved June 1, 2012, from www.lgc.org/freepub/community_design/participation_tools**

A guidebook website designed to encourage community participation in land use planning. Topics include: the strengths of public participation in community planning, computer simulation as a participation tool, public participation and visual surveys, participatory land use mapping, and how to organize a community mapping exercise.

Chen, Z., Gangopadhyay, A., Holden, S., Karabatis, G., & McGuire, M. (2007). Semantic integration of government data for water quality management. *Government Information Quarterly,* **24, 716–735.**

This project aims to expand currently available tools for collecting water quality data to give government officials and the general public more meaningful access to such information.

In order to interpret water-quality data, government agencies and water monitoring councils have designed several tools, including the EPA's STORET database (www.epa.gov/storet), the USGS National Hydrography Dataset (nhd.usgs.gov), and the Maryland Water Monitoring Council's (MWMC) Clickable Map (cuereims.umbc.edu/website/mwmc). However, these tools are not integrated and do not provide meaningful data analysis to help officials make decisions. The authors took elements from each of these tools to create a new comprehensive tool using semantic networks and reported positive progress toward more effective data integration systems for government agencies in order to help officials and citizens make more informed decisions about water quality policies.

Cockerill, K. (2003). Testing language: Media language influence on public attitudes about river management. *Applied Environmental Education and Communication,* **2(1), 23-37.**

The study examines news coverage of flooding in the Davenport, Iowa-based *Quad-City Times* newspaper. A major goal was to evaluate the associations between positive/negative coverage and support/lack of support for flood control policies. The analysis found that positive coverage, which characterized flooding as "natural and beneficial" was associated with less support for policy intervention, and negative coverage was associated with stronger support for local policy remedies. Scientists cited in the study pointed out that most flood-related news articles lacked information about river processes or the way human interventions have affected those processes over time.

Crow, D. (2010). Local media and experts: Sources of environmental policy initiation? *Policy Studies Journal, 3*8(1).

This article used a comparative case study approach to look at a contentious water rights issue in Colorado in 1998. Twelve communities attempted to alter water rights laws in order to protect recreational water in their areas. The study looked at the role of policy entrepreneurs and local media coverage of the case. Results suggested that experts wielded a higher level of influence than citizens in promoting the policy changes. When citizens acted as policy entrepreneurs, or advocates, the result was more controversy within the community, more media coverage early in the case, and less positive media coverage. Media coverage in general did not much influence the debate, as it proliferated only after the policy decisions had been made in 10 of the 12 communities. Successful policy change led to local media coverage, but not the other way around.

Elwood, S., & Leitner, H. (1998). GIS and Community-based Planning: Exploring the Diversity of Neighborhood Perspectives and Needs. *Cartography and Geographic Information Science*, 25(2).

Using a participatory research design, this article examines the problems that neighborhood groups face in accessing and using GIS (Geographic Information System) data sources and technology. The study looks into the geographic information needs of these groups, their perceptions of the usefulness of GIS technologies, and the specific concerns they have about GIS. The authors review the notion of *access*, arguing that it cannot be reduced to the ability to obtain data, hardware and software. According to them, *access* also needs to incorporate the group's awareness of information sources and GIS programs, as well as their ability to utilize the technology and data in meaningful ways. Comparing different community perspectives, this paper attempts to provide explanations for similarities and differences among groups. It argues that factors and conditions at the city, organizational, and individual scales all shape the opportunities and constraints of neighborhood groups with respect to GIS access, application ideas, and concerns.

Ferguson, D., & Smith, M. (2012) No frackin' way: Activism in the Marcellus Shale region. *Business Research Yearbook*, 19(2), 497-504.

The authors investigate the communications strategies used by activists and the energy industry during a 2008 controversy over proposed hydraulic fracturing in the Marcellus Shale Formation, which stretches from New York through Pennsylvania, Ohio and West Virginia.

Ganaptati, S. (2011). Uses of public participation geographic information systems applications in E-Government. *Public Administration Review*, 71 (3), 425-435.

Local governments are increasingly using geographic information systems (GIS) for a variety of public administration functions, including transportation and planning. Applications of GIS include evaluating neighborhood relationships, locations of businesses and residences, natural environment sites (such as watersheds, forest areas and floodplains), land use and zoning, parks and recreation, as well as utility services. Between 2002 and 2004, city/county jurisdictions using GIS programs to create maps and display data increased from 63.4 to 73.3 percent. However, there was less progress in making government GIS-related information available online. In some contexts, users themselves can add data to the maps, allowing for a two-way dialogue between local government agencies and citizens. This sharing capability has the potential to impact agencies in a variety of ways. According to the author, two areas that could benefit from this are park management and economic development.

Kruger, L. E., Mazza, R., & Lawrence, K. (Eds.). (2007). *Proceedings: National Workshop on Recreation Research and Management*. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

This document outlines a strategy for the U.S. Forest Service outdoor recreation research program. The report includes a call for better information management during forest planning research, issue-specific research, and documentation of public input and agency responses. A chapter by Deborah Chavez (titled *Ethnic Diversity and Recreation Preferences*) discusses a study of the communication between park visitors and managers at the Angeles National Forest, Southern California. The study found that 45 percent of Latino visitors to the forest spoke only Spanish and determined that sharing information about the forest via mass media was not effective in terms of reaching visitors. In response, park managers initiated a Forest Information Van, which traveled to visitors in different areas of the forest and provided information in Spanish. Additionally, park managers developed "eco-teams" that hired youth from Los Angeles and trained them to interact with visitors.

Lane, M., & McDonald, G. (2005). Community-based environmental planning: Operational dilemmas, planning principles and possible remedies. *Journal of Environmental Planning and Management*, 48(5).

The paper examines the 'bottom-up' vs. 'top-down' dichotomy of environmental planning. It lays out six key problems with the community-based environmental planning (CBEP) approach:

1. The conceptualization of 'community' which poorly accounts for difference
2. Problems of inequality
3. The organizational capacity and efficacy of community groups
4. The scale of CBEP
5. The types of knowledge utilized by communities in environmental management
6. The potential for parochial concerns to dominate the priorities and agenda of community organizations.

Then the authors suggest four key strategies to address challenges in environmental planning:

1. Enabling 'community' action yet respecting diversity and difference
2. Achieving widespread, yet equitable participation
3. Ensuring that community 'delivers' as an agent of planning
4. Developing a deliberative process that both respects and utilizes indigenous and scientific knowledge in planning.

Shapiro, M. (2005). Equity and information: Information regulation, environmental justice, and risks from toxic chemicals. *Journal of Policy Analysis & Management*, 24(2), 373-398.

This study looked at toxic chemical release data across 45 states, finding evidence that current regulations requiring industries to provide information about emissions have disproportionately benefited non-minority, higher-income, better-educated communities. Information barriers are the key challenge here: better-educated communities are able to overcome disadvantages coming from ethnic composition. According to the author, the volume of toxic chemical emissions from U.S. manufacturing facilities has been reduced since information about it

became available. This happened thanks to the 1986 Emergency Planning and Community Right-to-Know Act (EPCRA). However, obtaining and processing information on local emissions requires somewhat advanced technical knowledge. Communities must pay the cost of collecting that information and coming together to take action against perceived violations against clean air laws. The author found some support for the effectiveness of state information dissemination policies and broader right-to-know programs in lowering barriers to collective action for affected communities. This finding indicates that state agencies play an important role providing additional assistance to help communities use and interpret emission data.

1.G Transportation Systems and Issues

Anable, J. (2005). 'Complacent Car Addicts' or 'Aspiring Environmentalists'? Identifying travel behaviour segments using attitude theory. *Transport Policy* **12, 65-78.**

This article explores the willingness of community members to take a day trip without using their car. The authors found that attitudinal orientations had more impact on willingness to reduce car use than more traditional socio-demographic factors and personal characteristics. The study demonstrates that communities attempting to influence individual behavior need to tailor their communication strategies according to the attitudes of their target audience. For example, to convince a "malcontented motorist" to leave the car at home, public information campaigns should emphasize the frustrations of driving. To decrease car use among "aspiring environmentalists" on the other hand, officials should focus on providing clear information on alternatives to driving. Most importantly, the authors conclude that given the different predispositions with which people come to their decision-making, "soft" factors like transport information and marketing campaigns may have greater impact than the traditional typical "hard" infrastructural investments that governments generally rely on.

Archer, S. (2012). Explaining the ins and outs of passenger information technology. *Digital Community Transportation: Returning Transit to the Community***. Community Transportation Association of America.**

This piece outlines recommendations for best practices in serving user information needs in the area of public transportation. The suggestions come from transit systems that have tested a range of options for user-information infrastructures. These include YoloBus of Yolo County, California, Johnson City Transit System in Tennessee, Greater Lafayette City Bus in Indiana and Metro Transit in Oklahoma City, Oklahoma.

Commuters need real-time information about their trip: the current status of their bus, the number of available public bicycles, or the availability of alternative transportation. The article reports that passengers perceive their trip as "better" when they have more up-to-date

information, even if the actual wait is longer. Addressing this could increase ridership, public satisfaction and willingness to invest in public transit.

Ben-Elia, E., & Shiftan, Y. (2010) Which road do I take? A learning-based model of route choice with real-time information. *Transportation Research Part A: Policy and Practice*, **44(4), 249-264.**

This study modeled the impact of information on drivers' decisions about route choices. The research was conducted in Japan, where drivers tend to rely on broadcasted traffic information, which may be inaccurate by the time the information hits the airwaves. The authors found that information and experience had a combined effect on route selection, but behavior varied depending on the type of information provided.

According to the article, this kind of modeling is key for improving designs for advanced traveler information systems (ATIS), a component of intelligent transport systems that is garnering significant research attention. ATIS have the potential to inform, monitor and perhaps even charge travelers for using particular routes. Combining ATIS with other GPS-based path-finders is expected to reduce travel time uncertainty and alleviate congestion issues.

Blumenberg, E. (2002). On the way to work: Welfare participants and barriers to employment. *Economic Development Quarterly,* **16.**

The author looked at barriers to employment for welfare recipients in California, finding that transportation access is significantly related to employability. Many individuals receiving welfare live in "job-poor" neighborhoods geographically distant from employment opportunities. Women make up 80 percent of all welfare participants and are more reliant on public transit than men.

Bruffy, D. (2010). Transit in the age of cloud commuting. *Community Transportation*, **28(2), 6-7.**

This case study describes the developments in a transit system serving 90,000 people in a West Virginia university town. Almost two-thirds of the users were under 30 and used social networking, mobile devices and web-based applications to plan and update travel in the region. The study found that these commuters wanted real-time information and travel updates. According to the article, web-based solutions are the best way to address consumer demand as they do not require specific hardware or software and can be accessed through mobile devices. The author sees this as a growth opportunity for developers and a challenge for transportation.

Carmien, S.; Dawe, M.; Fischer, G.; Gorman, A.; Kintsch, A., & Sullivan, J. (2005). Socio-Technical environments supporting people with cognitive disabilities using public transportation. *ACM Transactions* **on Computer-Human Interaction, 12(2), 233-262.**

Public transportation systems are among the most complex large-scale networks found in modern society. To explain the unique challenges transportation systems present for people with cognitive disabilities, the authors outline deficiencies identified in an international study by the Transportation Research Board of the National Research Council. The paper reviews specific barriers found through empirical studies of transportation systems in several U.S. cities. The researchers conducted a small pilot study with 13 individuals with cognitive disabilities, examining how the participants navigated public transit. In order to use public transportation, users must "comprehend, manipulate and process essential navigation artifacts," such as maps, schedules, signs, clocks and other route guides. Interpreting this information requires fairly complex cognitive processing. Thus people with cognitive disabilities could end up using the special access vehicles designed primarily for people with physical disabilities. Using these special vehicles imposes constraints on travel flexibility and requires additional fees. The system also separates users from "mainstream experiences" and prevents social integration.

Cervero, R.; Sandoval, O., & Landis, J. (2002). Transportation as a stimulus to welfare-to-work: Private versus public mobility. *Journal of Planning Education and Research*, **22.**

This article investigated the importance of transportation as a way of connecting underprivileged residents with employment opportunities. The study tested whether private or public transport was more likely to yield employment success.

Using data from Alameda County, California, the study estimated the probability that someone could find a job as a function of car ownership, transit service quality, regional job accessibility through different transportation modes, human-capital factors, and various control variables. Car ownership significantly increased the odds of finding a job for welfare recipients. Public transit, however, was also important. Of those without cars, individuals who lived within walking distance of transit stations were more likely to find employment.

Davies, D; Stock, S.; Holloway, S.; Wehmeyer, M. (2010). Evaluating a GPS-Based transportation device to support independent bus travel by people with intellectual disability. *Intellectual and Developmental Disabilities,* **48(6), 454-463.**

The authors identify transportation problems as an obstacle in gaining access to self-advocacy activities, employment, religious participation, volunteering, physical activity and exercise, leisure activities, and health care. Lack of transportation is a factor that could contribute to a feeling of disconnect from community life among people with intellectual disabilities. The authors advocate the use of GPS technologies in handheld devices to help people with disabilities navigate transit systems. This study included an experiment featuring the proposed device. The GPS-based system was reported to have helped over 70 percent of the participants (individuals with intellectual disabilities) to identify the correct stop and exit at the right location.

Fujii, S., & Kitamura, R. (2000). Anticipated travel time, information acquisition, and actual experience: Hanshin Expressway route closure, Osaka-Sakai, Japan. *Transportation Research Record*, 1725, 79-85.

According to the authors, travel time is one of the "most fundamental and important determinants of travel behavior." Drivers decide on the fastest (i.e. best) route to take based on current information and previous experience. This article examined two models of decision-making: the information dominance hypothesis and the experience dominance hypothesis. The authors conducted a study of Japanese drivers and found evidence that those who relied more on information rather than experience were able to predict travel time more accurately. The study highlights the value of real-time transit information in terms of helping drivers navigate traffic congestion.

Henry, G., & Gordon, C. (2003). Driving less for better air: Impacts of a public information campaign. *Journal of Policy Analysis and Management*, 22(1), 45-63.

This study examined a joint government- and business-sponsored driving-reduction campaign in Atlanta, Georgia. The campaign aimed to reduce driving in order to decrease harmful emissions. It was further intended to raise awareness of ground-level ozone and air pollution, and inform the public of pollutant health consequences. Overall, the authors found that the public information campaign increased social awareness of the problem. The study suggests that public information campaigns can help spread awareness, but actual behavior change comes from employer involvement and incentivizing the desired actions.

McDonald, N.; Librera, S., & Deakin, E. (2004). Free transit for low-income youth: Experience in San Francisco Bay area, California. *Transportation Research Record: Journal of the Transportation Research Board,* 1887, 153-160.

This study looked at a free bus pass program for low-income middle- and high-school students. The initiative was launched in the San Francisco Bay-area in 2002. The authors analyzed the program's effect on youth travel patterns, after-school participation, and school attendance. They found evidence of increased after-school participation among all students using the free pass. Ridership after school rose significantly in denser, more transit-accessible areas of the program, though it did not increase in lower-income neighborhoods. The study attributes that to differences in street safety and neighborhood norms for child independence.

O'Connor, R., Schwartz M., Schaad, J., & Boyd, D. M. (2000). State of the Practice: White paper on public involvement. Transportation in the New Millenium Washington, DC: Transportation Research Board: Committee on Safety, Data, Analysis, and Evaluation.

This white paper, drafted by corporate engineers and city planners in the Midwest, addresses best practices in collaborations with stakeholders when making transportation decisions. The authors suggest that agencies should use mass and interpersonal communication tools to provide information and assess public opinion about issues. When public involvement is limited

to public meetings, the perspective of activists and lobbyists is privileged as they have the resources to attend. An agency has the responsibility to gather information not only from traditional community organizations, but also from other interested parties. The authors suggest that information technologies can help reach out to stakeholders who might otherwise be overlooked. According to the article, new media have the capacity to convey complex information about policy solutions in a clear way. The paper suggests that agencies should proactively provide information that can "help people accurately assess the importance of the issues to their quality of life, and attract and communicate effectively with a broader audience."

Pucher, J., Dill, J., & Handy, S. (2010). Infrastructure, programs, and policies to increase bicycling: An international review. *Preventive Medicine*, 50, Supplement, S106–S125.

This meta-analysis looked at 139 case studies to examine policies and practices that had an impact on bike ridership. A number of factors like land-use, integration with existing transit, and legal issues were found to influence the prevalence of bicycle riding in a community. Furthermore, cases that used public education, launched marketing campaigns, and provided necessary information about bicycle access, saw an increase in the number of bicycle trips and share of people riding.

Stommes, E. S., & Brown, D. M. (2002). Transportation in Rural America: Issues for the 21st Century. *Rural America* 16(4), 2-10.

Rural communities have difficulties dealing with the challenges brought about by transportation deregulation. This is partly due to lack of information sharing and coordination among them. Deregulation of transportation, (e.g. the Bus Regulatory Reform Act of 1982) has left local rural communities with the responsibility of structuring their region's passenger transportation. This is one of the reasons why intercity bus services in rural areas have dropped by half from 1982 to 2000.

Intelligent Transportation Systems are federally funded in rural areas to provide weather updates, road condition information and vehicle location services. Those capabilities serve to address typical rural challenges like long distance between destinations, lack of communication infrastructure, and high cost per unit for providing services. The authors suggest that there is a need for rural decision-makers and community groups to coordinate information and pool political capital as well as financial resources.

Watts, R. (2010). *Increased carpooling in Vermont: Opportunities and obstacles.* Report produced by the University of Vermont Transportation Research Council.

This report is part of an evaluation of the GoVermont public campaign and rideshare database. The study used geo-data and surveys of those who registered in the database to investigate where and why people were carpooling. The authors report that commuters in Vermont responded positively to carpool incentives. Employer strategies inducing workers to share rides were particularly effective. These strategies included creating designated carpooling lots,

providing ride-matching services, and deliberate of inadvertent reductions in the number of parking lots. Inability to find others going to a similar location at a given time often stood in the way of effective carpooling. Over half of the survey respondents cited that as a reason not to carpool.

2. Critical Information Needs: Performance Metrics and Methodologies

Adilov, N., Alexander, P. J., & Brown, K. (2007) *Economics of story choice in broadcast television*. **Proceedings of the Academy of Business Economics . Retrieved June 9, 2012, from** **business.usi.edu/mbea/2007/2007ABE-Adilov.pdf**

This paper examines the relationship between media ownership and local news, via an analysis of how broadcast television firms allocate news minutes among local news stories. Empirical estimates indicate that serving a larger local market does not have a statistically significant effect on provision of local news, while serving a larger non-local market increases the number of local stories and total local news seconds. Owning a radio station outside of the broadcaster's local market increases the number of local stories and owning a radio station within the local market decreases the number of local stories.

Alexander, P. & Brown, K. (2004). *Do local owners deliver more localism? Some evidence from local broadcast news.* **Federal Communications Commission.**

This study defines and tests a measure of localism. The authors examine the impact of local ownership on the proportion of local news aired by broadcast stations. The analysis is based on a dataset containing 4,078 individual news stories collected in 1998 from 60 stations across 20 designated market areas.
Local ownership was found to increase both *total local* and *total local on-location* news seconds aired by the TV stations. Local owners were likely able to monitor regional events at a lower cost, and their personnel could be more effective in covering local news. This was particularly relevant for on-location reporting, a resource-intensive practice requiring the mobilization of reporters, camera crews, and vehicles.

Arsenault, A., & Castells, M. (2008). The Structure and Dynamics of Global Multi-Media Business Networks. *International Journal of Communication, 2*, **707-748.**

This article explores the structure and dynamics of global media networks. It focuses on the seven largest multi-national corporations operating in 2008: Time Warner, Disney, News Corp., Bertelsmann, CBS, and Viacom. Four key Internet companies with diversified media holdings - Google, Microsoft, Yahoo, and Apple - are also included in the analysis.

The study highlights the networked forms of organization characteristic of the media sector. It examines the internal structure of transnational media conglomerates, their production and distribution arrangements, as well as their financial and partnership ties. The role of connections with parallel networks in the business, political, and creative sectors is also discussed. The analysis places media consolidation trends in the larger context globalization and diversification processes.

Bush, C. A., & Zimmerman, P. R. (2009). Media mergers with preference externalities and their implications for content diversity, consumer welfare, and policy. *Journal of Industry, Competition and Trade*, *10*(2), 105-133.

This article presents a formal treatment of the influence that within-group consumer preference externalities over media content have on a media outlet's incentive to engage in product repositioning both before and after merging with another media outlet. The article first presents a model of consumer behavior under preference externalities and derives aggregate consumer expenditure functions for media output. It is shown that even assuming the merged entity sets a uniform price and content mix across market areas, the relative access to some minority (majority) group subscribers will increase (decrease) post-merger (and vice versa).

Carpenter, S. (2010). A study of content diversity in online citizen journalism and online newspaper articles. *New Media & Society*, 12(7), 1064–1084.

This study proposed a measure of content diversity in online journalism. The index was based on several properties of the news articles: main story topic, outbound hyperlinks, the inclusion of video, audio, photos, graphics, maps, polls, and other elements.

The author employed quantitative content analysis of 963 news stories collected in 2007 to test for differences in the diversity levels of citizen content and online newspapers. The analysis found that online citizen articles were more likely to feature a greater diversity of topics, information from outside sources, multimedia and interactive features. The author concludes that online citizen journalism content adds to the diversity of information available in the marketplace.

Castells, M. (2009). *Communication power*. Oxford: Oxford University Press.

Building on his earlier work on the network society, Manuel Castells writes this book as a broad analysis of the way power is constructed through communication processes. The work focuses on the changing nature of power relationships in a new technological and organizational context. Examining those transformations, Castells draws upon literature from sociology, political psychology, communication, media studies, and cognitive science.

According to its author, the book's narrative revolves around three core components:

The structural determinants of social and political power in the global network society.

The structural determinants of the process of mass communication under the organizational, cultural, and technological conditions of our time.

The cognitive processing of the signals presented by the communication system to the human mind as it relates to politically relevant social practice.

Crawford, G.S. (2007). *Television station ownership structure and the quantity and quality of TV programming.* **Media Ownership Study #3, prepared for the Federal Communications Commission.**

This study presents an analysis of the relationship between the ownership structure of television stations and the quantity and quality of television programming in the United States between 2003 and 2006. This study reports patterns of overall television availability and viewing as well as the availabiilty of several types of programming of particular interest to the FCC (local news, public affairs, children's programming, etc.).

Easley, D., & Kleinberg, J. (2010). *Networks, Crowds, and Markets: Reasoning About a Highly Connected World*. **Cambridge: Cambridge University Press.**

This book presents the theoretical foundations and practical applications of network science in a variety of contexts. Drawing on mathematical sociology, computer science, and economics, it explicates the structure and dynamics of highly connected systems. The text provides an introduction to two major bodies of literature: graph theory and game theory. Graph theory examines network structures, while game theory lays out models of individual behavior in settings where outcomes depend on the decisions of other actors.

The authors go on to discuss networked markets and strategic interaction, as well as information networks like the World Wide Web. The book also covers network dynamics, diffusion and contagion processes, and the network mechanisms underpinning of key social activities and institutions.

Fancher, M. R. (2011). *Re-imagining journalism: Local news for a networked world.* **Washington, DC: The Aspen Institute.**

This paper provides an action plan to reconstruct community journalism in the US in the digital age. Recommendations are reinforced with case studies from Seattle, WA and other communities throughout the US. It stresses that for-profit, legacy media outlets immediately reinvent themselves to become more interactive, placing greater emphasis on collaboration and diversity. Because clear profit models for digital journalism outlets have not yet emerged, it is also important for nonprofit media to also serve communities, for example with hyperlocal news sites emerging throughout the US. Cases show chances of success will be higher if these efforts target specific information needs of communities. Educational institutions and libraries can also become leading hubs of journalistic activity because they are not tied to any particular platform or industry. Even self-reporting journalism – journalists getting paid by sources to cover them – is conceivable as long is there is transparency.

Fico, F. G., Lacy, S., & Riffe, D. (2008). A content analysis guide for media economics scholars. *Journal of Media Economics***, 21, 114-130.**

This article begins from the premise that, despite the central role of content in understanding some aspects of media economics, media economics scholars sometimes apply content analysis in ways that are inconsistent with the generally accepted practices of the method. This article deals with some basic concepts underlying the method of content analysis to familiarize media economics scholars with the method. The article argues tha adoption of accepted content analysis practices will yield better data and, in the long-run, help advance the understanding of media economics.

Fowler, E. F., Goldstein, K. M., Hale, M., & Kaplan, M. (2007). Law of democracy: Does local news measure up? *Stanford Law and Policy Review***, 18, 410-431.**

This article reports information from a collaborative initiative launched by the USC Annenberg School's Norman Lear Center and the University of Wisconsin NewsLab. The project systematically collected two waves of comprehensive data on media coverage of national politics. Over the 2002 mid-term and 2004 presidential election cycles, the researchers tracked local news stories about the election campaigns. This study was prompted by a 1998 report proposing that for 30 days before a national election, local television broadcasters should commit to airing 5 minutes of candidate-centered campaign coverage in each of their evening newscasts. While compliance was never made mandatory, many stations said that they would meet that standard. To test the extent to which TV owners had adhered to their earlier statements, the Norman Lear Center analyzed local broadcast television coverage on 74 stations in 58 markets for 30 days before the 2002 elections. During that time, the sampled stations aired an average of 74 seconds of candidate coverage per night. The authors suggest that local stations do not seem to meet their public interest obligations and should perhaps be put under stricter regulations.

Fuentes-Bautista, M. (2011). *Mapping "diversity of participation" in networked media environments***. Manuscript submitted for publication.**

This paper explores the multiple dimensions of participation in the media, discussing its implications for policy and practice that support and contribute to the diversity of local broadband markets. Departing from an overview of the literature of community development and participatory communication, the author discusses various definitions of participatory practice for community building and democratization, seeking more clarity and specificity about what public participation means and what it may entail in networked media environments. The author identifies four layers of public service media, including connection (engaging the public across different platforms), curation (identifying content and applications of value and supporting broad access to the public), creation (creating content and applications the market does not support), and infrastructure (transmitting public service media content and

applications). The author also identifies a scale of citizen participation with public service media, ranging from nominal participation which focuses on legitimation and basic levels of inclusion, up to transformative participation which focuses on citizen empowerment. This typology of information and participation is then applied in media market of Austin, Texas.

George, L. (2006, October). *The Internet and the market for daily newspapers*. **Hunter College Working Paper.**

Using zipcode-level daily newspaper sales and MSA internet penetration, this article documents that the internet has differentially attracted younger, more educated and more urban individuals away from daily newspapers. Higher internet penetration is not associated with lower newspaper sales among blacks and Hispanics, who thus far have been less likely to connect. Evidence suggests that the internet has driven changes in newspaper coverage, with greater emphasis on minority issues, education, crime and investigative reporting.

George, L. (2007). What's fit to print: The effect of ownership concentration on product variety in daily newspaper markets. *Information Economics and Policy*, **19, 285-303.**

This article examines the effect of ownership concentration on product position, product variety and circulation in the U.S. daily newspaper market. Using data on the assignment of reporters to topical areas at 706 newspapers in 1993, 1999 and 2004, the results show that both differentiation and variety increase with ownership concentration. Moreover, greater concentration increases variety over a range of topics and does not reduce readership.

George, L., & Waldfogel, J. (2002, July). *Does the New York Times spread ignorance and apathy* **? University of Pennsylvania Working Paper.**

Using longitudinal data on local newspaper circulation, *New York Times* penetration, and voting, this study finds that as the *New York Times* becomes more widely circulated in a market, sales of local newspapers to individuals targeted by the *Times* declines. Moreover, as *Times* penetration increases, college educated individuals targeted by the *Times* become less likely to vote in local elections. This paper concludes that, although some consumers benefit from availability of outside media in local markets, "distraction" from local affairs is a possible negative consequence of modern information technology.

George, L., & Waldfogel, J. (2006). The New York Times and the market for local newspapers. *American Economic Review*, **96(1), 435-477.**

This article estimates the effect of outside media on local media consumption and coverage by studying national expansion of the *New York Times.* The study uses this expansion to ask two questions. First, does circulation of the *Times* outside of New York affect local newspaper circulation among its target audiences? Second, does local newspaper targeting change as a result? Using cross-sectional and longitudinal data on local newspaper circulation, product

characteristics, and *New York Times* penetration, the study finds that increased availability of the *Times* reduces circulation of local newspapers among targeted readers. There is also evidence that *Times* expansion increases local newspaper readership among individuals not targeted by the *Times.* The study also provides evidence that local newspapers change their targeting, providing more local and less national coverage in response to *Times* expansion.

Gill, K. E. (2004, May). *How can we measure the influence of the blogosphere?* **Paper presented at the WWW 2004 conference in New York, NY.**

This article examines a set of methods used to measure the influence of blogs on traditional media sources and the public. The paper presents a number of high-profile cases in which stories became the center of blogger attention and were consequently picked up by major news outlets. The relevance of blogs in U.S. political life is discussed.

The study outlines a measure evaluating the importance of a website based on the number of incoming hyperlinks that point to it. The author describes four online platforms using similar techniques to assess blog influence that were popular at the time this work was written. Those include *Blogosphere*, *BlogRunner*, *BlogStreet*, and *Technorati.* A number of blogs (like BoingBoing and InstaPundit) which were ranked as highly influential by all four platforms are described in more detail. The author concludes that better and domain-specific measures of blog importance need to be developed.

Hamilton, J. T. (2004). *All the news that's fit to sell: How the market transforms information into news*. **Princeton, NJ: Princeton University Press.**

This book provides what is perhaps the most comprehensive analysis to date of the distinctive economic characteristics of news. The author investigates the economic reasons why news is a product always at risk of under-provision. He also examines the market factors that influence the quantity and quality of news available to audiences.

Hammond, A. S. (1999). Measuring the nexus: The relationship between minority ownership and broadcast diversity after Metro Broadcasting. *Federal Communications Law Journal*, **51, 627-637.**

The study discusses a series of court cases (Metro Broadcasting, Inc. v. FCC; Adarand Constructors, Inc. v. Peña; Lutheran Church - Missouri Synod v. FCC) concerned with diversity of viewpoints in broadcasting content and its relationship to the ownership and workforce composition of broadcast stations.

The Federal Communications Commission (FCC) has argued that both minority employment and minority ownership are linked to viewpoint diversity. The main source of empirical support for this position is provided by survey data collected for the FCC analyzed by the Congressional Research Service (CRS). According to the author, both the CRS study and a following related one conducted by Dubin & Spitzer are not only outdated, but also have important deficiencies. This highlights the need for a new study, which Hammond and colleagues set out to conduct. At the

time of the writing of this article (1999), that study is still in progress and findings from it are not reported.

Hill, B.C. (2006). Measuring media market diversity: Concentration, importance, and pluralism. *Federal Communications Law Journal,* **58, 169-194.**

This article reviews and critiques the FCC's Diversity Index, as well as alternative indices proposed by othe researchers. The author then proposes his own alternative approach to computing a diversity index that can be used to assess local media markets.

Hindman, M. (2011). *Less of the Same: The Lack of Local News on the Internet***. Federal Communications Commission.**

This study commissioned by the FCC looks at online sources of local news operating within the top 100 television markets in the U.S. The analysis is based on data collected over 3 months in 2010 by the web measurement firm comScore. The author identifies 1074 local news websites and examines their audience reach, traffic volume, and affiliations with traditional media.

The data revealed that a large proportion of the selected markets had fewer than a dozen local news websites, most of which affiliated with TV stations or daily newspapers. TV and newspaper sites also attracted larger audiences, while independent online venues were less popular. Eighty-four of the 100 markets did not have an online-only source of local news passing the study threshold of reaching over 1% of the audience. The small audiences of independent local sites have unfortunate economic implications for the viability of those venues. The author concludes that web-only outlets cannot fill the gaps in offline news coverage for any of the markets under study.

Using regression analyses, the author further finds that larger and heavily Hispanic markets tend to have fewer online-only local news venues. The models also suggest that media ownership patterns predict the levels of local news consumption. The presence of a minority-owned television station is associated with greater local news usage in both page views and minutes. One surprising finding of this study is that markets with greater per capita income seem to consume less news than poorer markets.

Howley, K. (2005). Diversity, localism and the public interest: the politics of assessing media performance. *International Journal of Media and Cultural Politics***, 1(1), 103-106.**

During Congress-mandated biennial reviews, the Federal Communications Commission evaluates the efficacy of current media ownership and cross-ownership regulations in serving the public interest. Two related aspects of media performance are of particular importance to policy-makers: diversity and localism. This brief essay outlines some of the metrics measuring these indices of media performance. The author identifies flaws in FCC's data collection methods and points to problematic aspects of the diversity index proposed by the regulator. He discusses alternative methods for the evaluation of diversity and localism, including content analysis, historical research, institutional analysis, in-depth interviews, focus groups and open-

ended questionnaires. According to Howley, even though those approaches are resource-intensive, they have the benefit of providing audience members with an opportunity to evaluate the content and services of local media outlets.

Jallov, B. (2005). Assessing community change: Development of a "bare foot" impact assessment methodology. *The Radio Journal - International Studies in Broadcast and Audio Media***, 3(1), 21-34.**

Impact assessment is one of a variety of monitoring tools available to ensure that a community radio effectively works towards set objectives and aspirations. In Mozambique a 'bare-foot' impact assessment methodology has been designed, tested, revised and implemented with eight community-owned stations between 2000 and 2005. The article explores the three separate areas of attention focused upon in this methodology: (1) an internal assessment of the radio's way of functioning as an organism; (2) an assessment of the capacity of the community producers through their programs to meet the needs and desires of the community; and (3) the overall objective of it all: assessing the extent to which impact can be registered vis-à-vis a positive development change within the community, empowerment, mending of the social tissue, etc. resulting from the work of the community radio. As for the first level of assessment, the community radio mobilizer completed a checklist twice a year. This involves speaking to key staff and volunteers. Assessments of the second level involved interviewing and feedback with community members and organizations about the radio's performance. The final level of assessment was also measured using interviews and focus groups.

Jeffres, L. W., Cutietta, C., Sekerka, L., & Lee, J. (2000). Newspapers, pluralism, and diversity in an urban context. *Mass Communication and Society***, 3(2-3), 157-184.**

This research examines the relations between community characteristics and media variables in the urban context. Using a national survey of 141 community newspapers and census data, it looks at the relation between the size of the population, "structural pluralism" focusing on the distribution of power within the system, and diversity in ethnicity, race and gender.
The results show that community size is related to census measures of diversity, but not to newspaper editors' perceptions of diversity and pluralism. An analysis of newspaper goals shows that overall diversity in the census data correlates with only one dimension – the relative importance of advertising and theater as a newspaper goal of function. Of the individual measures, ethnic diversity in the surrounding community is positively related to higher journalistic emphasis on civic journalism and activity.

Kaplan, M., Goldstein, K., & Hale, M. (2005). *Local news coverage of the 2004 campaigns: An analysis of nightly broadcasts in 11 markets.* **Los Angeles, CA: Norman Lear Center, USC Annenberg School for Communication.**

This report examines the scope and depth of campaign coverage in evening newscasts aired by 22 affiliates of ABC, CBS, FOX, and NBC during the four weeks before the 2004 presidential

election. The study was conducted in 11 markets, including New York, Los Angeles, Philadelphia, Dallas, Seattle, Miami, Denver, Orlando, Tampa, Dayton and Des Moines. Overall, 4,333 news broadcasts, or 2,166 hours of local news programming were analyzed.

Sixty-four percent of the broadcasts captured by the study contained at least one election story. A typical half-hour of news contained three minutes and 11 seconds of campaign coverage. Presidential coverage dominated the news, while local races did not get much attention. In fact, sports and the weather received 12 times more coverage than all local races combined. In terms of the story framing, campaign strategy and the horserace accounted for 44% of the coverage, while 32% of it focused on campaign issues.

Kaplan, M., & Hale, M. (2001). *Local TV coverage of the 2000 general election*. **Los Angeles, CA: Norman Lear Center, USC Annenberg School for Communication.**

This study is prompted by a 1998 report proposing that local television broadcasters should commit to airing 5 minutes of candidate-centered campaign coverage (CCD) in all evening newscasts for 30 days before national elections. While compliance with this rule was never formally mandated, many stations claimed that they would voluntarily meet that standard.

To test the extent to which TV owners had adhered to those statements, the Norman Lear Center analyzed local broadcast television coverage on 74 stations in 58 markets for 30 days before the 2000 general election. According to the study results, stations that had committed to the CCD standard aired an average of 2 minutes and 17 seconds of candidate coverage per night. The rest of the TV broadcasters had a nightly average of just 45 seconds of CCD.

As the authors point out, these findings show that even a modest goal of 5 minutes of programming a night was beyond what most television stations were willing to do voluntarily. Still, those who had committed to that goal had a measurably better performance than those who had not.

Kaplan, M., & Hale, M. (2010). *Local TV news in the Los Angeles media market: Are stations serving the public interest?* **Los Angeles, CA: Norman Lear Center, USC Annenberg School for Communication & Journalism.**

Even in an age of online media and citizen journalism, a large percentage of local news comes from print and broadcast. That is why, Kaplan and Hale point out, the quality of local television remains critically important for democracy. Upon receiving broadcast licenses from the government, stations make a commitment to serve the public interest. This report is framed as an attempt to assess the extent to which that obligation is actually met. The data used in the study is collected from 8 stations in the Los Angeles media market: KABC, KCAL, KCBS, KNBC, KTLA, KTTV, KCOP, and KMEX. In addition to 11,253 TV news stories collected over 14 days in 2009, the content of the Los Angeles Times for the same time period was collected.

On average, ads and teasers accounted for over 10 minutes of the 30-minute newscasts. A little over eight minutes were dedicated to local coverage, while an average of seven and a half minutes were spent on other news. Sports and the weather took the rest of the time. The most common leading topic of the newscasts was crime, followed by sports, weather and traffic.

While the study contains a wide variety of statistics about the content of local news, the authors do not present a definite conclusion about the extent to which public interest is served.

Kaplan, M. & Hale, M. (2000). *Television news coverage of the 1998 California gubernatorial election*. **University of California Institute of Governmental Studies Working Paper 2000-6.**

The paper describes two related projects in the area of political communication, conducted in 1998 under the auspices of the DC-based public interest group Alliance for Better Campaigns (ABC). One of the two initiatives was a research project studying TV news coverage of the 1998 California gubernatorial race. The second project was an intervention intended to improve that coverage and persuade candidates to move beyond sound bites and discuss issues.
The media monitoring results reported in the study were based on the coverage of 33 stations in five media markets: Los Angeles, San Francisco, Sacramento, San Diego, and Bakersfield.
The authors qualify the results of their analysis as "quite grim," finding that less than 0.5% of the total amount of news time on these stations was devoted to the election. More than half of the time dedicated to election news was spent on discussions of campaign strategy, tactics, polls, candidate attacks or fund-raising activity. This left voters with virtually no coverage of the main issues of the day. The results of the study were also indicative of the power debates have in driving campaign coverage. The authors thus argue that future intervention efforts should build on this by encouraging more debates and debate-like forums.

Kurpius, D. D., & Metzgar, E. T., & Rowley, K. M. (2010) Sustaining hyperlocal media. *Journalism Studies*, **11(3), 359-376.**

This case study examines ten hyperlocal media operations in six states, focusing on the different funding models that have emerged, the effectiveness of these models and their potential for sustainability. In-depth interviews and on-site observations are conducted to obtain "thick descriptions" of the organizations.
The ten hyperlocal sites are more subsidy-driven than market-driven, with nonprofit foundation grants the biggest source of funding. All of the sites have pegged their future on advertising, but their efforts are hampered due to the lack of specific demographic data in Google Analytics most of the sites use to gauge traffic. The sites also lack brand recognition to sell online ads, nor do they effectively make use of digital technology to engage potential consumers. Consequently, the long-term sustainability of the hyperlocal media operations is in question.

Lloyd, M. & Napoli, P. (2007). *Local media diversity matters*. **Washington, DC: Center for American Progress. Retrieved June 10, 2012, from:** **www.americanprogress.org/issues/2007/01/media_diversity.html**

This report describes an effort by a small group of scholars and public interest advocates to develop an alternative analytical and calculative approach to the Federal Communications Commission's Diversity Index. This approach sought to bring additional evaluative criteria into the calculus, such as the number and demographic characteristics of the journalists serving a

particular community.   This report conducts a pilot study and discusses data gathering and availability challenges needing to be addressed for such an analysis to be conducted on a larger scale.

Lowrey, W., Brozana, A., & Mackay, J. B. (2008). Toward a measure of community journalism. *Mass Communication and Society*, **11(3), 275-299.**

This paper develops a comprehensive scale to measure the degree to which media outlets contribute to the community. To do so, the authors review quantitative and qualitative research on community and news media to build a theoretical construct of community journalism, after which it moves on to propose general items in the scale.

The notion of community is strongly tied to both geographical and symbolic interactions. Findings suggest that 1) community is a process of negotiating shared symbolic meaning, and 2) degree of structure, or the degree to which institutions and spaces are structured for interaction, facilities the process of sharing. Consequently, a new community journalism scale should include:

> Community structure: Provide mobilizing information and facilitate social and civic engagement.
> Listening/pluralism: Research audiences
> Leading/cohesiveness: Connect and solve community problems

Marcus, A. (2007). Media diversity and substitutability: Problems with the FCC's Diversity Index. *I/S: A Journal of Law and Policy for the Information Society,* **3, 83-115.**

This article examines the question of whether the Internet is a substitute for broadcast media, particularly for the purpose of local news. The article argues that there is no conclusive evidence that people use the Internet as a substitute for broadcast media, and contends that the FCC should acknowledge the sizeable base of radios and televisions already installed, the importance of broadcasting as a public resource for local news, as well as cultural, educational, and emergency purposes and contribute to treat broadcasting separately from a policy standpoint.

Mason, L., Bachen, C., & Craft, S. (2001). Support for FCC minority ownership policy: How broadcast station owner race or ethnicity affects news and programming diversity. *Communication Law and Policy,* **6, 37-73.**

This article examines the relationship between the race/ethnicity of broadcast station license-holders and the diversity of news and public affairs programming produced by these stations. According to the study, while federal policies favoring minority ownership have assumed such a relationship, the empirical support for it is limited.

In order to contribute additional evidence to that debate, the authors conduct a nationwide telephone survey of 209 news directors at radio and television stations. The results indicated

that minority-owned radio stations emphasized issues of presumed interest to minorities more than did their majority-owned counterparts. For both television and radio, the percentage of minority reporters was positively correlated with such programming as well. The authors discuss implications of these findings for minority preference policies, expressing concerns about the extent to which "minority content" can be equated with "programming in the public interest". They conclude that the low levels of minority employment and the resulting lack of diversity in programming directed to minority audiences are a loss to the marketplace of ideas.

Matei, S. A., Oh, K., & Bruno, R. (2006, November). *Collaboration and communication in online environments: A social entropy approach***. Paper presented at the National Communications Association Annual Conference, San Antonio, TX. Retrieved June 1, 2012, from matei.org/ithink/2008/12/12/a-social-entropy-vision-of-wiki-collaboration**

This article proposes an index measuring the diversity of online content contributions. The authors argue that the notion of *social entropy* (as defined in information theory) provides a particularly suitable measure of participatory diversity for online groups.

Diversity of opinion in communication spaces is seen as a function of the number of participants and their shares in the project. The more people are involved, and the more uniformly their contributions are distributed, the higher the diversity. The measure of entropy (or *disorder* in the system) can tell us whether the different components of a communicative space are well represented.

The study suggests that adopting a measure based on social entropy would give researchers a better way to:

(1) Estimate participatory diversity of online communities or groups.
(2) Compare different online groups in terms of participatory diversity.
(3) Evaluate changes of contribution over time.
(4) Understand online interaction dynamics at small and large group scales.

The authors supply an example illustrating the use of the measure to assess levels of collaboration and their significance. The case study outlined in the paper demonstrates how entropy can be employed to study the evolution of collaborative diversity in Wikipedia articles. According to the paper, this approach is also relevant for other types of virtual communities including social networks, mailing lists, and blogs.

Meraz, S. M. (2009). Is there an elite Hold? Traditional media to social media agenda setting influence in blog networks. *Journal of Computer-Mediated Communication, 14***(3), 682-707.**

This article explores the agenda-setting power and social impact of elite traditional news outlets on top political bloggers in the U.S. The study employs hyperlink analysis, examining web structures to gain insight into the relations between mainstream and citizen media in a digital environment.

The analysis is based on a corpus of blog posts published in 2007 and covering three specific issues: the Alberto Gonzales hearings on the NSA wiretapping, the Larry Craig sex scandal, and

Iraq. The sample of websites used in the study included 18 popular political blogs from both sides of the spectrum, as well as 11 newsroom blogs associated with the New York Times and the Washington Post.

The findings of the study indicate that elite traditional media, while not the sole source of influence online, remain dominant agenda-setters on the web. Both the New York Times and the Washington post were among the top few sources linked to by political bloggers. The mainstream media content, furthermore, contained links going almost exclusively to other elite traditional outlets.

Milyo, J. (2007). *The effects of cross-ownership on the local content and political slant of local television news.* Federal Communications Commission Report No. 07000029.

This is the first comprehensive study examining the effects of newspaper cross-ownership on the local content and political slant. It looks at evening news broadcasts for three nights in the week prior to the 2006 general election for every cross-owned station as well as other major network-affiliated station in the same markets. Each station receives a grade based upon a subjective quality scale that combines separate scores for localism, importance, sourcing, creativeness and balance and accuracy.

Local television newscasts for cross-owned stations contain on average about 4%-8% more news coverage than the average for non-cross-owned stations. Newspaper cross-ownership is also significantly and positively associated with both local news coverage and local political news coverage. Particularly, cross-owned stations run 7%-10% more local news than do non-cross-owned stations, regardless of whether sports and weather segments are included in comparison. Furthermore, cross-owned stations run about 25% more coverage of state and local politics.

With regards to partisan slant of news coverage, however, there is little consistent and significant difference between cross-owned stations and other major network affiliates in the same market.

Mullainathan, S., & Shleifer, A. (2005). The market for news. *American Economic Review*, 95(4), 1031-1053.

This study investigates the market for news under two assumptions: that readers hold beliefs which they like to see confirmed, and that newspapers can slant stories toward these beliefs. The study shows that, on the topics where readers share common beliefs, one should not expect accuracy even from competitive media: competition results in lower prices, but common slanting toward reader biases. On topics where reader beliefs diverge (such as politically divisive issues), however, newspapers segment the market and slant toward extreme positions. Yet in the aggregate, a reader with access to all news sources could get an unbiased perspective. Generally speaking, reader heterogeneity is more important for accuracy in media than competition per se.

Nagler, M. (2007). Understanding the Internet's relevance to media ownership policy: A model of too many choices. *The B.E. Journal of Economic Analysis & Policy*, **7(1), Article 29.**

This article investigates whether the Internet provides a fail-safe against media consolidation in the wake of an easing of media ownership rules. The authors put forth a model of news outlet selection on the Internet in which consumers experience cognitive costs that increase with the number of options faced. Consistent with psychological evidence, these costs may be reduced by constraining one's choice set to "safe bets" familiar from offline (e.g., CNN.com). It is shown that, as the number of outlets grows, dispersion of patronage across outlets inevitably declines. Consequently, independent Internet outlets may fail to mitigate lost outlet independence on other media.

Napoli, P. M. (2001). Market conditions and public affairs programming: Implications for digital television policy. *Harvard International Journal of Press/Politics*, **6(2), 15-29.**

This study examines how various market conditions impact the provision of local public affairs programming on U.S. broadcast television programs. Drawing upon the analysis of television market data and program scheduling data, the study finds that structural conditions within local television markets do not have a strong relationship with the quantity of local public affairs programming provided on local stations.

Napoli, P. M. (2004). Television station ownership characteristics and local news and public affairs programming: An expanded analysis of FCC data. *Journal of Policy, Regulation and Strategy for Telecommunications*, **6(2), 112-121**

This study builds upon and extends a data set constructed for a previous study conducted by the Federal Communications Commission, in an effort to assess whether characteristics of the owners of local television stations are systematically related to the quantity of local news and public affairs programming provided by these stations.

Napoli, P. M. (in press-a). Assessing media diversity in the U.S: A comparative analysis of the FCC's Diversity Index and the EC's Media Pluralism Monitor. In Valcke, P., & Lefever, K. (eds.). (in press). *Global media pluralism: Concepts, risks, and global trends*. **NY: Palgrave MacMillan.**

This chapter conducts a comparative analysis of the FCC's Diversity Index and the European Commission's Media Pluralism Monitor. The chapter chronicles the history and legacy of the FCC's Diversity Index and explores possible ways in which it may have examined the conceptualization and implementation of the EC's Media Pluralism Monitor.

Napoli, P.M. (in press-b). Retransmission consent and broadcaster commitment to localism. CommLaw Conspectus.

This article examines the underlying rationales for the FCC's retransmission consent policies and examines the relevant literature in light of these underlying rationales. As this paper

illustrates, the retransmission consent rules were initially introduced as a means of insuring that local broadcasters remained capable of providing local news and information to their communities. However, as this paper also illustrates, in recent years growing retransmission revenues are increasingly being used to support national network programming; while at the same time, the literature on broadcasters' provision of local news and public affairs programming suggests that broadcaster performance in this regard is, at worst, degrading; or at best, stagnating. Thus, this paper questions whether the retransmission consent policies are effectively serving the goals they were initially instituted to achieve.

Napoli, P. M., & Gillis, N. (2006). Reassessing the potential contribution of communications research to communications policy : The case of media ownership. *Journal of Broadcasting & Electronic Media*, *50*, 671-691.

This study uses the FCC's Diversity Index, and the court's response to the Diversity Index, as a starting point for outlining a social science research agenda that could address subject matter and issues raised in both the construction of the Diversity Index and the court's response to it. As the authors argue, the traditional analytical parameters of media policy research have been expanded by the DI and the court's response, creating new opportunities for communications scholars to contribute relevant research to ongoing policy debates.

Napoli, P. M., & Karaganis, J. (2007) Toward a federal data agenda for communications policymaking, *CommLaw Conspectus*, 16, 53-96.

This article chronicles the wide range of data gathering and access problems that have plagued U.S. communications policymaking as a starting point for proposing a concrete set of proposals for how the data environment surrounding communications policymaking can be improved in ways that improve policy research and policy decision-making, but that do not impose problematic burdens or vulnerabilities upon regulated firms or the commercial data providers who provide much of the data used in policy analysis.

Napoli, P. M., & Yan, M. Z. (2007). Media ownership regulations and local news programming on broadcast television: An empirical analysis. Journal of Broadcasting & Electronic Media, 51(10, 39-57.

This study analyzes the provision of local news programming on local television and its relation with station ownership characteristics and market conditions. The results show that station financial strength and market competition have a significant, positive relation with the quantity of local news programming. However, there is little evidence that ownership characteristics (e.g., duopoly ownership and ownership by one of the big 4 broadcast networks) contribute to local news production. The findings call into question one of the underlying rationales of the Federal Communications Commission's current policies toward more relaxed national and multiple ownership rules.

Noam, E. (2009). *Media ownership concentration in America*. **New York: Oxford University Press.**

This book represents perhaps the most comprehensive study to date of concentration of media ownership in the United States. The book analyzes over 25 years of data across 100 different industry sectors. Noam has also developed his own diversity index (a modification of the FCC's diversity index), which he applies to the analysis of media markets.

Rennhoff, A. D., & Wilbur, K. C. (2011). *Local media ownership and media quality*. **Washington, DC: Federal Communications Commission. Retrieved June 8, 2012, from** ssrn.com/abstract=1803256.

This study investigates a panel of local media markets to find out how changes in media ownership are correlated with changes in media quality. It uses panel data from 210 local media markets from FCC and Nielsen Media Research Galaxy ProFile, regressing local market media quality variables (percentage of households watching evening news; number of local news hours; average ratings of local news programs; the number of daily newspaper copies; number of radio stations in the market) on a set of media ownership variables. The results show little robust evidence that local media ownership (cross-ownership, co-ownership or ownership diversity) affects local media usage or programming.

Roger, G. (2009). Media concentration with free entry. *Journal of Media Economics*, **22, 134-163.**

This research investigates the economic logic behind media mergers, developing a free-entry model of competition between media firms. It finds that media firms are incentivized to consolidate because mergers enable aggregation of consumer coverage, which in turn enables the holding firm to extract more surplus from advertisers. Moreover, the firms must preserve distinct and costly locations because such prevents further entry. The resulting change in advertising equilibrium affects other networks, and as a result some firms not involved in the merger may be forced to exit.

Sjovaak, H., & Stavelin, E. (2012). Web media and the quantitative content analysis: Methodological challenges in measuring online news content. *Convergence, 18*(2), 215-229.

This article presents a method for quantitative content analysis of news online. The research design is based on a triangulation approach, using qualitative and quantitative measures combined with automated computer-assisted analysis. Used to perform a content analysis of the online news output of the Norwegian Broadcasting Corporation [NRK] from 2009, this approach revealed that methodologies designed for measuring broadcasting news content do not suffice in the online news environment. Online research methods need to be redesigned to account for the medium-specific news features on the Internet. Computer-assisted coding methods can contribute depth and scale to such an analysis, as it can extract and assemble detailed data on large quantities of articles. Using a combination of automatic coding methods

with established content analysis for television news, this article presents a new design for quantitative content analysis of news online.

Snyder, J. M., & Strömberg, D. (2008). *Press coverage and political accountability***. National Bureau of Economic Research Working Paper No. 13873.**

This is an influential study that gauges the impact of press coverage on citizens' political knowledge and politicians' performance. The central concept that drives the study is "congruence," which is the sum of the share of a newspaper's readers that lives in a certain congressional district, weighted by its market share. Congruence is used as a proxy for news impact on voter information.

The results show that a good fit (high congruence) leads to more press coverage of the local congressman. In areas where coverage is high, voters are better informed about their congressman and more likely to participate in elections. Politicians respond to the increased media coverage by more actively pursuing their constituencies' interests. They moderate their partisan voting, and more frequently participate in constituency committees. This in turn results in more money for congruent districts. Consequently, the authors reiterate that press coverage is important for electoral democracy, and warn that increasing newspaper mergers throughout the U.S. could likely result in reduced political participation and accountability.

Valcke, P. (2009). From ownership regulations to legal indicators of media pluralism: Background, typologies, and methods. *Journal of Media Business Studies***, 6(3), 19-42.**

This article explores the European approach to media ownership policy as one aspect of the broader approach to media pluralism. It explores concerns and policy of the European Parliament, European Commission, Council of Europe, and various member states and how these are addressed in policy and legal measures. It then addresses how these factors have influenced the development of the Media Pluralism Monitor prepared for the European Commission. In the view of the author, legal indicators should 1) be diagnostic tools, not commandments, 2) be applicable in the various EU Member States, 3) have a sufficiently precise meaning, and a clear and direct link with media pluralism, 4) be expressed in quantitative or qualitative scores (no ambiguity on what is being measured), 5) measurable with available data is available, 6) it is feasible to define reliable border values and there is general agreement over interpretation of results, and 7) data can be collected frequently enough to inform the progress and influence the decisions. Finally, the indicators should be risk-based; hence, their purpose is to detect possible threats to media pluralism.

Valcke, P., Lefever, K., Kerremans, R., Kuczerawy, A., Sükösd, M., Gálik, M. … Trappel, J. (2009). Independent study on indicators for media pluralism in the member states - Towards a risk-based approach. Prepared for the European Commission Directorate-General Information Society and Media. Retrieved May 9, 2012, from ec.europa.eu/information_society/media_taskforce/doc/pluralism/pfr_report.pdf

The present study forms part of the European Commission's three-step approach for advancing the debate on media pluralism within the European Union. The approach was launched in January 2007 with a Commission Staff Working Paper and is planned to result in a Commission Communication on media pluralism at the end of 2009 or beginning of 2010. The objective of the study is to develop a monitoring tool for assessing risks for media pluralism in the EU Member States and identifying threats to such pluralism based on a set of indicators, covering pertinent legal, economic and socio-cultural considerations. The Final Report describes the approach and method used to design these indicators and their integration into a risk-based framework. Three sets of indicators are developed. The first addresses the legal indicators, assessing the availability of policies and legal instruments that support pluralism in Member States and their effectiveness. The second set is of the socio-demographic indicators that measure threats to media pluralism related to socio-demographic factors like geographic location, minority status, age, gender, etc. The last set focuses on the economic indicators, measuring the range, diversity and economic performance of media on the supply side based on the number of media companies, the level of market concentration, profitability ratios and other factors.

Valcke, P., Picard, R., Sükösd, M., Klimkiewicz, B., Petkovic, B., dal Zotto, C., & Kerremans, R. (2010). The European Media Pluralism Monitor: Bridging law, economics and media studies as a first step towards risk-based regulation in media markets. *Journal of Media Law,* **2(1), 85-113.**

This article discusses the Media Pluralism Monitor, a measurement tool which was developed by the authors for the European Commission in the context of the Independent Study on Indicators for Media Pluralism in the Member States—Towards a Risk-based Approach, carried out between February 2008 and June 2009. After situating the study against the backdrop of the broader EU media policy context, the article presents the main characteristics of the Monitor and explains its structure. It also addresses some implementation issues and discusses the most important comments and concerns raised by stakeholders and academics. The article argues that the Monitor adopts a novel, multidisciplinary and holistic approach to media pluralism, by combining, for the first time, indicators drawn from law, economics and social science to identify and measure risks relating to various aspects of media pluralism, including not only ownership and plurality issues, but also cultural, political and geographic dimensions. The Monitor is a first step in the development of an EU-wide standardized monitoring system for detecting and dealing with societal risks in the area of media pluralism and the first attempt to apply risk analysis to media policy. By bringing together a host of previously disparate concerns to offer a multi-faceted approach to media pluralism, the Monitor has the potential to provide decision-makers with the means to develop a wider and stronger evidentiary basis for defining priorities and actions in this important area.

Van Den Bulck, H. V. D., & Broos, D. (2011). Can a charter of diversity make the difference in ethnic minority reporting? A comparative content and production analysis of two Flemish television newscasts. *Communications*, **36, 195-216.**

This article examines the impact of the *Charter of Diversity* – a document signed in 2003 by the Flemish public service broadcaster VRT. Signing the Charter implies a set of commitments to practices of inclusiveness, balanced representation of social groups, and minority employment. To examine the effect the adoption had on TV portrayals of ethnic minorities, the authors compared VRT to a commercial TV station (VTM) that did not sign the Diversity Charter.

The study relied on mixed method research. It employed qualitative and quantitative analysis of 140 newscasts from VRT and VTM, as well as interviews with news production and ethnic minority experts. The content analysis did not reveal significant differences in the news programming of the two stations. Working under the Diversity Charter did not result in more balanced portrayals of minorities in the news. Interviews with experts were conducted to unpack the reasons for that unexpected finding. The authors' conclusion was that the VRT did not do enough to improve journalist media literacy and social capital or change the production process in order to enhance minority reporting.

Waldfogel, J. (2002, March). Consumer substitution among media. Federal Communications Commission Media Working Group. Retrieved June 9, 2012, from transition.fcc.gov/ownership/materials/already-released/consumer090002.pdf

This paper examines the extent of substitutability across media formats amidst major changes in the media environment. Methodologically, it uses a variety of demand and supply measures and assembles aggregate data on both the availability of media outlets and their use over time, as measured by listening, viewing and circulation.

The data show that there is clearest evidence of substitution between Internet and broadcast TV, both overall and for news; between daily and weekly newspapers; and between daily newspapers and broadcast TV news. Evidence of substitution was also found between cable and daily newspapers, both overall and for news consumption; between radio and broadcast TV for news consumption; and between Internet and daily newspapers for news consumption. However, there was little or no substitution between weekly newspapers and TV, or between radio and either Internet or cable.

While the results show the substitutability of various media, the authors stress that they cannot completely answer the question of whether substitution is sufficiently effectively that all media should be considered substitutes for news and information purposes.

Scott, D., Gobetz, R., & Chanslor, M. (2008). Chain versus independent television station ownership: Toward an investment model of commitment to local news quality. *Communication Studies***, 59(1), 84-98.**

The authors use content analytic techniques to analyze broadcast television newscast segments from September 1, 2003 to October 9, 2003. The study includes news segments from the 10:00 p.m. newscasts of the three major network-affiliated stations in the Tulsa, Oklahoma, market. The sample results in a total of 87 broadcasts and 2,527 news stories and includes the categories of local news, locally produced video, on-air field reporters, and newscast promotions. This pilot test of an investment model of commitment to television news quality

yield statistically significant results supporting four hypothesized relationships between types of broadcast station ownership. The findings indicate that the news department operated by a small media group produced more local news, more locally produced video, more use of on-air reporters, and fewer news promotions than the larger chain-based broadcast groups investigated, suggesting a deeper commitment to local news quality. The results support the policy position that stricter ownership limits would enhance the quality of local television news.

Shiman, D. (2007). The impact of ownership structure on a television station's news and public affairs programming. FCC Media Study 4: News Operations

This study investigates the connection between broadcast TV stations' ownership characteristics and the quantity of news and public affairs programming they provide. The author examines the programming of 6700 stations, collected for two weeks per year for the period between 2002 and 2005.

Controlling for unobserved market, broadcast network, and time factors, the analysis found that TV stations provided more news programming when they were:

> Cross-owned with a newspaper: 18 more minutes of news per day, an 11% increase
> Owned by a big four network: 22 more minutes per day, a 13% increase
> Had co-owned TV stations in the same market: 24 more minutes per day per co-owned station, a 15% increase

Stations provided less news programming if they were part of a large station group, or if they were locally owned (6 less minutes per day, a 4% decrease). TV-radio cross-ownership did not have a significant impact on news programming. Most ownership characteristics, furthermore, did not have an effect on the quantity of public affairs programming. The exception was TV-radio cross-ownership, associated with 3 more minutes per day (a 15% increase).

Singleton, L., & Rockwell, S. (2003). Silent voices: Analyzing the "media voices" criteria limiting local radio-television cross-ownership. *Communication Law and Policy*, 8(4), 385-403.

In 1999, the Federal Communications Commission liberalized its broadcast cross-ownership rules. According to the regulator, the new local ownership regulation was in keeping with the growth in the number and variety of media outlets in local markets. The extent of permissible television-radio cross-ownership was to be decided based on the number of independent "media voices" in the market.

This study reviews the FCC's development of the concept of media voice, which relies heavily on the notion of local news and public affairs programming. The authors examine local news programming from all full-power television stations in the top fifty U.S. media markets. The study focuses on identifying "silent voices": broadcasting stations that did not provide any local news or local public affairs programing. The analysis found 162 television stations of that kind, with at least one "silent voice" present in 49 of the top 50 markets. The authors conclude that FCC's policy of counting all local television stations equally as local media voices, (i.e. according

them equal weight in determining the permissible level of local cross-ownership) was a questionable practice.

Smith, L. (2009). Consolidation and news content: How broadcast ownership policy impacts local television news and the public interests. *Journalism & Communication Monographs***, 10(4), 387-453.**

This longitudinal case study in Jacksonville, Florida, analyzed the newscasts of one of the nation's first "duopolies," the result of changes in FCC policy in 1999, which allowed a single company to own two television stations in the same media market. A total of 60 newscasts and 1,048 stories were content analyzed. The study empirically measured diversity and localism, and results indicate that economies of scale achieved through local television consolidation may translate to higher quality coverage in some content areas but not others. Future research could address this problem by expanding the number of stories included in the analysis, perhaps sampling two weeks of content at each station instead of one.

Spavins, T. C., Denison, L., Roberts, S., & Frenette, J. (2002). *The measurement of local television news and public affairs programs.* **Washington, DC: Federal Communications Commission.**

This report measures the performance of television stations in the area of public affairs news. It evaluates the relative success of TV stations owned by one of the four largest broadcast networks (NBC, Fox, CBS, and ABC) and compares it to that of affiliates.
The quantity/volume of local news programming was computed based on the hours aired during the November 2000 sweeps period. The quality was evaluated based on three measures:

1. The ratings received for local evening news
2. The success at earning awards from the Radio and Television News Directors Association
3. The local television recipients of the Silver Baton of the A.I. DuPont Awards.

The analysis found that the performance of network owned-and-operated (O&O) stations and affiliates was identical with respect to ratings of early evening newscasts. With respect to the receipt of awards for local news operations, network O&Os outperformed affiliates on a nationwide basis. In addition, network O&Os appeared to produce, on average, a greater quantity of local news and public affairs programming than affiliates in markets where the two station types competed directly. Within the class of affiliates, there was variation in performance between affiliates that were owned in common with a newspaper publisher, and all other network affiliates. Affiliates co-owned with newspapers experienced noticeably greater success than other network affiliates.

Tremayne, M. (2004). The web of context: Applying network theory to the use of hyperlinks in journalism on the web. *Journalism & Mass Communication Quarterly***, 81(2), 237-253.**

The study employs network-analytical tools to examine news stories on the Web. This approach conceptualizes the Internet as a network of resources connected through hyperlinks. The analysis is based on a 5-year dataset of 2,500 online news pieces posted between 1997 and 2001 by the ten largest news organizations present on the Internet at the time.

The results demonstrated that the number of hyperlinks in stories increased over time. As the digital archives of news organizations grew, that also provided more opportunities to link back to previous stories that could supply context and background information. Story topics also affected the linking patterns of news content. International relations articles were particularly heavily linked, while stories about discrete events like crimes and accidents had less than the average number of links. The analysis further indicated that TV station websites used more links in their content than the sites of print publications.

The study concludes that network theory provides a useful framework predicting the linking patterns of online media. The author also suggests that news stories may become both more event-driven and more contextual on the Web.

Voakes, P.; Kapfer, J.; Kurpius, D. & Chern, D. (1996). Diversity in the News: A conceptual and methodological framework. *Journalism and Mass Communication Quarterly*, 73(3), 582-593.

This project seeks to develop a system for finding and categorizing source diversity within an article in a particular medium. Although content diversity may sometimes accompany source diversity, one does not ensure the other. The authors develop a protocol of frames and idea elements found in coverage of the debate about whether to raise Wisconsin's drinking age to 21. Six newspapers are chosen from various regions around the state, and the sample includes coverage between March and June of 1986. The project finds that at the case-study level there are differences between source diversity and content diversity.

Tongia, R., Wilson, E. J. (2011) The Flip Side of Metcalfe's Law: Multiple and Growing Costs of Network Exclusion. *International Journal of Communication*, 5, 665-681.

This theoretical work aims to fill a gap in the network literature, where most existing models focus on network inclusion and fail to capture the costs (or value loss) stemming from network exclusion. Intuitively, as a network grows in size and value, those outside the network face growing disparities. Tongia and Wilson present a novel framework for modeling network exclusion. Their work shows that costs of exclusion can be absolute, and might, at the extreme, grow exponentially, regardless of underlying network structure. The study presents several mechanisms (including parallel networks) through which the costs of exclusion can also be spread to the "included". The authors emphasize that future research needs to capture the interaction of alternate or parallel networks to the network at hand. They propose that empirically supported studies detailing these mechanisms have wide-reaching policy and design implications, particularly for the role of subsidies or direct intervention for network access and inclusion.

Yan, M. Z. & Park, Y. J. (2009). Duopoly, ownership, and local informational programming on broadcast television: Before-after comparisons. *Journal of Broadcasting and Electronic Media, 53(3)*, 383-399.

This study examines the relationship between duopoly ownership structure and the supply of local news and public affairs programming in the local television market. In 2003, the FCC allowed ownership of more than one television station by a single company, largely because they assumed these relaxed ownership rules would increase efficiency and improve local reporting. The results of this study show that both duopoly stations and non-duopoly stations significantly increased their local news programming from 1997 to 2003. The increases were attributable to the top four stations in each market. In addition, stations did not increase their efforts in local public affairs programming after becoming duopolies. The study also found that there was no significant difference in the amount of local news or local public affairs programming aired by duopoly and non-duopoly stations.

Yanich, D. (2010). Does Ownership Matter? Localism, Content and the Federal Communications Commission. *Journal of Media Economics*, 23, 51–67.

This study examines the relation between local news content and ownership structure in 17 television markets in the United States. The authors analyze television newscasts collected by the Project for Excellence in Journalism during the spring of 2002. The sample included 514 broadcasts from 53 stations in 17 markets and yielded 7,137 separate stories, excluding sports and weather. When examining only station-level factors, independent stations had more local content on their newscasts than those stations that were either (a) owned-and-operated (O&O) and part of a duopoly, (b) O&O-only, or (c) part of a duopoly-only. The authors interpret these findings to indicate that ownership does matter in the production of news on local broadcasts.

Yanich, D. (2011, October). Local TV news & service agreements: A critical outlook. University of Delaware.

Since 2000, there has been an increasing number of media markets in which broadcasters have entered into agreements with varying levels of cooperation. These agreements are expected to help relieve some of the economic burdens of gathering and presenting news content for local stations.

In this report, Yanich highlights the implications of these joint agreements for each the fundamental principles used by the Federal Communications Commission to regulate the broadcast industry: diversity, competition, and localism. The study employs content analysis of the newscasts in eight television markets in which there is at least one joint agreement. The research is intended to serve as a baseline for the public and for the FCC's policy-making process.

Yardi, S., & boyd, d. (2010). Tweeting from the town square: Measuring geographic local networks. International Conference on Weblogs and Social Media. American Association for Artificial Intelligence.

The study set out to demonstrate a relationship between the structural properties of online and real-world networks. It tracked the spread of information over Twitter, examining the role of mainstream media in the dissemination of local news. The data used in the analysis contained 12,619 tweets about two geographically localized events - a shooting that took place in Wichita, Kansas, and a building collapse in Atlanta, Georgia. The study also investigated the links between Twitter users who mentioned either of the events.

Even though Web platforms can facilitate long-distance communications, the analysis revealed that local networks were denser than non-local ones on Twitter. People discussing events that took place in their cities were more likely to follow each other than users who posted on more general topics. The residents of Wichita and Atlanta were also likely to get information about the events tracked by the study from their respective local news sources.

3. Barriers in Content Production, Distribution, Participation, and ICTs.

Barzilai-Nahon, K. (2006). Gaps and bits: Conceptualizing measurements for digital divide/s. *The Information Society*, 22, 269-278.

The author criticizes existing measures of digital divide on three grounds: First, one frequently finds simplistic, single-issue measurements that are generic and lack context. Second, existing indices tend to be at the international or national level, resulting in dearth of data at more micro levels. Third, measures lack comprehensiveness, overlooking socioeconomic divides. As an alternative, the author proposes an alternative framework for an integrative index with six major factors: 1) infrastructure access; 2) affordability relative to other expenditures and average income; 3) use frequency and patterns; 4) social and governmental constraints and support; 5) socio-demographic factors; 6) accessibility for disabled and special needs populations.

Berry, S. T., & Waldfogel, J. (1999). Public radio in the United States: Does it correct market failure or cannibalize commercial stations? Journal of Public Economics, 71, 189-211.

Grounded on economic theories, this paper examines whether public and commercial classical radio stations compete for listening share and revenue. It uses 1993 Arbitron data as well as station information from CPB and NPR.

The biggest finding of the paper is that public broadcasting does crowd out commercial broadcasting, particularly in classical music and to a lesser extent in jazz. The effects of public entry were particularly pronounced in larger markets. Over a third of public funding of jazz and classical music stations goes to public stations where similar programming is offered by commercial stations.

However, there was no evidence that public and commercial news programming competed directly. Also, the authors reiterate that such substitutability in classical and jazz stations should not be used to justify displacement of public funding, since the research only looked at the genres, not the degree of similarity between public and commercial stations.

Bissell, T. (2004). The digital divide dilemma: Preserving Native American culture while increasing access to technology on reservations. *University of Illinois Journal of Law, Technology, and Policy* **(2004), 129-150.**

This article examines the unique aspects of the digital divide in Native American communities and how this divide impacts the abilities of members of these communities to effectively participate in political and economic life. This study reviews and critiques policies that have been implemented to address the digital divide in Native American communities and offers a set of policy proposals.

Brown, K. S., Cavazos, R. J. (2002). Network revenues and African American broadcast television programs. *Journal of Media Economics***, 15(4), 227-239.**

This study analyzes factors explaining racial composition of network TV programs, using 1995 and 1996 data to conduct a multivariate regression analysis to look into the roles of program type, cast composition and viewer income on advertising revenue.

Results show that African-American characters are not underrepresented considering the average income and age of African American viewers. This means speaking purely in terms of revenue, neither networks nor viewers have a bias against African American cast members. Furthermore, African American viewers are found to have an intense preference for African American programming.

This means that despite the absence of bias, poorer groups like African Americans with stronger preferences are underserved in advertiser-supported broadcast markets because such viewers cannot express their preferences directly by simply paying more for their desired programming.

Basu, P., & Chakraborty, J. (2011). New Technologies, Old Divides: Linking Internet Access to Social and Locational Characteristics of US Farms. *GeoJournal***, 76, 469-481**

Rural areas are especially underserved in terms of Internet services, both in developed and less developed economies. This article examines access to the Internet within farming operations in the U.S. as an important aspect of understanding the digital divide within rural areas. Using county level data from the 2007 US Census of Agriculture, the analysis tests the relationship between farm Internet access and a set of explanatory factors (demographic characteristics of operators, economic characteristics of farms, geographic location of the farm, etc.). The findings indicate that existing social divides are replicated in terms of the digital divide, so that social inequalities are potentially a more pressing problem than infrastructural gaps in terms of rural access to the Internet in the U.S.

Cornwall, A. (2008). Unpacking "participation": Models, meanings, and practices. Community Development Journal, 43(3), 269-283.

As this article illustrates, public institutions appear to be responding to the calls voiced by activists, development practitioners and progressive thinkers for greater public involvement in making the decisions that matter and holding governments to account for following through on their commitments. Yet what exactly 'participation' means to these different actors can vary enormously. This article explores some of the meanings and practices associated with participation, in theory and in practice. It suggests that it is vital to pay closer attention to who is participating, in what and for whose benefit.

Deuze, M. (2006). Ethnic media, community media and participatory culture. *Journalism*, 7(3), 262-280.

There has been an exponential growth of ethnic/minority media in recent years globally, with experts attributing such trend as an expression of increasing worldwide migration. This paper challenges such causal relationship, locating the success of ethnic/minority media within the global emergence of "community, alternative, oppositional, participatory and collaborative media practices."
Participation is a core element of the currently emerging media culture. This heralds new roles for journalists as bottom-up facilitators and moderators of community conversation rather than top-down storytellers. Also, media firms are expected to adopt open business models to better engage with its audience as fellow citizens than potential customers.

DiMaggio, P., Hargittai, E., Celeste, C., & Shafer, S. (2004). Digital inequality: Retrieved June 1, 2012, from unequal access to differentiated use. In Neckerman, K. (Ed.) *Social Inequality* (pp. 355-400). New York: Russell Sage Foundation.

This paper reviews the literature about inequality in access to and use of new digital technologies. This paper argues that most research has focused on inequality in access (the "digital divide"), measured in a variety of ways. The authors agree that inequality of access is important, because it is likely to reinforce inequality in opportunities for economic mobility and social participation. At the same time, however, the authors argue that a more thorough understanding of digital inequality requires placing Internet access in a broader theoretical context, and asking a wider range of questions about the impact of information technologies and informational goods on social inequality.

Duwadi, K., Roberts,S., & Wise, A. (2007). Ownership Structure and Robustness of Media. FCC Media Ownership Study 2. Washington, DC: Federal Communications Commission.

In September 2002, the Federal Communications Commission released a study of media ownership that examined media ownership of various types (cable, satellite, newspaper, radio, and television) for 10 radio markets in 1960, 1980, and 2000.

This study updates and expands the previous report, analyzing data from all Designated Market Areas (DMAs) in the country. It examines media ownership for the same categories, but also adds the availability and penetration of Internet access. The authors track the availability and ownership of media in the U.S over the four-year period from 2002 to 2005.

The analysis finds that media ownership was fairly stable over the period studied. Multichannel video (cable and satellite) penetration has continued to grow since the previous report. In the TV industry, the data revealed a slight increase in the number of stations and a slight decrease in the number of owners. For the radio industry, the number of stations increased moderately, while number of daily newspapers decreased slightly.

Ford-Livene, M. (1999). The digital dilemma: Ten challenges facing minority-owned new media ventures. *Federal Communications Law Journal*, 51(3), 577-607

This study summarizes ten challenges minority-owned media ventures must overcome to stake a claim in the new media frontier:

> Bandwidth constraints that deny high-speed access for minority customers and small to medium-sized communities
> Digital divide in which minorities do not have time and money to use information technology
> Educational gap of minority consumers
> Lack of access to venture capital and other start-up money
> Difficulty in distribution due to weak brand power
> Difficulty in advertising due to underselling of minority consumers and weak power of minority advertising agencies
> High burn rate requiring both flexibility and fiscal discipline
> Maintaining optimal mix of original, member-created and third-party content
> Luring growing international web audience
> Maintaining competitiveness amidst consolidation of media and entertainment firms

George, L., & Waldfogel, J. (2003). Who affects whom in daily newspaper markets? J*ournal of Political Economy*, 111(4), 765-784.

This research looks into the operation of preference externalities in daily newspaper market according to ethnicity, and also considers whether preference externalities exist among groups defined by education, income or age. It uses zip code-level data from the 1990 Census data and newspaper circulation data from the Audit Bureau of Circulations to perform a multivariate regression analysis.

The findings confirm the hypothesis that an increase in the size of a group with similar preferences in a market increases consumption within the group and decreases consumption by individual outside the group: Blacks are more likely to purchase a daily newspaper in markets with larger Black population. Newspaper purchase rates of Whites also increased with

a larger White population but was not affected by the Black population. However, no such preference externality was found across education, income or age categories.

Hammond, A. S. (1996). Universal access to infrastructure and information. DePaul Law Review, 45, 1067-1091.

Written in the wake of the passage of the Telecommunications Act of 1996, the paper focuses on three areas deemed important in terms of ensuring universal access. The first is electronic redlining, a practice in which firms bypass low-income and minority communities when building or expanding telecommunications infrastructures for profit reasons, which the Act does not explicitly address. The second is universal service itself, which the Act did address by establishing additional principles, but nevertheless stopped short of defining what universal service is and who is eligible to receive assistance. The third is cable must carry provisions, which due to the Act's failure to mention could result in inferior programming for forty percent of Americans who previously had access to "free" broadcast information.

Hammond, A. S. (1997). Universal service in the digital age: The Telecommunications Act of 1996: Codifying the digital divide. *Federal Communications Law Journal*, 50, 179-214.

The paper argues that the Telecommunications Act of 1996 falls fall short of its stated goals to ensure better communications access for all Americans. Written in 1997, he provides one of the first examples of the digital divide affecting minority populations.

The impact of the deferred connections and disconnections to the Internet touch the fundamental nature of Americans. Lack of access means disadvantage in education, employment, civic engagement as well as health care.

While the 1996 Act contains provisions aimed at narrowing the communications gap, they are insufficient. Furthermore, the Act's equating antidiscrimination with antiredlining constrains the FCC's efforts to promote better access for minorities. Thus the author recommends short-term actions like extending telecommunications discounts and rapidly increasing subsidies.

Hammond, A. S. (2002). The digital divide in the new millennium. *Cardozo Arts & Entertainment Law Journal*, 20, 135-156.

This paper argues that it is shortsighted to declare the digital divide closed on the one hand, and equally shortsighted to insist on increasing subsidization of universal access by making firms and end users pay more.

Instead, it proposes that the government parties involved jointly develop a clearly measurable benchmark for determining the existence, scope and continuing gaps of the digital divide. Based on these benchmarks, government entities should work with public and business stakeholders to develop deployment goals and timetables. There should also be enforceable sanctions against redlining and a presumption the programs will end with two investment cycles (about 14 years) absent evidence that the divide remains.

Hargittai, E. (2002). Second-level digital divide: Differences in people's online skills. *First Monday*, **7(4).**

This study looks beyond mere access to the Internet to look at differences in people's online skills, finding a "second-level digital divide" that seriously hampers people's ability to make the most out of the Internet even with access. The author conducts close observation, interview and survey of 54 Internet users selected randomly.

The biggest finding is the large variance in people's Internet skills, particularly in the time they took to complete tasks like looking up certain information. As for explanatory factors, age is negatively associated with Internet skill, prior experience with technology is positively related, and differences in gender did not lead to statistically meaningful differences.

Hargittai, E. (2007). Content diversity online: Myth or reality? In Napoli, P. M. (Ed.) *Media diversity and localism: Meaning and metrics* **(pp. 349-362). Mahwah, NJ: Erlbaum.**

This research looks at what is realistically within reach of people actually navigating the Web. Methodologically, the author conducts observations and interviews with 100 randomly selected adults in 2001 and 2002. It makes the case that both the way content is organized as well as user's ability influence the accessibility of materials. Even in the new environment of the Internet, people tended to go to sources closely tied to traditional media like commercial aggregator sites to find local information.

Hargittai, E., & Shafer, S. (2006). Differences in actual and perceived online skills: The role of gender. *Social Science Quarterly*, **87(2), 432-448.**

This article analyzes gender differences in Internet skills by measuring both self-perceived abilities as well as actual abilities of men and women navigating online content. It finds that men and women do not differ greatly in their online abilities once the researcher controls for socioeconomic background and computer and Internet-use experiences. Rather than gender, age, level of education and experience with the medium emerged to be important predictors of Internet skills.

However, women's self-assessed skill was significantly lower than that of men. While gender influences self-perceived skill, age, education, and family income do not. This means women are less likely to take advantage of the myriad of services available on the Internet, because they think they are not capable of using them. On the contrary men may be benefiting more from the web because of their higher self-assessed capabilities.

Hargittai, E., & Walejko, G. (2008). The participation divide: Content creation and sharing in the digital age. *Information, Communication & Society*, **11(2), 239-256.**

This study examines the prevalence of content creation activities on the Internet and also conducts a multivariate regression to see if people of certain demographics are more likely to write or create music or video online. The sample was 1060 first-year college students from an urban public university.

Despite the opportunities afforded by the Internet, relatively few people are taking part. Only 41% of students took part in at least one of the four content creation activities online (music, photography, poetry or fiction, and video). There was little difference according to race or ethnicity, but the gender difference was considerable, with men (63.6%) more likely than women (50.6%) to take part in creative activities. However, the gender gap disappeared once Internet user skill was controlled for. A strong correlation was found with higher socioeconomic status measured by parental education levels.

Hassani, S. N. (2006). Locating digital divides at home, work and everywhere else. *Poetics*, 34, 250-272.

This study examines whether the locations people use to connect to the Internet – such as home, work, school and public places – can be identified as contributing factors to the digital divide. Multivariate regression analyses using national survey data show that having home Internet access is an important but insufficient measure to explain how location of use matters: individuals with many connections such as high-speed connections at work that offer relative freedom are most likely to take full advantage of the Internet in everyday lives. This means the current emphasis on bringing high-speed broadband to homes should be supplemented by providing access to all places for everyone, for instance by creating more public Wi-Fi zones.

Herman, E. S., & Chomsky, N. (2002). *Manufacturing Cons(t)ent: The Political Economy of the Mass Media*. New York, NY: Pantheon.

The authors describe a propaganda model for viewing the actions of the American mass media and use it to examine four case studies. The propaganda model examines inequalities of wealth and power and how their effects mediate the types of news disseminated, marginalize dissent and strengthen the dominant elite. Ownership, size, advertising, critique of media and anticommunism are addressed as elements that contribute to a pattern of manipulation and systematic bias.

Hoffman, D. L. (2011). Internet Indispensability, Online Social Capital, and Consumer Well-Being. In Mick, D. G., Pettigrew, S., Pechmann, C., & Ozann, J. L. (Eds.) *Transformative Consumer Research for Personal and Collective Well-Being*. New York, NY: Routledge.

Research has found a strong positive connection between being socially active and physical and mental well-being in later life. Further investigations have indicated that similar benefits may also accrue from online social connections. This theoretical work asks whether these beneficial effects of Internet use will accrue equally to all consumers. It identifies and examines key factors that may contribute to the positive impact of Internet use on consumer well-being. The authors propose that consumers who find the Internet indispensable to their daily lives are motivated to build and maintain online social capital and with that store of online social capital, experience positive outcomes related to mental health and physical well-being.

Howard, P. N., & Smith, S. (2007). Channeling diversity in the public spectrum: Who qualifies to bid for which FCC licenses? *Journalism & Mass Communication Quarterly*, **84(2), 215-230.**

This study looks at the result of the public spectrum auction results to see if the current system increased diversity of ownership and also to identify potential barriers to entry within each stage of the application system.

In a multivariate regression analysis of all auction data from 1995 to 2006, minority-owned businesses are much more likely to be interested in a television or radio license than a license to operate other communication services on the public spectrum, but less likely to actually succeed in the bid. While one in ten applicant businesses belong to the minority category, only one in thirteen qualified as bidder and fewer than one in fourteen ended up winning the bid.

As to the potential reasons behind the decreasing odds of minority bidders at each stage, the authors point to the lack of economic capital and understanding about the FCC process. The authors note that the online auction system itself is an improvement over the previous system of assigning broadcast licenses and does not provide a major administrative barrier to entry to minority ownership, with its user-friendly elements like application training opportunities. A learning curve is also visible: Holding other factors constant, in the later years of the auction program there was an increased chance that minority applicants will qualify to bid on licenses.

Hunt, D. (2007) Whose Stories Are We Telling? *The 2007 Hollywood Writers Report*. **Los Angeles, CA: Writers Guild of America West.**

This paper summarizes the state of female and minority employment in the television and the film industries in 2005, using membership data of Writer's Guild of America. It finds that females constitute 27% of television writers, with no meaningful income disparity compared to male television writers. Minorities were underrepresented by a factor of more than 3 to 1 among television writers, making up only 9% of all employed television writers. Median income of minority writers was $78,107, which is some 23% less than $97,956 for white writers. Whereas the gender gap is closing slowly for women, for minorities employment and earning gains have either slowed or ground to a halt altogether. In the film industry, income and employment gaps were considerably wider for both females and minorities.

Hunt, D. (2011). Recession and regression. *The 2011 Hollywood Writers Report*. **Los Angeles, CA: Writers Guild of America West.**

This report provides a snapshot of the state of female and minority workforce in the television and the film industries in 2009, comparing it with figures from 2007. Overall, the economic recession has done little to diversity the workforce, with the percentage of women television writers stuck at 28% and minority television writer increasing by a percentage point to 10%. The film industry, which has taken a harder hit from the recession, saw the share of female writers decrease by a percentage point to 17%. Minority film writers decreased by five percentage points to just 5%. The recession also resulted in widening of the income gap between women writers and their white male counterparts from $7100 to $9400 in two years. Median income of

minority TV writers was $84,675, compared to a larger increase of $108,000 for white male counterparts.

Katz, V. S., Matsaganis, M. D., & Ball-Rokeach, S. J. (2012). Ethnic Media as Partners for Increasing Broadband Adoption and Social Inclusion. *Journal of Information Policy*, **2(0), 79-102.**

This article details the role of ethnic media working with local institutions in alleviating social disparities. Written in response to the Federal Communications Commission's National Broadband Plan (NBP), the text outlines new avenues for the inclusion of underserved populations. It emphasizes the importance of collaborating with ethnic media in order to increase broadband adoption and sustain connectivity in local communities.

The study describes key factors that could enable or constrain ethnic media in their capacity to serve as intermediaries and explain broadband to their audiences in a culturally tailored, locally relevant way. Macro-level policies threatening localism and diversity include ownership concentration and deregulation, along with the defunding of public media. Micro-level factors promoting growth in ethnic media include the increasing population diversity in the U.S., the growing purchasing power of ethnic communities, and the emergence of ethnic media associations and alliances.

The authors recommend that government agencies engage in building capacity among ethnic media producers in order ensure a fruitful partnership around broadband inclusion. Increasing capacity can be done by providing assistance in developing literacy skills among news staff, as well as through material support. Financial backing could be provided by the restructuring of existing grant programs and the launching of dedicated new ones.

Koltay, T. (2011). The Media and the Literacies: Media Literacy, Information Literacy, Digital Literacy. Media, Culture & Society, 33(2), 211-221.

The study examines media literacy, information literacy and digital literacy as the three prevailing concepts that focus on a critical approach towards media messages. The article provides an overview of these literacies and discusses the similarities and differences between them.

Martin, S. P., & Robinson, J. P. (2007). The Income Digital Divide: Trends and Predictions for Levels of Internet Use. *Social Problems*, **54(1), 1-22.**

This article suggests that the diffusion of the Internet is becoming more rather than less polarized by family income in the United States. Using U.S. Census Bureau data for the years between 1997 and 2003, the analysis finds that the odds of access increased most rapidly for individuals at highest family income levels and most slowly for individuals with the lowest income levels. The slow diffusion among low-income groups is not apparent in comparable assessments of Internet diffusion in European countries.

Matsaganis, M. D. (2012). *Broadband Adoption and Internet Use Among Latinos*. **Los Angeles, CA: Tomas Rivera Policy Institute.**

This paper reviews looks into broadband usage patterns of Latinos, including differences between home broadband and mobile-only broadband users. A random telephone survey of 1600 Latino individuals conducted in 2010 shows 56% of them to have a high-speed Internet connection, which breaks down into 23% accessing from home only, 25% with both home and mobile access, and 8% with only mobile access.

Home broadband adopters are noticeably different compared to mobile-only broadband users. Among home adopters, the Internet is the top source for information (45%), followed by TV (23%) and newspapers (8%). For mobile-only users, TV (29%) and Internet (28%) are equally important. Also, home broadband adopters consume more English-language content on TV and the Web compared to mobile-only users who spend much more time on Spanish-language TV.

McChesney, R.W. & Scott, B. (Eds.). (2004) *Our Unfree Press: 100 Years of Radical Media Criticism*. **New York, NY: The New Press.**

As the title suggests, this collection of edited chapters examines the system of media production itself, challenging the notion of a fair and balanced free press. The authors describe how corporate ownership and commercial pressures contribute to the erosion of journalism as a public service and undermine democratic social goals.

Middleton, K. L., & Chambers, V. (2010). Approaching Digital Equity: Is WiFi the new Leverler? *Information Technology & People*, **23(1), 4-22.**

This article examines the relationships between demographic and situational variables and small and medium-sized enterprise (SME) owners' intentions to adopt and use free public Wi-Fi technology. The analysis is based on a survey of 158 SME owners in an urban renewal community.

Contrary to previous research, the study found that gender, age, education, and experience were not related to the intention to adopt Wi-Fi. Ethnicity had a significant, but small association with intent to adopt. Ethnicity and age were also found to be somewhat related to Wi-Fi usage. Education, gender, and experience were not significant predictors of usage.

Nahon, K. (2011). Fuzziness of Inclusion/Exclusion in Networks. *International Journal of Communication*, **5,756-772.**

This article addresses the concept of fuzziness of inclusion/exclusion in networks. It argues that the conceptualization of inclusion/exclusion is more complex than a static, binary dichotomy of in/out and requires that we take a viewpoint that examines the changes in the dynamics of power among the stakeholders. With this viewpoint the study examines the balance of power between gatekeepers and gated (the entity subjected to gatekeeping). The power dynamics are manifest through processes by which transient elites (gatekeepers) emerge and mature. Contrary to traditional thinking about gatekeepers controlling the whole process, the author

argues that the collective patterns of behavior of the gated have a crucial role in the emergence and sustainability of gatekeepers. Fuzziness is essential to the dynamics of these processes.

Napoli, P. M. (2002). Audience valuation and minority media: An analysis of the determinants of the value of radio audiences. *Journal of Broadcasting & Electronic Media*, 46(2), 169-184.

This study investigates the possibility of lower valuations of minority radio audiences by conducting a quantitative analysis of the determinants of the value of commercial radio station analysis.

The results confirm the hypothesis that Black and Hispanic audiences are more difficult to monetize than non-minority audiences, holding constant for demographic characteristics like income, age and gender. Such, coupled with the lower levels of audience size, feed into an economic process that works against minority-targeted content being able to compete and remain viable in the market.

The author thus recommends that policymakers come up with new strategies to promote diversity in the electronic media. In addition to continuing to seek means of promoting the establishment of new minority media outlets, policymakers should also seek ways to sustain such outlets once they are established.

Peha, J. M. (2007). Bringing Broadband to Unserved Communities. Pittsburgh, PA: Department of Engineering and Public Policy. Retrieved June 12, 2012, from repository.cmu.edu/cgi/viewcontent.cgi?article=1023&context=epp

Roughly one-third of households in rural America cannot subscribe to broadband Internet services at any price. This puts many rural communities at a disadvantage with respect to economic growth, job creation, educational opportunities, health care information, commerce, and more. This discussion paper proposes a suite of interrelated policies through which the government can facilitate the expansion of broadband infrastructure into unserved communities.

Powell, A., Bryne, A., & Dailey, D. (2010). The Essential Internet: Digital Exclusion in Low-Income American Communities. *Policy & Internet*, 2(2), 161-192.

This article examines factors that drive or constrain broadband adoption. The authors report results from a large-scale qualitative study of the barriers to broadband adoption in the U.S. Drawing from 170 interviews with broadband non-adopters as well as community access providers and other intermediaries, the study finds that price is only one factor shaping home broadband adoption. Furthermore, libraries and other community organizations are found to fill the gap between low home adoption and high demand for broadband. These intermediaries compensate for shortages in digital skills that also constitute barriers to adoption in a context where broadband is essential for gaining access to jobs, education, and e-government.

Prieger, J. E. (2003). The supply side of the digital divide: Is there equal availability in the broadband Internet access marker? *Economic Inquiry, Oxford University Press*, **41(2), 346-363.**

This article attempts to find out if groups lacking in broadband access are deprived because they cannot get it where they live. It conducts a multivariate regression analysis using Census data and the 2000 FCC broadband survey.

The results show no statistically significant evidence of unequal availability based on income or on concentration of Black or Hispanic population. A case of discrimination could only be found for Native Americans among all ethnic groups.

What emerges as important determinants of availability are rural locations (negatively correlated) and demand characteristics such as market size, education and age (positively correlated). Interestingly, Spanish language use was also found to increase availability. The author thus suggests that the government's universal policies focus more on the demand side through targeted subsidies.

Prieger, J. E., & Hu, W.-M. 2008. The Broadband Digital Divide and the Nexus of Race, Competition, and Quality. Information Economics and Policy, 20(2), 150-167.

The article studies the gap in broadband access to the Internet between minority groups and white households, using geographically fine data on DSL subscriptions. In addition to income and demographics, the quality of service and competition are examined as components of the Digital Divide. The findings indicate that gaps in DSL demand for Blacks and Hispanics do not disappear when income, education, and other demographic variables are accounted for. However, lack of competition is an important driver of the Digital Divide for Blacks. Service quality is an important determinant of demand, and is related to the DSL gap for some groups.

Pritchard, D., Terry, C., & Brewer, P. R. (2008). One Owner, One Voice? Testing a Central-Premise of Newspaper-Broadcast Cross-Ownership Policy. *Communication Law & Policy*, **13(1), 1-27.**

This article engages debates about the relationship between ownership structure and media content in the context of media ownership policy in the United States. The authors address the concern that an individual or company owning multiple media outlets will slant news and opinion in an attempt to distort public opinion and/or influence public policy. The premise is that a single owner represents a single voice, regardless of how many media outlets the owner operates.

The study examines news and commentary about the 2004 presidential campaign from commonly owned newspapers, television stations and radio stations in three communities to tests the validity of the one owner, one voice premise in the context of newspaper-broadcast cross-ownership. The results suggest that there is no empirical basis for believing that cross-owned media do any less than other media to serve the public interest.

Robinson, J. P., DiMaggio,P., & Hargittai, E.(2003). New Social Survey Perspectives on the Digital Divide. *IT & Society*, **1(5), 1-22. Retrieved June 12, 2012, from www.webuse.org/pdf/RobinsonEtAL-NewSocialSurveyPerspectives2003.pdf**

The authors point out that a digital divide may exist even among users who do have Internet access at home. The gap in this case is based on usage differences. This article analyzes usage data from the General Social Survey and other surveys to determine whether highly educated respondents have advantages in Internet usage.

The analysis finds that college-educated respondents have clear advantages over high-school educated respondents in using the Internet to derive occupational, educational and other benefits. The clearest advantage appears in terms of the types of sites visited, uses made and political discussion. Evidence shows that education - and occasionally income, age and marital status - is associated with consistently more long-term uses related to enhanced life chances via work, education, health or political participation. Education is also related to less use for simple, short-term, entertainment or personal purposes. The advantages to the college educated are also evident in their keeping in contact with a wider range of friends and relatives, particularly by email. On the other hand, in several areas (e.g. search strategies employed; receiving assistance from relatives) little gap by education exists.

Sandoval, C. J. K. (2005). Antitrust law on the borderland of language and market definition: Is there a separate Spanish-language radio market? A case study of the merge of Univision and Hispanic Broadcasting Corporation. *University of San Francisco Law Review*, **40, 1-68.**

This paper looks into the case of Univision and Hispanic Broadcasting Corporation. The author analyzes key factors that contributed to the Department of Justice (DOJ) decision that approved the merger amidst controversy.

The author's central argument is that there is no such thing as a distinct Spanish-language radio, as defined by the DOJ for antitrust purposes. The Hispanic population itself is multilingual, with only 10% unable to speak English. Very few tune into exclusively Spanish broadcasts, and hybrid formats using both Spanish and English in shows are increasingly popular.

With its current definition of distinct Spanish and English language broadcast markets, the DOJ is actually encouraging less Spanish programming as broadcasters will lure Hispanic listeners with both English and Spanish content and escape antitrust confines. Consequently, the author proposes that the DOJ consider the relevant market for mergers, such as between Univision and HBC, to be the whole radio market within the geographic area.

Schradie, J. (2011). The digital production gap: The digital divide and Web 2.0 collide. *Poetics*, **39, 145-168.**

This paper shifts the focus from the consumption and participation frameworks of the digital divide to that of production. It uses 17 Pew Internet & American Life Project national surveys from 2000 to 2008 to conduct a multivariate regression analysis.

The results reveal a class-based gap in digital production activities such as blog, comment, share and chat. While income explains much of digital production among adults, its effects weaken as it is a proxy for Internet access. Education emerges to be the most robust class-based measure of production for both the general population and for Internet users. The location and quality of access – whether one has broadband at home, school or work – also had a major impact.

Shah, D. V., Kwak, N., & Holbert, R.L. (2001). "Connecting" and "disconnecting" with civic life: Patterns of Internet use and the production of social capital. *Political Communication* 18, 141–62.

This article explores the relationship between Internet use and the individual-level production of social capital. The authors adopt a motivational perspective to distinguish among types of Internet use when examining the factors predicting civic engagement, interpersonal trust, and life contentment. The predictive power of new media use is then analyzed relative to key demographic, contextual, and traditional media use variables using the 1999 DDB Life Style Study. Although the size of associations is generally small, the data suggest that informational uses of the Internet are positively related to individual differences in the production of social capital, whereas social-recreational uses are negatively related to these civic indicators. Analyses within subsamples defined by generational age breaks further suggest that social capital production is related to Internet use among Generation X, while it is tied to television use among Baby Boomers and newspaper use among members of the Civic Generation. The possibility of life cycle and cohort effects is discussed.

Siegelman, P., & Waldfogel, J. (2001). Race and radio: Preference externalities, minority ownership, and the provision of programming to minorities. In Baye, M. R., & Nelson, J. P. (Eds.), *Advances in Applied Microeconomics, Vol. 10: Advertising and Differentiated Products*. Amsterdam: JAI/Elsevier.

This paper examines radio signals as public goods and analyzes the economic mechanism by which market provision fails to serve the public with underprovision of programming formats for small audiences. It uses station-level information for commercial stations including total listening, programming format and owner identity.
"Preference externalities" refers to the situation in which listeners benefit from being in the same market as others with similar preferences, because there is more programming available due to the size of the economy. However, because minority preferences are substantially different from whites, the paper finds that preference externalities are positive only within homogeneous ethnic groups.

Vehovar, V., Sicherl, P., Hüsing, T., & Dolnicar, V. (2006). Methodological challenges of digital divide measurements. *The Information Society*, 22, 279-290.

The authors present three methodological suggestions to address shortcomings in existing measures of the digital divide, which is often reduced to comparisons of Internet penetration rates. First is multivariate regression analysis instead of bivariate modeling. By controlling for the effects of variables like age, education, income and gender, one can have a better idea of the exact determinants of the divide. Second is compound measurements like the Digital Divide Index that can capture the complexities of the digital divide to avoid oversimplification and even deception. Third is time-distance methodology that captures changes over time, rather than presenting a static picture. Such is particularly useful in capturing trends and making forecasts.

Waldfogel, J. (2003). Preference externalities: An empirical study of who benefits whom in differentiated-product markets. *RAND Journal of Economics, 34*(3), 557-568.

Theory predicts that in markets with increasing returns, the number of differentiated products and the tendency to consume will grow in market size. This study documents this phenomenon across 247 U.S. radio markets. By a mechanism termed "preference externalities," an increase in the size of the market brings forth additional products valued by others with similar tastes. But who benefits whom? This study documents sharp differences in preferences between black and white, and between Hispanic and non-Hispanic, radio listeners. As a result, preference externalities are large and positive within groups, and they are much smaller and non-monotonic across groups.

Wareham, J., Levy, A., & Shi, W. (2004). Wireless diffusion and mobile computing: Implications for the digital divide. *Telecommunications Policy, 28*(5/6), 439-457.

This article illustrates that despite significant improvements in nominal levels, severe gaps of digital inclusion still exist in the American economy. This article argues that, for certain groups, migration towards mobile computing and digital inclusion may transpire from 2G voice centric mobile telecommunications to data centric mobile computing devices. Accordingly, this analysis employs a large data set to investigate what socio-economic factors are determinant for the diffusion of mobile telecommunications; how these findings can be extended to help close the digital divide; and how these findings can inform policy making concerning the digital divide.

Wang, X., & Waterman, D. (2011). Market size, preference externalities, and the availability of foreign language radio programming in the United States. *Journal of Media Economics*, 24, 111-131.

This study tested the conventional wisdom that minorities are underserved in America's broadcast markets by going beyond the Black or Hispanic population, analyzing radio foreign language programming in one or more of the 19 foreign languages within the largest 50 radio markets in 2005.
Multivariate regression analyses consistently show that foreign language population sizes and the number of foreign language stations serving those groups are positively related. Also, the

size of the English language population had a consistently negative impact on the amount of foreign language programming, although the relation was statistically insignificant in several models. Higher foreign language populations also led to greater local production levels, and the size of the English language population, other things equal, tended to reduce local news and talk show production.

Wei, L. (2012). Number matters: The multimodality of Internet use as an indicator of the digital inequalities. *Journal of Computer-Mediated Communication*, **17, 303-318.**

Traditional measures of Internet use tended to rely on user/nonuser and information/entertainment dichotomies. Instead, this study proposes the concept of "multimodality" of Internet use as a tool to determine digital inequalities. Multimodal Internet use is defined as engaging in a wide spectrum of activities from email and news reading to political information-gathering and blogging.

Multivariate regression analysis shows that multimodality is strongly and positively correlated with the levels of education and income. Also, a systematic pattern of progression is observed, with users starting with email and news and moving on to a full range of utilizations with advanced applications like travel service, politics, reading blogs and Twitter. Most importantly, multimodal Internet use is strongly associated with user's political communication and participation.

Worthy, P. (2003). Racial minorities and the quest to narrow the digital divide: Redefining the concept of "universal service." *Comm/Ent: Hastings Communications and Entertainment Law Journal*, **26(1), 3-71.**

This paper draws upon the history of the concept of universal service to see if the precedents set for telephony could also be applied for Internet access. Although universal service started as a corporate strategy by Bell in early 20th century, the concept became a vital element of federal telecommunications regulatory policy. Since 1985 federal and state governments have subsidized phone access for the elderly, low-income and rural citizens to ensure universal access. There is also a historical precedent of the government providing highly complex customer premise equipment as part of the basic telecommunications services: the U.S. government has provided equipment for the hearing-impaired for more than twenty years.

But universal access policies do not cover the Internet despite its growing importance in everyday lives of citizens from employment to education and basic social services. Despite a growing digital divide according to race and income, there is no parallel program to ensure the same minimum access to information technologies. Consequently, the author proposes that the government redefine universal access to include the Internet, ensuring low-income families have access to computers and the Internet.

Yanich, D. (2008). Doing Policy Research: Camelot or Oz? Science Research Council. Retrieved June 27, 2012, from <u>**essays.ssrc.org/mcrm/2008/12/03/doing-policy-research-camelot-or-oz**</u>

Very often the worlds of the scholar and the policy maker do not intersect, even when it would be in the best interests of both to have a connection. That is a shortcoming of many social science disciplines. In the past decade or so, scholars and policy makers have come to recognize that it is especially true of the communications field.

This essay offers one strategy that may help bridge the gap. It specifies a step-by-step approach to the process of informing public policy through research. It identifies those attributes of the policy world that the researcher must consider and it offers insights into how that affects the policy research process. The essay identifies three phases of the enterprise – bargaining, conducting the research, and communicating the results – as crucial steps for a successful collaboration between the researcher and the policy maker.

Yanich, D. (2011). Cross-Ownership, Markets and Content on Local TV News. In P. M. Napoli & M. Aslama (Eds.), *Communications research in action: Scholar-activist collaborations for a democratic public sphere*. New York: Fordham University Press.

This study examined the effect that the cross-ownership of local television stations and newspapers may have on the local content of newscasts across television markets. It is particularly timely for two reasons: (1) the Federal Communications Commission significantly reduced the prohibitions to cross-ownership in an order issued after a December 2007 meeting; and (2) the current economic crisis has increased the calls for media consolidation by the media industry as a mechanism for staving off financial ruin. The author applies a new coding scheme to research commissioned by the Federal Communications Commission (FCC) to examine issues of cross-ownership. That particular FCC research, Media Ownership Study No. 6, analyzed the effect of cross-ownership on political slant and local content. It concluded that cross-ownership positively affected both the total amount of news and the local content. The FCC relied heavily on this study in its December 2007 decision to significantly relax the restrictions on the cross-ownership of local television stations. However, peer reviews of Study 6 cited various methodological problems including its definition of "local".

The study conducted by Yanich and partially funded by the Social Science Research Council used the same content as Study 6 but applied a different coding scheme to it. The analysis found that cross-ownership negatively affects the amount of total news and the amount of local news in the television markets that formed the database for the research.

Yanich, D. (in press). Local TV News, Content and the Bottom Line. *Journal of Urban Affairs*.

This study compares the nature of local stories that were presented on TV newscasts across seventeen television markets in the U.S. It is an extension of the localism research that was conducted by the Federal Communications Commission in 2004 and the Local Television News Media Project at the University of Delaware in 2007 and 2009. The focus is on the cost characteristics of stories identified as "local" using the definition adopted by the FCC. The author examined attributes of stories (across the television markets) that would affect the cost of presentation to the station – the proverbial bottom line. The attributes considered in the paper included story type, story placement, story duration, and presentation mode. Differences in those attributes across markets were also captured. The author discussed a range of implications for public policy and citizenship.

Yanich, D. (in press). Local TV News, Content & Shared Services Agreements: The Honolulu Case. *Journal of Broadcasting & Electronic Media*.

In 2009, three of the five stations in Honolulu that delivered a daily newscast entered into a Shared Services Agreement (SSA). A community group, Media Council Hawaii, filed a formal complaint with the FCC to stop the arrangement. As of June 2012, the Commission has not yet ruled on the complaint.
This article reports the results from a content analysis of the stations' broadcasts before and after the SSA went into effect. The study captures differences in content and the distribution of stories among the SSA stations, among the SSA stations as compared to the non-SSA stations, and among the non-SSA stations across those time periods.

4. Communication/Media Ecologies. Traditional and Digital Connections.

Ball-Rokeach, S. J., Gonzalez, C., Son, M., Kligler-Vilenchik, N. (2012). *Understanding Individuals in the Context of Their Environment: Communication Ecology as a Concept and Method*. Presented at the Annual Meeting of the International Communication Association, Phoenix, AZ.

This paper outlines the conceptual and methodological development of a communication ecology measure for the health domain. The authors test the proposed construct in a pilot for a larger project investigating the health behaviors of women. This study is part of a National Institute of Health grant titled "Barriers to Cervical Cancer Prevention in Latina Women: A Multilevel Approach". The measure developed in the article accordingly aims to capture barriers and conduits to cancer prevention at the individual, interpersonal, and community levels, and identify interactions between levels.
The authors define communication ecology as "a network of communication resource relations constructed by individuals in pursuit of a goal and in context of their communication environment." One implication of this definition is that ecologies may vary both by individual and by goal. Dimensions of the measure discussed in the paper include:

> Resource categories (media, interpersonal, organizational, professional)
> Starting point, or the initial resource a respondent selects for a particular goal
> Number of steps, or the consecutive resources that are part of the respondent ecology
> Sequence, or the temporal unveiling of access to different resources
> Predominance, or the major resource categories in a particular communication ecology

Ball-Rokeach, S. J., Matei, S., Wilson, M., Loges, W., Hoyt, E. G., Jung, J. Y., et al. (2000). Community storytelling, Storytelling community: Paths to belonging in diverse Los Angeles residential areas (Metamorphosis White Paper #1). Los Angeles: Metamorphosis Project.

This white paper examines the levels of neighborhood belonging and the connectedness to local storytellers (residents, geo-ethnic media, and local organizations) in seven Los Angeles communities from the perspective of the dominant ethnicity in the area (African-American, Caucasian/Protestant, Caucasian/Jewish, Central American, Chinese, Korean, and Mexican). Neighborhood belonging is an index of engagement measuring how attached individual members are to their community, how they feel and act towards other local residents.

The results point to a positive association between belonging and integrated connectedness to the neighborhood storytelling network (ICSN). The study models the storytelling systems of the seven geo-ethnic groups mentioned above. Communication environment constraints on local storytelling and belonging are identified. Among them: bad mainstream media portrayals of the area; unsafe streets; homeowner-renter division; poor area maintenance; cultural and demographic differences between residents; work pressures; poor quality of goods and services; poor quality of public schools; traffic, and others.

Dluhy, M., & Swartz, N. (2006). Connecting Knowledge and Policy: The Promise of Community Indicators in the United States. Social Indicators Research 79(1):1-23.

This article examines a large number of community-based indicator projects in the U.S. The purposes and focus of these projects vary considerably as they have no common structure or template, which results in the use of different framework, indices, and measures.

The authors set out to review the factors that contribute to success across different cases and discuss the types of desired outcomes sought by communities. Some of the best practices outlined in the study include:

Using an explicit ideology or conceptual framework to develop the indicators.
Relying on a formal theory of the problem/issue to design policy interventions.
Following the cannons of good research design in order to develop credible indicators.
Connecting indicators with budgeting and planning processes whenever possible.
Using creative ways to reach citizens and to secure their involvement and input.

Durrance, J. C., & Fisher, K. E. (2005). *How Libraries and Librarians Help: A Guide to Identifying User-Centered Outcomes*. Chicago: American Library Association, 2005.

This book is a practical guide describing the How Libraries and Librarians Help (HLLH) Outcome Model. The model is developed and tested in six libraries over two years. The authors address ways to quantify outcome measures to evaluate the impact of a library on local communities and residents. The book also describes a number of success stories exemplifying work towards outcomes like "Empowering Youth" and "Strengthening Community."

Hampton, K. (2007). Neighborhoods in the Network Society: The e-Neighbors Study. Information, *Communication & Society* 10(5). 714-748.

This study examines whether the Internet is increasingly a part of everyday neighborhood interactions, and in what specific contexts Internet use affords the formation of local social ties. The paper argues that while the Internet may encourage communication across great distances, it may also facilitate interactions near the home. The analysis is based on detailed, longitudinal social network surveys completed by residents of four contrasting neighborhoods for three years as part of a quasi-experimental study.

The results suggest that with experience using the Internet, the size of local social networks and frequency of email communication with local networks increases. The introduction of a simple neighborhood email list further increases the number of weak neighborhood ties. The study outlines concerns related to the digital divide. It suggests that the concentration of poverty and lack of Internet access may widen the divide in social well-being between advantaged and disadvantaged communities.

Hampton, K., Lee, C.-J. & Her, E. J. (2011). How New Media Affords Network Diversity: Direct and Mediated Access to Social Capital through Participation in Local Social Settings. *New Media & Society* **13(7), 1031-1049.**

This study examines how new communication technologies – mobile phone, social networking websites, blogging, instant messaging, and photo sharing – are related to the diversity of people's personal networks. The study is based on an analysis of data collected from a large, random survey of American adults. The findings point to the complex relationship between the use of new communication technologies, the diversity of social networks, and use of traditional group settings, such as neighborhoods, voluntary associations, religious institutions and public spaces. The findings suggest that the use of new communication technologies is associated with substantively higher diversity in personal relationships. About half of the diversity in people's relationships that is associated with using new communication technologies is a direct result of using the Internet (i.e., online engagement). The other half of the diversity associated with use of these technologies is a result of the role new communication technologies play in supporting participation in traditional settings (e.g., neighborhoods, voluntary groups, religious institutions, and public spaces).

Hampton, K., Livio, O., & Sessions, L. (2010). The Social Life of Wireless Urban Spaces: Internet Use, Social Networks, and the Public Realm. *Journal of Communication* **60(4), 701-722.**

This study explores the role of Internet use in urban public spaces for democratic and social engagement. The study is based on observations of over 1,300 Internet users in 7 parks, plazas, and markets in 4 North American cities, and surveys of wireless Internet users at those sites. Findings suggest a positive relationship between the availability of an infrastructure for Internet access and use of public spaces. It was found that Internet use within public spaces affords interactions with existing acquaintances that are more diverse than those associated with mobile phone use. However, the level of co-located social diversity to which Internet users are exposed is less than that of most users of these spaces. It is argued that online activities in public spaces contribute to broader forms of democratic participation. Internet connectivity

within public spaces may contribute to higher overall levels of democratic and social engagement than what is afforded by exposure within similar spaces free of Internet connectivity.

Hampton, K. & Wellman, B. (2003). Neighboring in Netville: How the Internet Supports Community and Social Capital in a Wired Suburb. *City and Community* **2(4), 277-311.**

This is one of the first papers to explore how Internet use affects local social relationships. The study is based on a multi-year ethnography, and a survey of wired and non-wired residents of a suburban community. In contrast to conceptualizations of the Internet as a "global village", this study finds strong, local implications of Internet use. Internet use was found to have a large impact on the number of local social ties and the frequency of communication, on and offline. Those who were connected to a local Internet network were found to know more neighbors, see them more often in-person, and to be more involved in local civic activities.

McCarty, D. (2008, June). *The evolutionary ecology of information and communication networks.* **Paper presented at the International Telecommunications Society, Montreal, Canada.**

The emergence and development of information and communication networks (ICNs) are fundamentally organic processes. Therefore, the intellectual tools of the biological sciences – evolution and ecology, in particular – can be most helpful in illuminating the ways in which ICNs emerge, grow, and change. This paper develops a conceptual framework for analyzing these processes based on recent developments in the biological sciences. The framework takes as its starting point an "evolutionary theory" of economics. It elaborates this notion by incorporating recent work in evolutionary ecology, especially in the area of "niche construction." This framework is then positioned within "the new institutional economics" to incorporate broader socio-cultural and macroeconomic influences. The analytical approach developed here takes into account not only the interaction of firms, government agencies, and consumer types ("species") within and among markets (communities) comprising the ICN "ecosystem," but also the temporal dimension of the "evolution" of technological and organizational "species." It addition, it accounts for both the natural-selection pressures of markets and ecosystems and the role of innovative organizations in actively shaping environmental factors. By explicating the multidimensional dynamics of evolving trends within ICN ecosystems, this approach can illuminate critical aspects of specific issues. Insights derived from this approach can provide guidance for industry players needing to understand the dynamics and market potential of such innovations as video-over-IP, as well as for regulators and policy makers concerned with such issues as network neutrality and the migration to next-generation wireline and wireless networks.

Miel, P., & Faris, R. (2008). News and Information as Digital Media Come of Age. Berkman Center for Internet and Society, Harvard University. Retrieved June 1, 2012, from <u>cyber.law.harvard.edu/node/4904</u>

This study explores the changing news and information environment, emphasizing the role of digital and participatory media. It suggests that the increasingly complex interdependencies among media entities have blurred the lines between professional and amateur and shifted the definitions of commercial, public, and community media.

The authors identify six challenges to achieving the best possible media environment:

> The economic problems of journalism have reduced original reporting.
> Web-native outlets are not addressing all of the crucial reporting gaps left by traditional media. Current structures & mechanisms do not provide sufficient incentive to do so.
> News consumers now risk relying on sources that are not credible or comprehensive.
> Inequality in online participation has left some populations and ideas underrepresented.
> Elements of crucially important journalism have not found sustainable online models.
> Efforts to understand and address those issues are hampered by lack of solid empirical evidence.

The reports further suggests areas where efforts to remedy existing problems should focus:

> Promoting excellence in journalism using the best available technical, financial, and managerial tools and techniques.
> Catering to the needs of underserved populations, increasing the scope and salience of information they get.
> Monitoring and addressing areas where original reporting is inadequate in quality, quantity or balance.
> Measuring the impact of shits in the media environment on public attitudes and knowledge.

Napoli, P. M., Stonbely, S., Friedland, L., Glaisyer, T., & Breitbart, J. (forthcoming). *Understanding Media Diversity Using Media Ecosystem Analysis.* **New America Foundation.**

This position paper identifies the nascent "media ecosystem" paradigm as a promising path forward for media policy research that seeks knowledge of media systems in their actually existing forms. The authors argue that studies which are locally oriented, comprehensive, have clear independent and dependent variables, draw comparisons, and use the latest tools and databases, are the best suited for supplying policymakers the information they need to craft twenty-first century communication policy.

Wilkin, H. A., Ball-Rokeach, S. J., Matsaganis, M. D., & Cheong, P. H. (2007). Comparing the communication ecologies of geo-ethnic communities: How people stay on top of their community. *Electronic Journal of Communication***, 17(1-2).**

This article aims to promote the use of ecological approaches investigating the network of interpersonal and media (traditional and new, mainstream and geo-ethnic) connections that people construct in the course of their everyday life. To demonstrate the applications of this perspective, the authors conduct an empirical study exploring the communication patterns of ethnic groups in different communities located in the Los Angeles area.

Grounded in media system dependency and communication infrastructure theories, the text presents communication ecologies as dynamically responsive to people's individual goals situated in a social context. The study describes storytelling processes through which residents, geo-ethnic media, and local organizations work together to construct a collective discourse around the community and engage shared concerns. The paper further discusses the role of Internet as a channel for interpersonal communication, local information dissemination and retrieval.

The ecological approach proposed in the first part of the article is employed to study the communication resources of various ethnic groups and neighborhoods. A wide range of findings, including comparisons across groups and communities, are presented in the paper.

5. Women and Marginalized Populations, Media Diversity: Research, Policy and Regulation.

Aslama, M., & Napoli, P. M. (2010). Diversity 2.0: Rethinking audiences, participation, and policies. McGannon Center Working Paper Series, 16.

This study examines the concept of diversity as a media policy principle in light of technological and institutional changes.

The traditional typology of media diversity concerned three aspects of content, media sources, and reception. However, the Internet, due to its interactive and networking propensities, is blurring the boundaries of the three categories of diversity. Consequently, there is a need to agree on new concepts such as diversity of participation.

The authors thus argue that in addition to recognizing the diverse forms of positions of participation, there is also a need to support different practices of participation. In the policy field, this means coming up with a way to "de-institutionalize" diversity assessment to include not only content production and distribution, but audiences' consumption and production of content.

Aufderheide, P. (1999). Communications Policy and the Public Interest: The Telecommunications Act of 1996. The Guilford Press: New York.

This oft-cited book on the 1996 Telecommunications Act (TCA) puts the TCA in historical and political context. It includes the abridged text of the Act, as well as seminal court case decisions, policy papers, and relevant speeches. The book demonstrates how much has changed since the first legislation to truly grapple with the twenty-first century media ecosystem. The most salient issue remains, however, the tension between competition and regulation.

Austin, C. (2011) Overwhelmed by big consolidation: Bringing back regulation to increase diversity in programming that serves minority audiences. *Federal Communications Law Journal,* **63(3), 733-764**

The article calls for the FCC to bring back a regulatory approach to achieve media diversity, pointing out the deregulatory approach since the 1980s have shown that market forces by themselves have not been able to create a true "marketplace of ideas."

From 1978 to 1990, the FCC's minority ownership policies led to minority ownership of radio and television stations to increase from 1% to 3.5%. Since the 1990s, however, courts have cut down the diversity rationale and government ownership limits have also been relaxed greatly. Within two years of the 1996 Telecommunications Act, big media companies bought and sold 4,400 radio stations out of the 10,400 commercial radio stations that existed at the time. In 2005, only 3.6% of all radio and TV stations were minority-owned, and 3.4% were owned by women.

The author thus suggests that the FCC not only continue existing regulations promoting ownership diversity, but also create new regulations on diversified programming and lowering market control, such as ascertainment requirements that set standards for serving minority audiences.

Bachen, C., Hammond, A., Mason, L., & Craft, S. (1999). Diversity of programming in the broadcast spectrum: Is there a link between owner race or ethnicity and news and public affairs programming? Santa Clara University.

This research provides empirical evidence linking ethnic diversity in broadcast ownership with diversity in content. It uses broadcast industry data as well as telephone interviews with 211 news directors at minority and majority-owned stations in 1998 and also conducts multivariate analyses.

The findings show important differences in news and public affairs programming between majority and minority owned stations. Minority-owned radio stations a wider variety of public affairs programming despite possessing fewer resources. However, even majority-owned radio stations are more likely to program for diversity if their news staff is diverse.

Although both minority radio and TV station owners own fewer stations per person, it is only the minority radio station owners who are actively involved in the decision-making in news and public affairs. Such noninvolvement may be the reason why for television staffing diversity correlates with greater programming diversity but owner diversity does not.

Bachen, C.M., Hammond, A.S., & Sandoval, C.J.K. (2007). Serving the public interest: Broadcast news, public affairs programming, and the case for minority ownership. In P. M. Napoli (Ed.), *Media diversity and localism: Meaning and metrics* **(pp. 269-308). Mahwah, NJ: Erlbaum.**

This chapter provides a comprehensive review of the academic literature, policy actions, and relevant legal decisions surrounding the issue of minority ownership of media outlets. This chapter argues that the extent social science literature provides a compelling justification for policies that work to increase minority ownership of media outlets. The authors also argue that there is a compelling government interest in policies intended to increase minority ownership of media outlets.

Baynes, L. M. (2006). Race, media consolidation, and online content: The lack of substitutes available to media consumers of color. *University of Michigan Journal of Law Reform***, 39, 199-228.**

The article examines the FCC's reliance on the existence of the Internet to provide justifications for greatly relaxing ownership regulations in 2003. It looks at Census and other national survey data on minority access and usage patterns of Internet use.

In a 2002 NTIA survey which approached Internet access issue more broadly than in past surveys by asking whether individuals had access from anyplace – including work, library or a friend's house – only 39.8% of African Americans and 31.6% of Latinos said yes, which was about half of the percentage for whites.

Such low levels of access is exacerbated with the poor quality of access in schools and workplaces where minorities get access, as well as their lack of skills to utilize Internet as a media source. This persisting "Digital Divide" means the Internet fails as a substitute for broadcasting for media consumers of color.

Baynes, L. M. (2008). Race and media: Several key proposals for the next administration. Legal Studies. *St. John's Legal Studies Research Paper***, 8(154).**

The article proposes to the Obama administration policies that can promote racial diversity in the media industry. It starts from the assumption that despite the growth of the Internet, traditional broadcast technologies remain a viable market for minorities. Also, content for minorities constitutes a separate market.

In terms of media ownership, the FCC should first reintroduce the Minority Tax Certificate Program, since there is substantial evidence that minority-owned businesses face capital market discrimination. In the same vein of overcoming capital market constraints, the FCC should bring back the FCC's Distress Sale Policy. Furthermore, the Small Business Administration should guarantee loans to small telecommunications businesses.

Furthermore, the Obama administration should amend the Communications Act to make non-stereotypical portrayals and diversity of media content a core American value. The FCC should implement the new statute by explicitly barring racist and stereotypical speech from the airwaves.

Benson, R. (2005). American Journalism and the Politics of Diversity. *Media, Culture & Society*, 27(1), 5-20.

This article unpacks the multifaceted idea of diversity in U.S. journalism, focusing on the professional voluntary association "'Unity: Journalists of Color". The author juxtaposes the diversity ideal upheld by Unity with the group's "commitment to the corporate bottom line". He concludes that only structural reforms of the media system are likely to produce diversity that is more than skin-deep.

Benson, R. (2009). What Makes News More Multiperspectival? A field analysis. *Poetics*, 37, 402-418.

This article introduces new generalizable measures of ideological and institutional pluralism and applies them to a case study of immigration news coverage by a cross-section of the U.S. and French national newspaper fields. The study demonstrates that the most multiperspectival newspapers tend to receive less of their funding from advertising and have audiences with higher cultural capital. Consistent cross-national differences may be partially attributed to political field influence and news formats. In contrast to more atomized U.S. narrative-driven news stories, the French ''debate ensemble'' format (grouping together breaking news, editorials, interview transcripts, and background context articles) serves as the opening to a wide-ranging public debate. When U.S. newspapers offered ''multi-genre'' news coverage, their degree of multiperspectivalness also increased.

Blevins, J. L. (2007). The Political Economy of U.S. Broadcast Ownership Regulation and Free Speech after the Telecommunications Act of 1996. *Democratic Communiqué*, Vol. 21, No. 2: 1-22.

The author highlights the evolving use of the First Amendment in broadcast ownership court cases. From the 1930s, judges interpreted the First Amendment to uphold the collectivist right of the public to hear diverse voices and viewpoints. Since the early 1980s, judges have increasingly interpreted the First Amendment as favoring the individual rights of broadcasters to unregulated expression. Blevins argues that a collectivist interpretation of the First Amendment is the correct interpretation in light of the FCC's mandate to uphold the public interest.

Blevins, J. L., & Brown, D. H. (2010). Concerns about the Disproportionate Use of Economic Research in the FCC's Media Ownership Studies from 2002-2007. *Journal of Broadcasting & Electronic Media* Vol. 54, No. 4.

Blevins and Brown analyze FCC-commissioned studies from 2002 and 2007 and conclude that the FCC relies heavily on economic methods and analysis, to the exclusion of other relevant disciplines. Blevins and Brown argue that in addition to the heavy reliance on econometrics, the

FCC has actively disregarded academic research from social science and the humanities that has produced results unfavorable to its neoliberal agenda. This study is of direct relevance as evidence of a structural barrier to full understanding of citizens' Critical Information Needs in the twenty-first century.

Blevins, J. L., & Martinez, K. (2010). A political-economic history of FCC policy on minority broadcast ownership. *The Communication Review*, **13, 216-218.**

This study looks into the reasons behind diminished importance of minority broadcast ownership as a civil rights issue since the 1960s, and also considers the impact of the re-emergence of the concern in the modern media reform movement after the 1990s.

Grounded in political-economy and critical theories, the authors find that popular politics, neoliberal economic theory and media ownership concentration have been the most important forces that undercut minority ownership policies. In particular, neoliberal economic thinking resulted in courts' relaxed media ownership rulings as well as the FCC's rescission of the Fairness Doctrine and the Congressional repeal of the minority tax certificate program.

The study suggests that media reformers work to enhance popular recognition and challenge the dominant way of thinking. Grassroots activism should promote race neutral policies that focus on breaking up media ownership concentration, highlighting the fact that minority ownership serves not only minority interests but serves all of the public with enhanced diversity of the broadcast spectrum.

Bradford, W.D. (2000). Discrimination in capital markets, broadcast/wireless spectrum service providers and auction outcomes. Report prepared for the Federal Communications Commission. Retrieved June 10, 2012, from: transition.fcc.gov/opportunity/meb_study/capital_market_study.pdf.

This study is comprised of two parts. The first part examines whether capital market discrimination may be a market entry barrier for firms seeking to acquire FCC licenses. Specifically, it explores whether and to what extent applicants for FCC licenses may have suffered discrimination in capital markets. The second part of this study compares the success rates of firms owned by minorities, women and non-minorities in auctions for FCC wireless licenses. Specifically, it examines whether, when controlling for relevant variables, race or gender is a statistically significant variable in predicting success in FCC auctions. The second part of this study analyzes the differences in the ability to acquire a wireless license between businesses owned by minorities and women, and other businesses. It tests the hypothesis that minority/women applicants in FCC Spectrum Auctions encounter discrimination in capital markets. If capital market impediments are pervasive, then they may lead minorities and women to be less successful in FCC license auctions and in purchasing FCC licenses in the secondary markets. The objective of this research is to test each of these hypotheses.

Brand, K. (2004). The, Rebirth of Low-Power FM Broadcasting in the U.S. *Journal of Radio Studies,* **11(2), 153-168.**

This study is based on a survey of the first 239 low-powered radio broadcasting stations licensed after the Federal Communications Commission created two new classes of such stations. Survey results show that the low-power FM stations are significantly more diverse, both in terms of ownership (41% community, 41% religious, 10% education & 7% municipal) and programming (57% music, 38% religious, 41% news and information, 22% miscellaneous entertainment, and 20% education, respondents allowed to check multiple types).

Braunstein, Y. M. (2000). The FCC's financial qualification requirements: Economic evaluation of a barrier to entry for minority broadcasters. *Federal Communications Law Journal*, **53, 69-90.**

The study examines the impact of the FCC's financial qualification standard on minority media firms. It focuses on the economic effects including whether the regulations created an unreasonable disadvantage to minorities and whether one can measure impacts on minority employment and programming. To determine such, the study develops a financial model of an archetypal radio broadcast group to estimate the value of an individual broadcast property and the effects of various practices on that value.

The work finds that an increase of interest rate for the long-term loan at a media start-up led to a reduction of value of $440,000 per station. Discontinuation of the minority tax certificate program would result in a loss of value of approximately $1.5 million for each station in current dollars.

However, the study was unable to incorporate changes in programming because the linkage between ownership and programming was unclear and there is no effective approach to convert programming changes into financial gains.

Braunstein, Y. M. (2002). Ownership issues in the digital divide. *Comm/Ent: Hastings Communications and Entertainment Law Journal*, **24(4), 555-565.**

The article explores into the concentration of ownership of broadband access facilities and the links between the ownership of access and content.

It finds that policies that keep Internet access prices costly exacerbate the digital divide, and policies that retain broadband access prices high intensify the differences of access according to socioeconomic status.

While there is empirical evidence linking numeric diversity in ownership – of separately owned and controlled outlets – with diversity of Internet content, linkages between specific types of owners and content are unclear at best.

Byerly, C. M. (2011). Behind the scenes of women's broadcast ownership. *The Howard Journal of Communications*, **22, 24-42.**

The research surveys female broadcast owners, who own less than 5% of TV station owners and 6% of full-power broadcast radio stations, on issues surrounding gender and media ownership. The majority of female media owners inherited the stations from their family, as daughters and mothers. Out of 64 stations owned by females, only ten had the female owners involved in management. The women nevertheless exhibited strong values of values of community service, even in face of economic difficulties they cited as the greatest challenge.

The study thus recommends that the government reintroduce tax certificate policies and extend it to female owners of stations, which have become much more expensive after media deregulation. Increased access to capital and more training to provide women with the experience necessary to run stations is also suggested.

The authors call for more scholarly attention into the definition of women's ownership. This is because of the high levels of absentee ownership in female-owned broadcast stations, which has no parallel situation with minority ownership. Future research should also establish a nexus between gender of the owners and broadcast programming.

Castañeda Paredes, M. (2003). The transformation of Spanish-language radio in the U.S.
***Journal of Radio Studies*, 10(1), 5-16.**

This research examines the transformation of the Spanish-language radio industry in the early 2000s. It finds that the discovery of the increasingly profitable Latino audience, along with the major trends of growth and consolidation in the media industry, are resulting in a major reorganization of the Spanish-language radio sector. Spanish-language stations have grown by nearly tenfold in the two previous decades. At the same time, there have been major consolidations like the Univision-HBC deal. Such changes are increasingly problematic in terms of local programming, content diversity and independent ownership. Consequently, many Latino listeners are greatly limited in their ability to access a wide array of radio channels.

Celli, A. G. Jr., & Dreifach, K. M. (2002, May). ***Postcards from the edge: Surveying the Digital Divide.*** **Paper presented at the Symposium Bridging the Digital Divide: Equality in the Information Age, New York City, NY.**

The study dissects the notion of digital divide along three fault lines of the Access Divide, the Capital Divide, and the Treatment Divide, by reviewing official statistics, survey data and court rulings as well as business developments.

The paper's primary finding is that the Access Divide – low Internet use that breaks down along racial, ethnic, class, and geographic lines – has been used to justify Capital Divide, in which funding is denied to minority-oriented Internet businesses.

The Treatment Divide - in which a consumer's browsing habits and preferences are used for customized advertising and price differentiation strategies – is becoming increasingly worrisome. The Internet enables aggressive and extensive use of consumer data by companies, but such price customization and other tactics are far less transparent than offline deals such as paper coupons, resulting in discrimination and mistreatment of some consumers.

Chambers, T. (2006). The state of Spanish-language radio. *Journal of Radio Studies*, 13(1), 34-50.

This article investigates the ownership, programming, and competition patterns of Spanish-language radio stations in the top Hispanic metropolitan areas in 2002. The results show moderate levels of ownership concentration in the markets. Also, Spanish-language radio stations are differentiating their products from other Spanish-language stations, with the average Spanish-language radio market offering 3.3 unique formats.

Charbonneau, S. M. (2009). Branching out: Young Appalachian selves, autoethnographic aesthetics, and the founding of Appalshop. *Journal of Popular Film and Television*, 37(3), 137-145.

The article tracks the founding of Appalshop, a Kentucky community media center that has produced films preserving the Appalachian identity. It focuses on one of the center's earliest films, In Ya Blood (1971), as an example. The Appalshop's initial establishment in 1969 reflected middle-class idealism on the part of policymakers and an opportunity to reconstitute an Appalachian mountain subjectivity on the part of early workshop participants. What the film shows is how the center in the ensuing years moves away from class as a tool for understanding poverty and ends up showing managerial liberalism and identity politics.

Cooper, M. N. (2002, May). *Inequality in the digital society: Why the digital divide deserves all the attention it gets.* Paper presented at the Symposium Bridging the Digital Divide: Equality in the Information Age, New York City, NY.

The paper focuses on behavioral implications of the digital divide such as civic participation, as well as the underlying causative trends, based on the assumption that the surface indicators of computer ownership and Internet connectivity are not sufficient in scrutinizing the digital divide. The work relies primarily on a 2000 national survey data.

Not only does digital divide matter, but that it is likely to persist, particularly by polarizing labor force into a better-educated core with specialized education – of about 40% - and the poorly educated periphery that make up the rest. The poor, who are already excluded from the economic, social and cultural mainstream, are further disadvantaged by the lack of access and the inability to utilize the Internet. Survey shows cyberspace is less equal than in physical space, with more concentration of media markets which in turn has a negative effect on diversity.

To break the vicious cycle of the digital divide polarizing societies, citizens should demand new rights with political action, in line with progressive capitalism that evolved via labor civil rights and the consumer movements. History provides justifications for universal service obligations that provide all citizens with Internet access. Ownership limits and public interest programming obligations should also follow.

Craft, S. (2003). Translating Ownership into Action, Owner Involvement and Values at Minority- and Non-Minority-Owned Broadcast Stations. *Howard Journal of Communications*, 14(3), 147-158.

Research demonstrating a link between minority ownership of broadcast stations and news and public affairs programming diversity also includes the counter-intuitive finding that owner involvement in station activities is not related to that link. This article examines 3 other mechanisms that may mediate the relationship between ownership and programming: staff perceptions of shared values with the owner, the owner's direct communication of values to the staff, and hiring. Results of a telephone survey of people directly responsible for news at minority- and non-minority-owned stations suggest that owner involvement predicts the extent to which the staff perceives an owner's values to be their own, as well as the likelihood that the owner will overtly communicate his or her values to the staff. Owner involvement was not found to be a significant predictor of hiring of staff who are members of minority groups.

Daniels G. (2006). The role of Native American print and online media in the era of "big stories": A comparative case study of Native American outlets' coverage of the Red Lake shootings. *Journalism*, 7(3), 321-342.

This article involves a comparative case study of Native American and general audience newspapers coverage -- across both print and online platforms -- of the Red Lake Indian reservation school shooting. This study seeks to offer comparative analysis of print and online journalism; as well as comparative analysis of Native American versus general audience. Among the studies key findings are that print Native American news outlets tend to employ a stronger local orientation (in terms of sources and content) than their online counterparts; and that Native American outlets employed a greater diversity of sources and a greater range of points of focus in their stories than did general audience news outlets.

Drew, E. M. (2011). Coming to Terms with our own Racism: Journalists Grapple with the Racialization of their News. *Critical Studies in Media Communication*, 28(4) 353-373

While considerable research has been done on the effects of news on its consumers and context, relatively little is known about the effects of news production on its producers. Even less is understood about what emerges when journalists begin investigating, writing and talking about racism with intentionality. This article uses data from interviews with journalists at 28 major U.S. newspapers, who produced special news series dedicated to understanding racism in the post-Civil Rights era. The author contends that explicit and intentional ''racial projects'' can foster antiracist consciousness and action in their producers. She suggests that journalists' investigation of racism in their cities prompted them to turn their lens inward, engaging in a critical self-reflection about the complex relationship between racism and their news content, production practices, and newsroom hierarchies. Consciousness about the racialization of news led journalists to reorient their relationships to each other and the community, and make changes inside the newsroom related to hiring, space allocation, and news coverage of people of color.

Dwyer, T., & Martin, F. (2010). Updating diversity of voice arguments for online news media. *Global Media Journal, 4*(1), 1-18.

This paper explores and problematizes concepts of voice diversity in news media in light of the global growth in online publishing. The paper argues that regulation for media diversity continues to be a precondition of democratic and/or pluralistic polities, on the basis of emerging mainstream digital news production and distribution arrangements, including content reuse (licensing and syndication), reversioning of content across co-owned titles, and cross-media repurposing (for multiple delivery platforms).

Embrick, D. G. (2011). The Diversity Ideology in the Business World: A New Oppression for a New Age. *Critical Sociology*, 37(5), 541–556.

This study examines the notion of diversity in the business world. It explores how, in the wane of progressive programs such as affirmative action and organizational multiculturalism policies, diversity has become the post-civil rights mantra of equality in America. Using interview data from upper-level managers in Fortune 1000 companies the author argues that diversity ideology has enabled many organizations to curtail deeper investigations into the gender and racial inequalities that continue to persist in the workplace. The study finds that managers tend to exclude race and gender in their definitions of diversity. Furthermore, most managers, even while claiming that their companies were interested in promoting diversity, could not effectively elaborate on their company's diversity policies or practices.

Entman, R. M. (2006). Punctuating the Homogeneity of Institutionalized News, Abusing Prisoners at Abu Gharib Versus Killing Citizens at Fallujah. *Political Communication* 23, 215-224.

This article investigates a central assertion of new institutionalist approaches to news: that all things being equal news coverage will tend toward homogeneity. The analysis examines news coverage of events in Fallujah, Iraq, in April 2004. An index of homogeneity is developed borrowing from the Herfindahl-Hirschmann index of market concentration in economics. Using this index, the study shows that the coverage of Fallujah in the major mainstream American news outlets was relatively homogeneous and in this respect apparently differed from the more diverse reporting on Abu Ghraib. The comparative homogeneity of Fallujah news is explained in part using new institutionalist principles. The author concludes that developing new institutionalist theory requires more precise conceptualization and measurement of its key predictions, such as the expectation that major national media usually cover big stories similarly.

Entman, R. M., & Wildman, S. S. (1992). Reconciling economic and non-economic perspectives on media policy: Transcending the "marketplace of ideas." *Journal of Communication* **42(1), 5-19.**

The authors suggest that communications policy researchers need to construct a new analytical framework in which quantifiable economic efficiency criteria, the hallmarks of market school analysis, are weighed explicitly alongside the non-quantifiable social values. Entman and Wildman point out that market economics and social value approaches to communication policy have largely ignored each other's arguments and evidence. Only by considering both schools (market economics and social values) can analysts contribute to policy that promotes social welfare in its fullest sense.

According to the authors, market economics works had a tendency to neglect externalities that are not quantifiable and do not fit well into the standard economic cost-benefit calculus. A market-governed media system underproduces certain kinds of content, especially content essential to democratic deliberation and self-government. Conversely, the social values school has focused on the spread of knowledge or appropriate content for children, and ignored the strength of consumer preferences and the limited effects of regulatory interventions on audiences' consumption of the favored content. In summary, the authors attributed the general problem to both schools' faulty understanding of diversity and to their shared misplaced attachment to the First Amendment metaphor of the marketplace of ideas.

FCC News (April 8, 2009). FCC takes step to improve its collection of data on minority and female broadcast ownership. Retrieved June 11, 2012, from: www.fcc.gov/document/fcc-takes-steps-improve-its-collection-data-minority-and-female-broadcast-ownership

In this announcement the FCC says it will improve its collection of data on minority and female broadcast ownership, by expanding Form 323 ("Ownership Report for Commercial Broadcast Stations") requirements for full-power commercial stations owned by individuals and also by broadening the scope of scope of reportable interests to include certain minority interests.

Félix, A., González, C., & Ramírez, R. (2008). Political protest, ethnic media, and Latino naturalization. *American Behavioral Scientist***, 52(4), 618-634.**

The study looks into the role of media during the 2006 immigration rights protests in California and afterwards, when the Latino community stepped up voter registration and naturalization efforts. A pilot survey conducted to people applying for naturalization was used as a basis to determine the relations between media and naturalization.

During the protests the Spanish-language media – and radio in particular – played a critical role alongside Latino civic and community organizations. Popular DJs in Los Angeles encouraged participation in the protests, and continued to demonstrate after the protests were over by making voting and naturalization efforts during the show.

However, the research fails to establish a clear relationship between such efforts and the increased tendency of eligible Latinos to apply for naturalization. The authors concede that they have been unable to disentangle other effects such as an increasingly difficult citizenship test

and increased naturalization fees, which may also have contributed greatly to the increased naturalization rates.

Ho, D.E., & Quinn, K.M. (2009). Viewpoint Diversity and Media Consolidation: An Empirical Study. *Stanford Law Review* **Vol 61: 781-868.**

In this study, the authors seek to directly test the hypothesis that ownership consolidation reduces diverse and antagonistic viewpoints. To do this they compare editorial positions on non-unanimous Supreme Court cases as expressed in several newspapers, both pre- and post-merger. Their results are mixed and ultimately do not assuage the scholarly dissensus that pervades the debate over the effects of convergence on diversity of viewpoint. What they do contribute, however, is a detailed history of the debate and an important acknowledgement of the importance of local-level variables on diversity. For example, in five consolidations, they find instances of stability, convergence, and divergence of viewpoints, "*depending on the context*" (p. 830, italics added).

Gonzalez, J. & Torres, J. (2011) *News for All the People: The Epic Story of Race and the American Media*. **London, UK: Verso.**

The authors dismantle the American press, demonstrating that through structural constraints, government preferences, and outright censorship, the press has never been "for all the people" but systematically marginalized people and communities of color. The historical analysis and up-to-date look at current media policy offers lessons on navigating the nation's complex media system. The authors' belief -- that a true, democratic media system must be local with independent citizen access to mass communications -- is supported by examples of local media autonomy that provide the most freedom of expression to nonwhite communities.

Guzman, I.M. (2006). Competing discourses of community: Ideological tensions between local general-market and Latino news media. *Journalism, 7*(3), 281-298.

Based on a critical analysis of the news coverage and editorial content regarding the Elián González international custody case in *The Miami Herald* and *El Nuevo Herald*, this article explores the ideological tensions between local general-market and Latino news outlets during moments of increased social crisis. Specifically, it documents the newspapers' relationship with each other and analyzes the competing discourses of ethnic, community and national identity embedded in the journalistic texts. The study suggests that, as US ethnic and racial demographics continue shifting in its major cities, particular attention must be paid to the dynamic role of the ethnic media. Examining the production of meanings in ethnic and general-market news coverage in relation to one another presents an opportunity for rethinking the role of journalism in public negotiations over constructs of community, national identity, and ethnic and racial difference.

Hammond, A. S. (2002). The FCC's third report on broadband deployment: Inequitable, untimely and unreasonable. *Comm/Ent: Hastings Communications and Entertainment Law Journal*, 24(4), 539-553.

The author criticizes FCC's third report on broadband deployment – in which the commission concluded that the current deployment of broadband is reasonable and timely – on several grounds. First, the commission's definition of broadband is flawed in including one-direction high-speed services that cannot effectively deliver video, which is becoming increasingly important. Second, the growth in number of subscribers can be misleading because the actual number of Internet subscribers was so low to begin with. Also, the figures do not reflect the inequitable deployment of broadband according to income, race and ethnicity. Relying on zip code-level data is also arbitrary. In doing so, the FCC is ignoring contrary findings by the congress, industry and the public.

Hollifield, C. A., & Kimbro, C. W. (2010). Understanding media diversity: Structural and organizational factors influencing minority employment in local commercial television. *Journal of Broadcasting & Electronic Media*, 54(2), 228-247.

This research explores the external and internal factors that influence minority employment in local commercial TV by analyzing Annual Broadcast Employment Reports filed to the FCC from 1971 to 1995. A panel data is created to control for missing reports and regression analysis is conducted to examine the relationship between independent variables.

The results show structural factors external to the organization to be more important in creating workforce diversity than internal organizational variables. The diversity of the surrounding population was the most important factor, with a one percentage point increase change in the population producing a 0.5 percentage point change in TV station employment diversity. Also, important were a station's desire to target minority audiences and the size of the market.

With the exception of minority ownership, organizational variables were not important predictors of diversity. Neither group ownership nor group size was related to greater diversity.

Johnson, P. (2004). Black radio politically defined: Communicating community and political empowerment through Stevie Wonder's KJLH-FM, 1992-2002. *Political Communication*, 21, 353-367.

The paper is a case study of the community responsiveness of KJLH-FM – Los Angeles' only independently Black-owned radio station – during the 1992 riots. It zooms in on contents of the program "Front Page," a 90-minute program that airs weekday mornings.

During the civil unrest, the station played a pivotal role by capitalizing its partnerships with city agencies, churches and social organizations. "Front Page" repeatedly emphasized community and peace, and provided information on shelter and food at a time when much of South LA was without power and water. Geographical location and proximity to its listeners was a major factor.

Furthermore, the station provided a forum for discussion of nonviolent solutions to the problems faced by African-Americans. The station was able to do so because of its ability to draw celebrities and politicians into the discussion. The station's owner Stevie Wonder had placed social concerns and commitment to the local Black populace at the center of programming after buying it in 1979. The study concludes that it was KJLH's independent status was that ultimately enabled it to become a safe haven for outrage and defuse tensions.

Kalra, G. (2002). Note and comment, On the verge of information apartheid: The future of governmental intervention to address the digital divide: The need for a broader constituency. *African-American Law & Policy Report*, 5, 41-46.

In the wake of a 1999 bill to terminate the e-rate program requiring telecommunications service providers to offer a discounted rate for schools and libraries, the author presents five ways for political leaders to frame the debate surrounding the digital divide: 1) Reference rural Americans as beneficiaries of government efforts to narrow the digital divide; 2) Reference seniors as beneficiaries of such efforts; 3) Present the digital divide as a non-partisan public policy issue; 4) Present the digital divide in a race-neutral manner; and 5) Present the digital divide as a global workforce issue and not an educational equity issue.

Karpowitz, C. F., & Mendelberg, T. (2011, September). Do women deliberate with a distinctive voice? How decision rules and group gender composition affect the content of deliberation. Paper presented at the American Political Science Association, Seattle, WA.

This study examines how the content of group discussion about income redistribution changes according to changes in the group's decision rule and gender composition. To discover whether women need a particular critical mass before they speak equally and articulate, the authors conduct random experiments in which individuals into groups of different gender composition conditions and one of two decision rule conditions – majority rule or unanimous rule.
The study finds that that women not only speak less when they are minorities under majority rule, but they also speak less about concerns women tend to raise in one-on-one interviews such as children, the family and the poor, which are segments of society women tend to view as vulnerable.
However, unanimous rule seems to prevent women's minority status from affecting the level of participation and the concerns they voice. This is because unanimous rule is more compatible with women's distinctive speech patterns which less confrontational and more personal. Based on the finding, the authors underline the importance of creating better institutional settings in achieving deliberative democracy.

Kim, D. H. (2011). The triangle of minority ownership, employment and content: A review of studies of minority ownership and diversity. Unpublished manuscript submitted to the Federal Communications Commission.

This paper analyzes the findings of all social scientific studies on the issue of the relationship between minority ownership of media outlets, minority employment in media, and media content that have either been commissioned by the Federal Communications Commission or referenced by the courts in proceedings in which relevant FCC regulations and policies have faced legal challenges. The author conceptualizes each relationship between each of these three elements as sides of a triangle. She then reviews the empirical findings of those studies meeting the previously noted selection criteria. As this review illustrates, the findings of the body of research analyzed are somewhat inconsistent, with strong empirical support for the ownership--content and ownership--employment relationships, but somewhat weaker support for the employment--content relationship.

Klinenberg, E. (2007). *Fighting For Air: The Battle To Control America's Media*. New York, NY: Metropolitan Books.

"Opening with the story of the Minot tragedy, Eric Klinenberg's Fighting for Air takes us into the world of preprogrammed radio shows, empty television news stations, and copycat newspapers to show how corporate ownership and control of local media has remade American political and cultural life. Klinenberg argues that the demise of truly local media stems from the federal government's malign neglect, as the agencies charged with ensuring diversity and open competition have ceded control to the very conglomerates that consistently undermine these values and goals."

"Such "big media" may not be here to stay, however. Fighting for Air delivers a call to action, revealing a rising generation of new media activists and citizen journalists--a coalition of liberals and conservatives--who are demanding and even creating the local coverage they need and deserve." (Publisher's Review)

Lin, W., & Song, H. (2006). Geo-ethnic storytelling: An examination of ethnic media content in contemporary immigrant communities. *Journalism*, 7(3), 362-388.

This study explores the content of ethnic media in order to better understand their role in contemporary immigrant communities. It suggests that globalization is always experienced in a local context and studies the extent to which ethnic outlets provide locally relevant information. The findings are based on an analysis of ethnic newspapers serving Asian and Latino neighborhoods in Los Angeles. The article also identifies differences in news content across ethnic communities.

According to the reported results, less than half of the coverage in ethnic newspapers was done by staff members, while 13% came from news wires, and 30% lacked a byline identifying its source. A large proportion of the publications (85%) were written in a language other than English. The two major topics of interest for ethnic newspapers were politics (18% of the stories) and the economy (14% of the stories).

One key finding was that ethnic media had a predominantly international focus. They provided little information about local issues and did not seem to support new immigrants' adaptation to the host country. More than half of the total newspaper coverage (55%) was international,

mostly related to the home country of the immigrant community served by the publication. Less than 3% of the articles referred to the state of California, 9% to Greater Los Angeles, and only 5% were local neighborhood stories.

Matsaganis, M. D., Katz, V., & Ball-Rokeach, S. J. (2011). *Understanding ethnic media: producers, consumers, and societies*. **Thousand Oaks, CA: Sage Publications.**

In this foundational volume, Matsaganis, Katz, & Ball-Rokeach provide a comprehensive overview of ethnic media research and practice. Forces of globalization – technological innovation, heightened migration, and integrated transnational economies – have removed many of the barriers that previously hindered individual and organizational activities across nation-state borders. As populations around the world become increasingly diverse, a proliferation of ethnic media outlets start playing a key role in community life.

This book analyzes the effect of ethnic media on identity negotiations. It overviews production and consumption practices, placing ethnic media in the context of larger social systems. The authors address historical, cultural, organizational, policy, professional, social, community, migration, and globalization dimensions of ethnic media studies. They discuss the role of ethnic outlets as part of the media system, and highlight their relevance for researchers, practitioners, community organizers, policy-makers, advertisers, and marketing professionals.

While much of its content is based on U.S. data, the book also covers ethnic media production and consumption in a number of other countries, including Australia, Austria, Belgium, Britain, Canada, China, Denmark, France, Finland, Germany, Greece, Ireland, Israel, Mexico, the Netherlands, South Africa, Spain, Sweden, and the Philippines.

Millar, R. (2000). Racism in the air: The FCC's mandate to protect minorities from getting shortchanged by advertisers. *CommLaw Conspectus*, **8, 311-327.**

This paper looks into the legal and policy implications of systematic discrimination of minority broadcasters by advertisers. Some advertisers display "no-Urban/Spanish dictates" which effectively prevents them from reaching out to minority consumers. Consumer research has shown that such "profiling" of consumers based on racial stereotypes not only results in "minority discounts" for minority broadcasters, but also is ineffective from a business standpoint. The author argues that the FCC has a mandate and the authority to act on this type of discriminatory profiling, including: 1) creating a code of conduct for advertisers; 2) require broadcasters' disclosure to make sure decisions followed market research; and 3) prohibit federal agencies from working with advertisement agencies that have been known to discriminate.

Napoli, P. M. (2001). Foundations of Communication Policy: Principles and Process in the Regulation of Electronic Media. Cresskill NJ: Hampton Press Inc.

The author, a leading communication policy scholar, identifies and explains the basic conceptual building blocks of U.S. communication policy: public interest, diversity, localism,

competition, etc. Napoli argues that these concepts must be tested empirically and in relation to existing conditions, rather than used as rhetoric in service of pre-existing ideologies.

Ofori, K. (1999). When being no. 1 is not enough: The impact of advertising practices on minority-owned and minority-formatted broadcast stations. Report prepared for the Federal Communications Commission. Retrieved June 10, 2012, from: transition.fcc.gov/Bureaus/Mass_Media/Informal/ad-study/.

The study focuses on practices called "no Urban/Spanish dictates" (*i.e.* the practice of not advertising on stations that target programming to ethnic/racial minorities) and "minority discounts" (*i.e.* the practice of paying minority-formatted radio stations less than what is paid to general market stations with comparable audience size). The study consists of a qualitative and a quantitative analysis of these practices. Based upon comparisons of nationwide data, the study indicates that stations that target programming to minority listeners are unable to earn as much revenue per listener as stations that air general market programming. The quantitative analysis also suggests that minority-owned radio stations earn less revenue per listener than majority broadcasters that own a comparable number of stations nationwide.

Omachonu, J. O., & Healey, K. (2009). Media concentration and minority ownership: The intersection of Ellul and Habermas. *Journal of Mass Media Ethics*, 24, 90-109.

Grounded on the moral theories of Jurgen Habermas and Jacques Ellul, this study scrutinizes the problem of scant minority ownership and the ensuing problems of homogenization of content, loss of localism, and decreased ownership diversity.

Ellul warned about the technological progress that led to the birth of the global mass media machine that facilitates propaganda while suppressing social criticism. To tame the negative force of technique, Ellul called for the awakening of the moral conscience by self-directed interest groups outside the mainstream. The authors argue that the formation of independent, nonprofit and alternative media sources is compatible with Ellul's argument. Ellul thus provides the moral conscience of modern activist movements such as low power FM radio (LPFM).

Habermas's theory of communicative action explains a comparable paradox, in which the system imperatives of modernity – money and power – colonized the very world that gave birth to it in the first place. For Habermas, media concentration is a prime example of such colonization, which is why ownership diversity and public participation in policy debates is important. Unlike Ellul, Habermas has more faith in social institutions, justice and reason in curbing media concentration and restoring integrity to the public sphere.

The study thus concludes that media reform efforts must incorporate both Habermasian and Ellulian ideas, and suggests that media activists pursue both federal regulatory reform as well as grassroots activism towards ownership diversity.

Owens, W. L. (2004). Inequities on the air: The FCC media ownership rules - encouraging economic efficiency and disregarding the needs of minorities. *Howard Law Journal*, **47(3), 1037-1071.**

This paper calls for the FCC to play a more aggressive role in media merger analysis by focusing on the social and political factors. It points out that the FCC has opted to focus heavily on economic factors such as efficiency and preserving market shares, despite having the authority to protect the interests of the minority viewing audiences with its public interest mandate.

The author thus suggests that the FCC should supplant its merger review with an analytical framework that focuses on non-economic factors to promote diversity of content. Such non-economic analysis should focus on minority audiences as a submarket which exists separately within the primary market.

Pease, E. C., Smith, E., & Subervi, F. (2001). *The news and race models of excellence project. Overview: Connecting newsroom attitudes toward ethnicity and news content*. **Retrieved May 30, 2012 from** www.poynter.org/wp-content/uploads/2012/01/Models-of-Excellence-Report.pdf

This research tests the hypothesis that the more the White and minority journalists agree on diversity questions in the workplace and in coverage, the more inclusive the news product will be. The authors pick six print and six television newsrooms deemed exemplary in terms of commitment to diversity, and conduct staff surveys and year-long content analysis.

The results find a strong relationship between newsroom attitudes and the quantity of coverage: newsrooms with stronger agreement on issues of race and ethnicity had the best and most coverage of minorities. However, the authors could not find a direct correlation between newsroom climate and the quality of coverage such as tone of stories.

Overall, the "model" news outlets had much more diverse coverage than the national average, with as much as 39% of TV news and 38% of newspaper items dealing with people of color. This was a vast improvement over prior content studies that found the proportion of minority-related news to be typically below 10%.

Polat, R. K. (2005). The Internet and political participation: Exploring the explanatory links. *European Journal of Communication*, **20(4), 435-459.**

This study investigates the links between the Internet and political participation by looking at three facets of the Internet: the Internet as an information source, as a communications medium and as a virtual public sphere. While the Internet offers much potential as an information source, in reality people may not be interested enough to obtain the information, and may also lack the skills to process them. Furthermore, academics have not established direct links between information and participation. Furthermore, as a medium the Internet supports some forms of communication more than others, affecting different modes of political participation in asymmetrically. Also, the Internet's value as a public sphere is limited due to unequal distribution of the technology as well as a highly fragmented structure and increasing commercialization.

Pritchard, D., & Stonbely, S. (2007). Racial Profiling in the Newsroom. *Journalism & Mass Communication Quarterly* **84(2): 231-248.**

The authors found, through empirical analysis of news content supplemented with journalist interviews, that race played a key role in story assignment at a metropolitan daily newspaper. Furthermore, newsworkers in all positions agreed that being a racial minority was advantageous when covering minority issues, while minority journalists expressed the belief that their race was a detrimental factor if they wished to advance to more prestigious positions within the newsroom. This article speaks to the importance of diverse voices in news production.

Reed-Huff, L. N. (2006). Radio regulation: The effect of a pro-localism agenda on Black radio. *Washington and Lee Journal of Civil Rights and Social Justice*, **12, 97-154.**

This paper looks at the potential effects of the FCC's relaxation of cross-ownership of broadcast on local Black broadcasting stations. Black radio has provided a valuable service to the African-American community in America's modern history, filling a void left by white-dominated mainstream media. The author argues that due to the changing external environments as well as the costs and license renewals, Black radio, which had been disadvantaged to begin with, could be lost altogether amidst an environment of excessive consolidation enabled by the laws. Such promotion of minority ownership should be pursued in conjunction with more local ownership as well.

Rivas-Rodriguez, M., Subervi-Vélez, F., Bramlett-Solomon, S., & Heider, D. (2004). Minority journalists' perception of the impact of minority executives. *The Howard Journal of Communications*, **15, 39-55.**

This research looks into the impact of minority executives in newsrooms by surveying a self-selected group of minority journalists who attended a conference in 1999. It finds that minority journalists believe that a minority at the helm of a media operation can make a positive difference in four areas – the news operation's sensitivity to racism, its coverage of minority groups, providing greater job opportunities for all minorities, and influencing how the news media think about minority groups.

The survey also asks minority journalists about job satisfaction, and found that an overwhelming majority were satisfied with their jobs and planned to stay in the media. This differs from a 1999 Freedom Forum survey in which 55% of journalists said they were considering leaving the newspaper business, possibly because the latter dealt with the minorities' current working conditions but not the profession.

Sandoval, C. J. K. (2008). Antitrust language barriers: First amendment constraints on defining an antitrust market by a broadcast's language, and its implications for audiences, competition and democracy. *Federal Communications Law Journal*, **60, 407-479.**

This study explores the constitutionality of the decision to define an antitrust market according to the language of a broadcaster's program, which the Department of Justice (DOJ) had made during 2008 buyout of Clear Channel by private equity as well as the 2003 Univision merger.

Spanish and English-language programming do contain distinct content and messages, but that distinctiveness is insufficient to establish a separate antitrust market. Broadcasters, advertisers as well as Latino audiences move fluidly between languages and formats, creating a dynamic and integrated marketplace of ideas. Latino audiences move between Spanish and English-language programs not only because of language but also because of differences in content.

Although the DOJ's definition of an antitrust market according to language was meant to prevent undue concentration within the Spanish-language broadcast market, it is actually creating a competitive advantage for English-language broadcasters, which can enter quickly to take a dominant position in the Spanish market with their content. The authors conclude that the First Amendment rights at stake require a reexamination of the concepts that media markets are rigidly separated by language.

Sandoval, C. J. K. (2009, November). Minority commercial radio ownership in 2009: FCC licensing and consolidation policies, entry windows, and the nexus between ownership, diversity and service in the public interest (Report).

Using the FCC's consolidated database system (CDBS) as well as Internet resources, this paper looks into the corporate structure of minority commercial radio broadcasters and the role of the FCC's licensing and consolidation policies on minority ownership entry.

The emerging commercial broadcast ownership structure is characterized by massive consolidation in majority of local markets. This leaves minority owners, 61% of whom control only one station as of 2009, at the other end of the spectrum. Fewer new minority owners entered the commercial radio field after 1996 Telecommunications Act, as compared to those who entered between 1978 and 1995.

The correlation between minority ownership and diversity in program has been well documented, showing minority owners overwhelmingly provide minority-oriented content that contributes to diversity and the public interest. The FCC should thus recognize minority broadcasters' contribution to the democratic dialogue and seek ways to ensure minority broadcasters thrive in the future.

Sandoval, C. J. K. (2011). Minority commercial radio ownership: Assessing FCC licensing and consolidation policies. In P. M. Napoli & M. Aslama (Eds.), *Communications research in action: Scholar-activist collaborations for a democratic public sphere* **(pp. 88-113). New York: Fordham University Press.**

This study examines more than 11,000 records from the Federal Communications Commission's (FCC) Consolidated Database System (CDBS) and Internet sources on radio ownership and

program formats in mid-2009 to analyze the effect of FCC licensing and multiple ownership policies on minority ownership of commercial radio stations, program diversification, and service to the American public. This report identifies minority commercial radio broadcasters, examines their corporate structure and the stations they control, illuminates the role of FCC licensing and consolidation policies on minority ownership entry, and confirms that minority radio owners contribute in huge numbers to program diversity.

Squires, C. R. (2000). Black talk radio: Defining community needs and identity. *The Harvard International Journal of Press/Politics***, 5(2), 73-95.**

The research explores the relationship between WVON-AM, a Black talk radio station in Chicago, and its publics. It uses both ethnographic research and an audience survey of core listeners who contributed money during subscription drives.

It finds that the station provides information not found elsewhere. Asked why they listen to WVON, 95.6% of listeners said the station voices a Black perspective that isn't available on other stations. The station pays particular attention to cover general topics that are rarely covered featuring Blacks because they are not defined typical "Black" topics by the mainstream media.

In addition, the audience attends events WVON clues them in on, providing a social circulation conducive to a healthy public sphere. Although the station is commercial, it nevertheless performs a public role by providing information and perspectives valued by its Black listeners. The authors conclude that commercial media can play a positive role in forming and sustaining serious discourse within a subaltern public sphere, especially with a niche format like WVON's.

Subervi, F., Torres, J., & Montalvo, D. (2005). *Network Brownout 2005: The portrayal of Latinos and Latino issues on network television news, 2004, with a retrospect to 1995***. National Association of Hispanic Journalists, Austin, TX, and Washington, DC.**

This is one of a series of studies sponsored by the National Association of Hispanic Journalists (NAHJ). These reports extensively document the limited volume and scope of issues relevant to Latinos that get covered in network news.

The analysis uses the Vanderbilt University's Television News Archive to examine the content of four major English-language television networks: ABC, CBS, NBC, and CNN. The coverage of Latinos and Latino-related issues in their evening news programs is evaluated. The report also provides an overview of trends in the TV news representation of Hispanics for the time period between 1995 and 2004.

The report concludes that Latino issues have been and remain underrepresented in network evening news. The author suggests that English-language news does not seem to serve the information needs of Latinos in the U.S.

Subervi-Vélez, F. A. (1999). Spanish-language television coverage of health news. T*he Howard Journal of Communications***, 10, 207-228.**

This paper analyzes health coverage in Spanish-language television (SLTV), looking into 1) the quantity of stories compared to other topics like crime and education 2) characteristics of health stories and 3) whether the stories are more in line with the assimilationist role or with the pluralist role of ethnic media. It conducts a content analysis of Univision and Telemundo stories in 1997 and 1998.

Overall, health coverage in SLTV replicates coverage of English-language television, meaning crime stories outnumber health or immigration stories. This means health coverage is predominantly clinical, dominated by stories about diseases and illnesses with little social or political context. While certain topics such as HIV/AIDS appeared more and abortion and substance abuse appeared less in SLTV, topic related to political issues, community outreach, education and immigration were notably absent in health coverage, although such areas offer SLTV opportunities to relate to the Latino community. In the same vein no Latino advocacy organizations appeared as sources on SLTV.

Turner, S. D. (2007). Off the dial: Female and minority radio station ownership in the United States. Washington, DC: Free Press. Retrieved May 30, 2012, from www.freepress.net/files/off_the_dial.pdf

The research provides an assessment and analysis of female and minority ownership in all licensed commercial radio stations in the United States. It shows that media consolidation is a central factor keeping female and minority ownership low.

Although radio stations cost less to operate than television stations, the level of minority ownership is only slightly higher in the former. Female and minority station ownership in commercial stations, at 6 percent and 7.7 percent respectively, is over four times below their proportion of the general population.

Compared to corporate station owners, female and minority owners control fewer stations per owner and are more likely to operate locally, in less concentrated radio markets. Crucially, minority owners are more likely to air formats that appeal to minority formats, even though other formats are more lucrative.

Turner, S. D., & Cooper, M. (2007). Out of the picture 2000: Minority & female TV station ownership in the United States. Washington, DC: Free Press. Retrieved June 6, 2012, from www.freepress.net/files/otp2007.pdf

This research provides an overview of the state of female and minority ownership of television stations in the United States. It shows extremely low levels of minority ownership that has decreased amidst industry-wide consolidation since the 1990s.

Women own only 80 TV stations, or 5.87 percent of all full power commercial TV stations. Minorities, who make up 34% of the population, own only 3.15 percent of stations. Figures were also low for Blacks (0.6%) and Hispanics (1.25%), who comprise 13% and 15% of the population, respectively. The authors find the state diversity in the broadcast sector "shocking" compared to other industries. Women and minorities owned 28% and 18% of all non-farm businesses, respectively.

While minority ownership figures for other business sectors rose since the late 1990s, in TV the figures dropped. The decrease has been marked for African American owned stations which decreased by 70% from 1998 to 2007. Consequently, minority-owned stations reach only 22% of all U.S. TV households, and just 30% of all minority U.S. households.

Vargas, L. C., & dePyssler, B. J. (1999). US Latino newspapers as health communication resources: A content analysis. *The Howard Journal of Communications*, 10, 189-205.

This study examines the coverage of health issues in Latino newspapers. A content analysis of 17 Latino publications is conducted to see the amount of coverage as well as framing, sources and Latino relevance.

The results show that Latino newspapers publish a surprisingly high number of health stories, which outnumber coverage on crime, immigration or education. However, more than four of five health stories conveyed clinical information originating from the health care industry or the medical community. Stories that move beyond clinical information to address sociopolitical linkages constituted only 16% of the total.

In the same vein, few health stories were contextualized with Latino voices and information applicable to Latino readers' concerns and experiences. The authors thus conclude that Latino newspapers may be wasting an opportunity to empower the community with socially relevant and engaging health coverage.

Wilson, E. J., & Constanza-Chock, S. (2009). *Digital public media: New diversity of same old boys network?* **Unpublished manuscript, University of Southern California, Los Angeles, CA.**

This study provides an overview of employment and ownership diversity in the U.S. media system, testing the hypothesis that public media would be more diverse than other media sectors, with the possible exception of online.

Inequality is persistent in all sectors of media. Both commercial and public TV have the lowest rates of control by people of color (1% and 2%, respectively), and data about online media remain inconclusive. Employment figures are more clustered, with the national public broadcasting outlets substantially ahead (28%), followed by commercial TV (21%), public radio (20%), and public TV (19%). Online media employment metrics suggests about 18%, while print (13%) and commercial radio (8%) are last in line.

Public broadcasters have generally done the best job of including diverse voices, and there has been some progress. Nevertheless, at the present rate public radio and TV stations will never reflect the nation's changing demography. The authors thus call for action to make media spaces more diverse, calling for large national producing stations like NPR revisiting its decision to cut programming for youths and ethnic minorities.

Wilson, E. J., & Constanza-Chock, S. (2011). *New voices on the net? The digital journalism divide and the costs of the network exclusion.* **Unpublished manuscript.**

This research develops a new conceptual tool to think about the Digital Divide and the costs of network exclusion. It also examines the current state of race-based exclusion in journalism in online as well as offline media.

Using data from the U.S. Economic Census as well as American Society of Newspaper Editors (ASNE) and the FCC, the paper shows that racial inequality in ownership is strong across every major media platform. People of color own less than one percent of commercial TV stations. Employment diversity is better than ownership diversity, with the public stations leading the pack with a 29.8% minority employment rate. Minority employment was somewhat higher in online media compared to print and commercial radio, but lower than commercial TV or public broadcasting.

Metcalfe's Law, which states the value of the network is proportional to the square number of users, is widely used to calculate the value of inclusion per person. To better gauge the value of exclusion, it needs to be modified to consider not only the size of the network (N) but also those excluded in the network (N-n). This can be summed up as follows:

> Equation 1 (Inclusion-based framing): Network value as per any law/members in the network (=n)

> Equation 2 (Exclusion-based framing): Network value as per any law/members outside the network (N-n)

By applying Equation 2 it becomes clear that the greater the proportion of people included within a network, the more quickly the costs of exclusion grow for those excluded. Particularly, the costs of exclusion rise dramatically as networks grow to include more than 50% of the population.

6. Critical Information Needs and Public Media. Funding Journalism.

Ali, C. (2010). "The second day story": Re-imagining public broadcasting through community. Paper presented at the RIPE conference. Retrieved June 12, 2012, from: http://ripeat.org/wp-content/uploads/tdomf/1281/Ali.pdf

This paper investigates the future of public broadcasting in the community context with a case study of WHYY-TV, a PBS affiliate servicing the Philadelphia-Wilmington area. The Interviews and in-person observations reveal several issues. First, there is tension over the notion of "community," which is defined differently if one looks at the geographical reach, audience, and paying members. Second, the station is caught in a balancing act between being local and being national. Despite branding itself "local," was still hoping to capitalize on the national trust embodied within "PBS." Third, technological change is accelerating the shift away from the

siloed containers of TV, radio and the Internet and prompting the stations to emphasize content instead of platform.

Aspen Institute (2009). *Aspen Institute Roundtables on Public Service Media*.
 Retrieved June 1, 2012, from www.cpb.org/events/aspen2009/

This report is a summary document from the first meeting in the Aspen Institute Roundtable series (February, 2009). It outlines major challenges faced by public service media in the U.S. Among the barriers are problems with funding, leadership, and structure.
The opportunities identified during the meeting include taking advantage of:

> Near-term collaboration across digital platforms (such as creating multi-platform resources for those dealing with the economic crisis)
> Developing public radio in the digital space
> Developing a branded approach to news and public affairs programming so that public media could "own" specific economic/financial issues
> Acting as a public watchdog.

Aufderheide, P. (1996). Public service broadcasting in the United States. *The Journal of Media Economics*, **9(1), 63-76.**

The article summarizes that state of public service broadcasting in light of increasing challenges to become more market-sensitive. The author argues that American public service broadcasting is not essentially public service broadcasting in the European tradition, lacking a unified structure with little financial support and small audience numbers. Public service broadcasting stations in the US have historically been in the margins and still lack a unified structure. However, the author argues that such also lends certain flexibility to the public service broadcasting stations in times of change. In the digital age, public service broadcasting stations are well-positioned to experiment digitalization and convergence of electronic media, in which the stations could become community public information resources.

Aufderheide, P., Clark, J., Nisbet, M. C., Dessauer, C., & Donnelly, K. (2009). Scan and Analysis of Best Practices in Digital Journalism both Within and Outside U.S. Public Broadcasting. American University, Center for Social Media. Retrieved June 1, 2012, from www.cpb.org/publicmedia2.0/

This report aims to identify a set of best practices for digital journalism. The study is written as a guide to new media planning and initiatives for public service media in the U.S. The authors compile suggestions based on a literature review and interviews with experts (both practitioners and researchers).
Best practice categories included in the report touch on ways to reach new audiences and get readers more involved, encourage collaborations, spur innovative use of technologies, enhance

participation, and promote new media literacies. The authors also explore mechanisms allowing media to take advantage of digital platforms, employing them to add depth and context to news coverage. The study presents examples and case studies to illustrate the recommendations of the report.

Balas, G. R. (2003). Recovering a Public Vision for Public Television. Rowman & Littlefield Publishers, Inc.

This book provides a historic account of public broadcasting. It proposes a six-point plan to rejuvenate the mission of public broadcasting: (1) Make public media more accessible; (2) Encourage popular performance and televisual literacy; (3) Commit to integrated, broad-based, national-local discourse; (4) Take programming risks, adopt a reformist approach; (5) Develop a practical vision that is an alternative to commercial broadcasting purpose and practice; and (6) Take the lead in demanding structural change in U.S. media.

Barksdale, J., & Hundt, R. (2005). Digital Future Initiative: Challenges and Opportunities for Public Service Media in the Digital Age.
Retrieved June 1, 2012, from
www.current.org/pbpb/documents/PBSDigitalFuturesInitiativeDec05report.pdf

This document summarizes the work of an expert panel examining the use of digital technology by public service media to address two national challenges : lifelong education and community engagement. The study offers three sets of recommendations:
(1) For education: an "Early Childhood 360 Initiative" for preschoolers/early elementary grade children, and a national, online library with e-learning content and applications.
(2) For community engagement: a digital civic forum for every state, a public health information service, and an emergency preparedness network.
(3) For integration with digital media: a new content archive and delivery system called the Public Service Media Web Engine, and collaborating with content producers in acquiring digital rights.

Brooks, A. C., & Ondrich, J. I. (2006). How public is public television? *Public Finance Review*, **34(1), 101-113.**

The article examines the public-ness of public television from the standpoint of viewership, using the General Social Survey data to look for public TV viewer characteristics. The results are mixed. While some socio-demographic characteristics of viewers and viewing areas like income have little effect over the likelihood of viewing public viewing, others like higher education levels and family size strongly push it up.

Clark, J., & Aufderheide, P. (2009). Public Media 2.0: Dynamic, Engaged Publics.
Retrieved June 1, 2012, from www.centerforsocialmedia.org/documents/whitepaper.pdf

This white paper lays out a vision for a multi-platform, participatory, digital public media 2.0. The document provides several key takeaway points for public media:

> Embrace the participatory and web 2.0 technologies to effectively engage audiences.
> Generate publics around problems.
> Use both commercial and non-commercial venues.
> Have a national coordination mechanism to collaborate among media outlets/allied organizations.
> Share standards and practices.
> Use impact measurements.

Cowan, G., & Westphal, D. (2010). *Public Policy and Funding the News*. **USC Annenberg Center on Communication Leadership & Policy. Retrieved June 1, 2012, from** **fundingthenews.usc.edu/report/**

This report investigates the role of foundations and philanthropy in the current world of journalism. The text documents the cutbacks of news organizations and discusses potential policy frameworks. The authors suggest that the government should explore new ways to support the production of news – something that it has done throughout America's history. Specifically, the report recommends that:

> The government should find ways of ensuring that content creators are paid for work that might be used without permission or compensation.
> Most government funding should be indirect (similarly to the CPB).
> Government funding should be distributed according to formula, not as a direct subsidy for particular news outlets.
> The government can play an important role by investing in technological and other innovations.

The study concludes with guiding principles for policymakers: (1) do no harm; (2) the government should help promote innovation; (3) content-neutral government-supported mechanisms are preferable to funding specific news outlets.

Downie, L., & Schudson, M. (2009). *The Reconstruction of American Journalism*. **Columbia Journalism Review. Retrieved June 1, 2012, from** **www.cjr.org/reconstruction/the_reconstruction_of_american.php**

Even as journalism is facing economic problems, new media venues, nonprofits, and other organizations are gathering and distributing news in participatory and collaborative ways. This report asks how we can turn these transformations into a "reconstruction of American journalism", enabling independent reporting even as traditional news media is in decline. Downie and Schudson offer a number of recommendations:

1. The IRS/Congress should allow news organizations covering public affairs to be created as (or converted into) nonprofit or low-profit entities serving the public interest. "Program-related investments" in these hybrid news organizations from philanthropic foundations should also be authorized.
2. Philanthropists and foundations should substantially increase their support for news organizations with a demonstrated, substantial commitment to public affairs and accountability reporting.
3. Public radio and television should be urgently and substantially reoriented towards local news reporting in each of their communities.
4. Universities should become sources of local, state, specialized subject, and accountability news reporting as part of their educational mission.
5. A national Fund for Local News should be created. It should come either from current FCC funds, or from telecom users, licensees, or ISPs. It should be administered in open competition through state Local News Fund Councils.
6. Government agencies should make public information available and accessible.

Goodman, E. (2008, August). *Public service media 2.0.* Retrieved June 11, 2012, from:
papers.ssrn.com/sol3/papers.cfm?abstract_id=1299685

The paper proposes a restructuring of public media in the digital era, pointing out the current public media system is antiquated and out of touch. It thus calls for a) restructuring the current system so funds are diverted from the operation of broadcast facilities to actual content; b) refocusing on general public media instead of public broadcasting in terms of funds allocation; and c) revamping the system of copyright exemptions and license so public media can share and distribute content better.

Howley, K. (2005). Manhattan Neighborhood Network: Community access television and the public sphere in the 1990s. *Historical Journal of Film, Radio and Television*, 25(1), 119-138.

This article presents the result of a case study and assessment of the Manhattan Neighborhood Network; and historical significant and influential community access television station. This study address the following questions: How does MNN exemplify the social, political and cultural possibilities of a participatory medium, like community access television? What obstacles inhibit the realization of this potential? More specifically, how does lack of popular participation compromise the efficacy, indeed the relevancy, of community media initiatives, like MNN? And finally, what is MNN's role in the creation of a democratic public sphere?This study reaches some critical conclusions about the MNN, arguing that its programming tended to reflect the interests of only a small minority of Manhattan residents.

Gupta Consulting LLC. (2009). Embracing Digital: A Review of Public Media Efforts across the United States. Retrieved June 1, 2012, from
www.cpb.org/publicmedia2.0/docs/EmbracingDigitalReviewPublicMediaEfforts2009.pdf

This study records the digital efforts of public media across the United States. The authors surveyed 535 media outlets, receiving 258 responses. Out of those, 55 were TV stations, 148 were radio stations, 34 were joint licensees, and 21 were non-broadcast-station program producers or distributors. According to the report, public media need digital presence to better reach their audiences, and particularly the younger generations. However, many stations reported problematic trends:

> A lack of guidance and information on best practices in digital media
> No clear standardization for production and development of new media
> A lack of understanding of metrics, data collection, and use of such information to gain strategic advantage
> A need for training in and understanding viable business models to generate revenue to support digital offerings.

Hamilton, J. T. (2009). Subsidizing the Watchdog: What would it Cost to Support Investigative Journalism at a Large Metropolitan Daily Newspaper? Duke Conference on Nonprofit Media. Retrieved June 1, 2012, from
sanford.duke.edu/nonprofitmedia/documents/dwchamiltonfinal.pdf

The paper examines how nonprofits can subsidize the creation of information through commercial media outlets. The case study used in the text is that of The News & Observer (N&O), a local accountability journalism source for residents in the Research Triangle Area.
The author suggests that nonprofits or foundations could subsidize particular types of coverage in the paper. Those could include, for instance, funding a beat reporter or an investigative unit for a year, funding a dedicated page each week, or funding an investigative series.
Some of the open questions for nonprofit funders include:

> Uncertainty of the impact for an article (e.g. investigative journalism often include failed leads);
> Temptation for newspapers to substitute nonprofit-funded areas for current staffing rather than expand to areas not already included in the newspaper coverage
> Credibility and impact of journalistic entities (depending on whether they have, for example, wide circulation, a reputation for accuracy and excellence, or experienced reporters)

Some issues to be addressed by news organizations include transparency, nonpartisanship, and independence.

Hamilton, J. T. (2009). The Road Ahead for Media Hybrids. The Duke Nonprofit Media Conference. Retrieved June 1, 2012, from
dewitt.sanford.duke.edu/images/uploads/About_3_Research_A_3_Report.pdf

The text provides a summary of the 2009 Duke Nonprofit Media conference. It examines the hurdles to nonprofit or foundation ownership of media outlets, as well as obstacles to subsidies

for covering public affairs information.   Non-consensus recommendations from conference participants include:

(1) Funding:

> Implementing a donor collaborative model for a central fund for nonprofit journalism organizations.

> Supporting assets that regional and state investigative centers can share.

> Creating a clearinghouse to vet foundation investments.

> Encouraging collaborations between community foundations and local media.

(2) Government policy:

> Make clear that news organizations can be run as nonprofits.

> Encourage growth of low-profit news organizations.

> Expand government support for news products.

(3) Governance: experiment with "media hybrids"

Minnesota Public Radio. *Instant white paper: The future of news*. **Retrieved June 12, 2012, from api.ning.com/files/KC-AMG1lLva39cxABkGQHuKk33qOB4d9Y9vbyHA73l4_ /WhitePaperTheFutureofNews.pdf**

This report summarizes the result of a 2009 meeting of leaders from media, philanthropy, government and business, in Saint Paul, Minnesota at the Minnesota Public Radio | American Public Media Broadcast Center. 1,500 additional people attended online. The focus of the meeting was the future of regional news in America. This report synthesizes more than 800 comments posted by 1,551 people who attended the event online and the hundreds more from those who followed the proceedings via Twitter. Drawing upon these data, this report seeks to frame the problems and opportunities facing local and regional journalism and to serve as the focal point for future conversations about new models for local and regional journalism.

Mitchel, C. (2010). *Breaking the Broadband Monopoly: How Communities Are Building the Networks They Need*. **The New Rules Project, Institute for Local Self-Reliance. Retrieved June 1, 2012, from www.muninetworks.org/sites/www.muninetworks.org/files/breaking-bb-monopoly.pdf**

This comprehensive report explores publicly owned broadband networks. It provides an overview of their advantages, evaluates their performance, and includes detailed case studies of publicly owned networks. The document further reviews obstacles to community ownership, discusses the relationship of open access to public ownership, and concludes with lessons learned from publicly owned networks.

According to the document, cities are seeing many benefits from publicly owned networks: millions of dollars in savings from reduced rates; recruitment of major employers who choose sites because of public broadband availability; better service because of more localized accountability; greater competition because of open access policies; and increased self-

determination by customers to make decisions that benefit the community (including schools and underserved populations).

The authors suggest that states should accordingly remove barriers that discourage publicly owned networks. They recommend that Congress prohibits states from barring publicly owned networks. Networks that are structurally accountable to communities should be given a higher priority.

Murdock, G. (2004). Building the digital commons: Public broadcasting in the age of the Internet. Cultural dilemmas in public service broadcasting. Retrieved June 1, 2012, from pantherfile.uwm.edu/type/www/116/Theory_OtherTexts/Theory/Murdock_BuildingDigitalCommons.pdf

This study argues that public service broadcasting still has a place in the modern communications environment, but that "rethinking public service is the key to this project". The author traces the development of public broadcasting and other trends in communications, highlighting the need to discard "our old analogue maps" of the cultural industries.

Murdock suggests that we think of public broadcasting as a principal node in an emerging network of public and civic initiatives. Because public service broadcasting can link national institutions and local initiatives, "it makes the resources of the best resourced equally available to the hardest pressed". Public broadcasting can also counter fragmentation by instituting programs that maintain a base of shared experiences and its high public trust can add credibility to public broadcasting endeavors.

Ouellette, L. (2002). *Viewers like you? How public TV failed the public.* **New York: Columbia University Press.**

This well-known book raises the question, how "public" is public television if only a small percentage of the American people tune in on a regular basis? The book traces the history of public broadcasting in the United States, questions its priorities, and argues that public TV's tendency to reject popular culture has undermined its capacity to serve the people it claims to represent. Drawing from archival research and cultural theory, the book shows that public television's perception of what the public needs is constrained by unquestioned cultural assumptions rooted in the politics of class, gender, and race.

Powers, S. (2010)*. Government Support for Information Infrastructure: An Overview.* **Public Policy and Funding the News, USC Annenberg Center on Communication Leadership & Policy. Retrieved June 1, 2012, from fundingthenews.usc.edu/related_research/5_Carnegie_Broadband.pdf**

This working paper is part of the Policy and Funding the News research project. It outlines key deficiencies of the telecommunication infrastructure in the U.S. and asserts that the lack of broadband has a significant impact on the news industry. The document outlines broadband-related challenges facing traditional business models. It also points out the need for more

comprehensive studies on the importance of broadband for the news business. The report concludes with a discussion of related current issues, including the FCC's efforts to create a national broadband plan addressing questions of speed, access, and ability.

Silver, J., Strayer, L., & Clement, C. (2009). *Public Media's Moment*. **Free Press.**
 Retrieved June 1, 2012, from www.freepress.net/files/public_medias_moment.pdf

This study examines the challenges and opportunities faced by public media in a digital age. It proposes policy recommendations for funding. The document also discusses the National Public Lightpath: a collaboration between public broadcasters, education centers, and the tech industry to create a high-speed network between public media outlets and local partners.
The authors suggest that there is a need to:

> Establish a *"White House Commission on Public Media"* to give policy recommendations.
> Build infrastructure for standardized but customizable local platforms.
> Increase funding for diverse staffing

The report also includes examples of existing models and practices that should be encouraged (e.g. NPR's release of its model API in 2008, public media programs that reach out to communities of color).

Stein, L. (1998). Democratic "talk," access television and participatory political communication. *The Public,* **5(2), 21-34.**

This study assesses the contribution of public access cable television to political communication in the United States. Using interviews and original source materials, the study examines the political uses of access television by radical media projects, a type of media seldom granted access to commercial or public television. In their attempts to organize and empower communities that have been under represented or excluded from mainstream political discussions and debates, these projects perform many of the functions scholars have attributed to democratic talk. Conclusions drawn from the study suggest that access television hosts a range of democratic speech which is largely absent from professional media industries and which merits the support and protection of democratic states.

Steiner, L. (2005). The feminist cable collective as public sphere activity. *Journalism,* **6(3), 313-334.**

This article highlights the efforts of a group that produces, under the aegis of the National Organization for Women, a feminist public affairs series cablecast on cable television public access channels. The study concludes that public access cable television does provide viable opportunities for feminist 'content', for activist-minded news, discussion, and criticism of the economic sphere, the state, and family.

Strayer, L. J. (2009). Corporation for Public Broadcasting: Building a Digital Democracy Through Public Media. In M. Green & M. Jolin (Eds.), *Change for America***.**
Retrieved June 1, 2012, from
www.americanprogressaction.org/issues/2008/changeforamerica/pdf/pbs.pdf

This document provides a set of policy recommendations in the area public broadcasting for the U.S. President. The text is part of the *Change for America* book project. Key suggestions proposed by the author include:

> Convening an independent commission of media experts and technology leaders.
> Planning the integration of an online media platform. Employing emerging information and communication technologies to better serve all Americans.
> Providing full funding to CPB until a Public Media Trust, designed to provide an independent and stable funding stream for public media, can be established.

The Public Radio Audience Growth Task Force Corporation for Public Broadcasting. (2010).
*Public Radio in the New Network Age: Wider Use, Deeper Value, Compelling Change***.**
Retrieved June 1, 2012, from www.srg.org/GTA/Public_Radio_in_the_New_Network_Age.pdf

The document proposes seven strategies to grow the audience of public radio:
1. Increasing inclusiveness and authenticity by encouraging multiple and differentiated services. Investing in stations and programming developed and controlled by people of color.
2. Increasing trust in public media as a source of daily news, strengthening existing news programs, investing in program innovation. Supporting an increase in scale, quality, and impact for local reporting.
3. Creating a 21st-century public radio music service.
4. Embracing the networked environment as a primary platform.
5. Strengthening core competencies throughout public radio.
6. Developing market-to-market strategies for audience growth.
7. Supporting follow-up and accountability for this plan.

Thai, A. M., Lowenstein, D., Ching, D., & Rejeski, D. (2009). *Game Changer: Investing in Digital Play to Advance Children's Learning and Health***. New York, NY. Retrieved June 1, 2012, from**
www.joanganzcooneycenter.org/pdf/Game_Changer_FINAL.pdf

The report puts forward a number of recommendations about the use of digital tools in the areas health and education:

> Implementing R&D initiatives at a federal and state level.
> Creating innovative public-private partnerships between groups with different areas of expertise.
> Supporting adult guidance for children's digital activities.

Modernizing public media to accommodate the needs and interests of children living in the digital age. This includes new formats, new business models, and new incentives. Initiating a broad public dialogue about digital media and games.

Wilkinson, K. T. (2010, September). *Echoes of the Latin boom for U.S. public service media.* **Paper presented at the RIPE@2010 Conference in London, UK.**

This paper presents the results of a survey of managers at NPR and PBS stations about their knowledge and information-seeking behaviors regarding Hispanic/Latino audiences in the areas they serve. The goal of this project is to compare the knowledge and information-seeking behaviors of public broadcasting station managers located in the larger, well-established markets with those serving areas of recent Hispanic/Latino population growth.

7. Critical Information Needs and Open Access. Knowledge Commons.

Benkler, Y. (2006). The Wealth of Networks: How Social Production Transforms Markets and Freedom. New Haven, CT: Yale University Press.

This groundbreaking book analyses novel ways of collaborating online to create a new networked information economy through peer-production. The book underlines the important link between the American democratic process and the constantly evolving "mass-mediated public sphere."

Bollier, D. (2007). The Growth of the Commons Paradigm. In *Understanding Knowledge as a Commons: From Theory to Practice***. Hess, C. & Ostrom, E., Eds. Cambridge, MA: MIT Press.**

Bollier's chapter showcases the many different types of commons operating in American life today. The author illustrates how, despite significant differences, those commons embody certain general principles and sharing and openness.

Bollier, D. & Watts, T. (2002). Saving the Information Commons: A New Public Interest Agenda in Digital Media. Washington, DC: Public Knowledge.

This study produced for the New America Foundation and Public Knowledge describes the "information commons" as a new paradigm for organizing a public-interest agenda in digital media. Numerous creative initiatives and policy proposals are described.

Boyle, J. (2003). The Second Enclosure Movement and the Construction of the Public Domain. In The Public Domain. *Law and Contemporary Problems*, vol. 66, nos. 1 & 2.

This is a seminal article describing how the relentless increase in intellectual property rights in the U.S. is creating "a second enclosure movement." The first enclosure movement refers to the series of Enclosure Acts in England and northern Europe from the Middle Ages to the 19th century that took away rights to land for agriculture and grazing from the common people.
In the same vein, the series of new Intellectual property legislation that began in the late 1980s and continues to date serve to remove access of important digital information from citizens. Thus, new IPR laws are privatizing information that used to be open and free.

Chan, L., Kirsop, B., & Arunachalam, S. (2011). Towards Open and Equitable Access to Research and Knowledge. *PLoS Med* 8(3): e1001016.

This article discusses the critical importance of the ability of all to conduct research and openly share knowledge. The authors view open access to knowledge as fundamental to all aspects of human development: "from improving health care delivery to increasing food security, and from enhancing education to stronger evidence-based policy-making."

Cinderby, S., Snell, C., & Forrester, J. (2008). Participatory GIS and its Application in Governance: The Example of Air Quality and the Implications for Noise Pollution. *Local Environment* 13(4):309-320.

This article examines participatory GIS (geographic information systems) that use community mapping exercises to produce spatial representations of local knowledge. This model relies on public participation in the use of spatial data, leading to increased community involvement in policy-setting and decision-making. The paper presents findings from two case studies. One of those demonstrates how participatory GIS were used in the UK for assessments of air quality in order to improve local government policy. The second case study focuses on assessments of noise pollution. The study concludes by discussing a caveat on the use of Participatory GIS for environmental governance. The authors point out that, ideally, only issues on which participants are likely to have direct experiential knowledge should be targeted.

Garcia-Penalvo, F. J., de Figuerola, C. G., & Merlo, J. A. (2010). Open Knowledge: Challenges and Facts. *Online Information Review* 34(4):520-539.

This article written by Spanish scholars is the introduction to a special issue of Online Information Review on open knowledge management in higher education. Its aim is to review the concept and extension of the movement or philosophy of open knowledge in universities and higher education institutions. The authors apply a Spanish model that comprises four areas: free software, open educational content and cultural dissemination, open science, and open innovation. They discuss the importance of open knowledge which international organizations and governments are increasingly embracing as the way to share scientific advances with society and as an international cooperative path to assist development in third-world countries.

Hepburn, G. (2004). Seeking an Educational Commons: The Promise of Open Source Development Models. *First Monday* 9(8).

This article points to the critical importance of open source software in building an educational commons. The author writes: "schools are hindered by cost and flexibility problems as they try to obtain resources such as software and textbooks. Open source development processes are producing products that can address many of these problems and, as importantly, provide a better alignment with core educational values. Indeed, open source products potentially encourage the development of an educational commons."

Hess, C., & Ostrom, E. (2003). Ideas, Artifacts, and Facilities: Information as a Common-Pool Resource. *Law and Contemporary Problems* 66(1-2):111-146.

This paper situates the "intellectual public domain" within the common-pool resource literature and analysis where institutional design and collective action are considered as important as property rights. The complexity of the knowledge commons is considerable for many reasons: the vast number of players, multiple conflicting interests, rapid changes of technology, the general lack of understanding of digital technologies, local versus global arenas, and a chronic lack of precision about the information resource at hand.

As one of the framing papers for the Conference on the Public Domain, this article focuses on the language, the methodology, and outcomes of research on common-pool resources in order to better understand how various types of property regimes affect the provision, production, distribution, appropriation, and consumption of scholarly information. The analysis suggests that collective action and new institutional design play as large a part in the shaping of scholarly information as do legal restrictions and market forces.

Hess, C. (2008). Mapping the New Commons. Presented at *Governing Shared Resources: Connecting Local Experience to Global Challenges*, the 12th Biennial Conference of the International Association for the Study of the Commons, University of Gloucestershire, Cheltenham, UK.

This paper is a guide to the rapidly growing area of research and activity the author calls *new commons*. New commons (NC) are various types of shared resources that have recently evolved or have been recognized as commons. The NC overview includes a survey of the physical resources, the user communities, the literature, and some of the major collective action activities. Tracking new commons over several years, Hess shows how this vast arena has been inhabited by heterogeneous groups from divergent disciplines, political interests, and geographical regions. Those groups are, furthermore, increasingly finding the term 'commons' crucial in addressing issues of social dilemmas, degradation, and sustainability of a wide variety of shared resources. The resource sectors include scientific knowledge, voluntary associations, climate change, community gardens, wikis, cultural treasures, plant seeds, and the electromagnetic spectrum. These new sectors and communities require rigorous study and analysis in order to better grasp their institutional nature. This study is designed to serve as an introductory reference guide for future scholarly work.

Hess, C., & Ostrom, E., Eds. (2007). *Understanding Knowledge as a Commons: From Theory to Practice***. Cambridge, MA: MIT Press.**

This book provides an introduction to a new way of looking at knowledge as a shared resource, a complex ecosystem that is a commons – a resource shared by a group of people that is subject to social dilemmas. Knowledge in digital form offers unprecedented access to information through the Internet but at the same time is subject to ever-greater restrictions through intellectual property legislation, overpatenting, licensing, overpricing, and lack of preservation. Looking at knowledge as a commons – as a shared resource – allows us to understand both its limitless possibilities and what threatens it. The book includes studies by experts from a range of disciplines discussing the knowledge commons in the digital era – how to conceptualize it, protect it, and build it.

Chapter authors consider the concept of the commons historically and offer an analytical framework for understanding knowledge as a shared social-ecological system. They look at ways to guard against enclosure of the knowledge commons, considering, among other topics, the role of research libraries, the advantages of making scholarly material available outside the academy, and the problem of disappearing Web pages. Book chapters examine the role of intellectual property in a new knowledge commons, the open access movement (including possible funding models for scholarly publications), the development of associational commons, the application of a free/open source framework to scientific knowledge, and the effect on scholarly communication of collaborative communities within academia. The authors also offer a case study of EconPort: an open access, open source digital library for students and researchers in microeconomics. The essays clarify critical issues that arise within these new types of commons – and offer guideposts for future theory and practice.

Horan, T., & Wells, K. (2005). Digital Communities of Practice: Investigation of Actionable Knowledge for Local Information Networks. *Knowledge and Technology Policy* **18(1):27-42.**

The article explores integration of knowledge enabling digital technology into community functions through the development of local Digital Communities of Practice. The analysis includes both general considerations – in terms of domain, community, and practice dimensions – as well as results from an exploratory research project in Minnesota. The domain is described as integrated deployment of virtual services (education, human services, government) in local communities. The community is comprised of the local stakeholders and residents that would use or benefit from such services. The practice is considered as a decision-making processes for designing and deploying these services. The paper concludes with research and policy considerations regarding providing an enduring source of knowledge about local virtual services, needs, and solutions.

Kranich, N. (2007). Countering Enclosure: Reclaiming the Knowledge Commons. In *Understanding Knowledge as a Commons: From Theory to Practice*. **Hess, C. & Ostrom, E., Eds. Cambridge, MA: MIT Press.**

Nancy Kranich, a former president of the American Library Association, discusses the importance of knowledge commons and open access, as found in the tradition of American public libraries, essential to the democratic process. The chapter examines the numerous forces in recent years that are enclosing the knowledge commons and threatening the sustainability of public knowledge.

Levine, P. (2002). Building the Electronic Commons: A Project of the Democratic Collaborative. The Good Society 11(3):1-9.

In the most general sense, a "commons" is something valuable (intrinsically or instrumentally) that a whole community jointly owns and controls. Levine suggests that one important way to establish a commons is to design institutions and resources – such as nonprofit, nongovernmental associations or "networks of associations." The characteristics of associational commons include voluntary membership; considerable autonomy from other institutions; internal deliberation; rules or norms to govern membership and conduct; and common ownership. According to the author, associational commons differ from a corporation because they do not sell shares, and differ from a state because they do not compel membership or claim sovereign powers.

Levine, P. (2007). Collective Action, Civic Engagement, and the Knowledge Commons. In *Understanding Knowledge as a Commons: From Theory to Practice*. **Hess, C., & Ostrom, E., Eds. Cambridge, MA: MIT Press.**

In this chapter, Levine outlines his strategy of building knowledge commons with communities. He and his colleagues assume that associations (not just loose groupings of people) are needed to support a knowledge commons in which ordinary citizens can be creative.
"Young people – above all, adolescents who are not already on track for college – must be included in these associations, or else the future of the knowledge commons will be threatened. Universities have a potentially constructive role to play, and may benefit if they work more collaboratively with the communities around them. Finally, there is a particular need for associations that create local knowledge: information and insights of use to places and communities."
 "These are the strategic assumptions that guide our work. They are consistent with a political philosophy that Harry Boyte and others call 'public work'; I conclude by explaining why that philosophy is relevant."

Mergel, I. (2011). Crowdsourced Ideas Make Participating in Government Cool Again, in: *PA Times,* **American Society for Public Administration, Vol. 34, No. 4, October 2011, p. 4 & 6.**

The author studies the way in which public managers are using their informal networks to find information for mission-specific tasks. Mergel employs social network analysis techniques to map these complex relationships in order to understand how work "really gets done". She tracks online social networking services such as Facebook, YouTube, Flickr and Twitter that are increasingly becoming important tools for public managers. Her work seeks to understand how social networking services can be efficiently used in the public sector.

Mills, G. M. (2009). The Digital Divide: Left behind on the other Side. *University of La Verne Law Review***. 30: 381.**

This important article examines the digital inequalities that continue to create divisions in our world between "have's" and "have not's." The first part looks at the disparities of access found within the United States. Multiple reports created during the Clinton administration discussed the problems of the digital divide. A decade later, this article looks back at those reports and compares their finding with current data. The author also discusses a variety of metrics used to compile this data and demographic characteristics relevant to digital inequality: "young, old, rural, urban, central city, male, female, white, minority - variables that do not give easy or concrete answers."

Schweik, C. M. (2007). Free/Open-Source Software as a Framework for Establishing Commons in Science. In *Understanding Knowledge as a Commons: From Theory to Practice***. Hess, C. & Ostrom, E., Eds. Cambridge, MA: MIT Press.**

Schweik argues that the collaborative ideals and principles underlying the Free/Libre and Open Source Software (FOSS) projects could be applied to any collaboration built around intellectual property (not just software) and may potentially increase the speed at which innovations and new discoveries are made. He conceives of a future where such 'knowledge commons' are built not around software, but more generally around any kind of work or content.

Suber, P. (2007). Creating an Intellectual Commons through Open Access. In *Understanding Knowledge as a Commons: From Theory to Practice***. Hess, C. & Ostrom, E., Eds. Cambridge, MA: MIT Press.**

This article discusses the basic principles of open access. "Open access (OA) is free online access. OA literature is not only free of charge to everyone with an Internet connection, but free of most copyright and licensing restrictions. OA literature is barrier-free literature produced by removing the price barriers and permission barriers that block access and limit usage of most conventionally published literature, whether in print or online."

Suber, P. (2006). Open Access in the United States. In *Open Access: Key Strategic, Technical and Economic Aspects***. Jacobs, N., Ed. Oxford, England: Chandos Publishing.**

This chapter documents the rich history of open-access (OA) initiatives in the U.S., including the 1969 ARPANET, a direct predecessor of the Internet. Even earlier, Americans launched the Education Resources Information Center (ERIC) and MEDLINE, probably the first OA projects anywhere. Both ERIC and MEDLINE are still online and going strong. Suber focuses on the American tradition of freely sharing knowledge and discusses ten of the most important current OA initiatives. Those include the arXiv e-print repository; the Internet Archive; the Public Library of Science (PLoS); the MIT DSpace repository, Creative Commons, and others.

Uhlir, P. F., & Schroder, P (2007). Open Data for Global Science. *Data Science Journal* 6:36-53.

From the authors: "The digital revolution has transformed the accumulation of properly curated public research data into an essential upstream resource whose value increases with use. The potential contributions of such data to the creation of new knowledge and downstream economic and social goods can in many cases be multiplied exponentially when the data are made openly available on digital networks. Most developed countries spend large amounts of public resources on research and related scientific facilities and instruments that generate massive amounts of data. Yet precious little of that investment is devoted to promoting the value of the resulting data by preserving and making them broadly available. The largely ad hoc approach to managing such data, however, is now beginning to be understood as inadequate to meet the exigencies of the national and international research enterprise. The time has thus come for the research community to establish explicit responsibilities for these digital resources. This article reviews the opportunities and challenges to the global science system associated with establishing an open data policy."

Waters, D. J. (2007). Preserving the Knowledge Commons. In Understanding Knowledge as a Commons: From Theory to Practice. Hess, C. & Ostrom, E., Eds. Cambridge, MA: MIT Press.

In this chapter, Waters discusses the importance of understanding the task of preserving the digital knowledge commons as a shared responsibility that is, in itself, a kind of commons.

Yu, A. K. (2007). Enhancing Legal Aid Access through an Open Source Commons Model. *Harvard Journal of Law & Technology* 20(2):373-402.

High quality legal services, in both civil and criminal matters, is beyond the financial reach of many people. This poses a challenge to the legitimacy of civil, democratic societies founded on the notion of equal justice. In the United States, legal aid, at least in the civil context, continues to be considered more a charity than a right. This article explores the commons movement as a potential model to broaden access to legal information and counsel. With minimal financial and capital requirements, commons can make a dramatic impact on the way legal resources are accessed, including in countries like the United States.

Yu, P. K. (2007). Intellectual Property and Information Wealth: Issues and Practices in the Digital Age. (Vol. 1-4). Westport, CT: Praeger.

From the publisher: "Until recently, issues of intellectual property were relegated to the experts--attorneys, legal scholars, rights holders, and technology developers who wrangled over interpretations and enforcement of copyright, patent, and trademark protections. But in today's knowledge-based economy, intellectual property protection has taken on fundamentally new proportions, as a subject of urgency for businesses (whose survival depends on protection of their intangible assets) and as a subject of cultural importance that grabs front-page headlines (as the controversy over Napster and high-profile revelations of plagiarism, for example, have illustrated). This landmark set of essays brings new clarity to the issues, as societies around the world grapple with the intricacies and complexities of intellectual property, and its impact on business, law, policy, and culture. Featuring insights from leading scholars and practitioners, Intellectual Property and Information Wealth provides rigorous analysis, historical context, and emerging practical applications from the public, private, and non-profit sectors."

8. Relevant Data Sets, Reports, and Case Studies.

Abramson, J. (2011). Networks and Citizenship: Using Technology for Civic Innovation. 2011 Aspen Institute Forum on Communication and Society. Washington, DC: Aspen Institute.

This report provides recommendations on promoting hyper-local, local and global citizenship engagement through information and communication technologies, while preserving the traditional values of a diverse democratic platform.

American Society of Newspaper Editors (1997-2012). ASNE Newsroom Employment Census. Retrieved June 1, 2012, from asne.org/key_initiatives/diversity/newsroom_census.aspx

The Newsroom Employment Census measures the percentage of minority employees working in newsrooms across the U.S. To collect that data, ASNE conducts an annual survey of newspaper editors. Participating publications agree to make public the percentage of minority employment among the employees of their organization. The information from newspapers taking part in the survey is used to project the numbers for non-responding papers in the same circulation range.

According to the latest ASNE report, minority newsroom employment across all market sizes is still substantially lower than the percentage of minorities in the populations served by those newsrooms.

Annenberg Public Policy Center (2000, 2004, 2008) National Annenberg Election Survey (NAES) Data Sets. Retrieved June 1, 2012, from www.annenbergpublicpolicycenter.org

These large-scale online and telephone surveys are representative of the U.S. adult population. The datasets cover a range of topics related to political attitudes, behaviors, and media use. The surveys provide an insight into the information needs of the American public in the political domain. They also identify key sources of information the respondents use to fulfill those needs.

Baldwin, T., Bergan, D., Fico, F., Lacy, S., & Wildman, S. S. (2010). *News media coverage of city governments in 2009*. Retrieved June 11, 2012, from:
http://quello.msu.edu/sites/default/files/pdf/PEJ_City_Govt_report-final.pdf

The report offers a comprehensive analysis of the way different media serve communities' information needs. It examines news coverage and commentary about city government by daily and weekly newspapers, television, cable, radio and citizen journalism sites in 98 metropolitan central cities and 77 suburban cities.
The results show that daily and weekly sources to be major sources of original news articles about city governments. Also, coverage of central cities differed from that of suburban cities. Few TV stories addressed suburban city government, and suburban cities were much more reliant on weekly newspapers than dailies. Suburban city coverage was more likely to address city government, human interest and community news, whereas central city coverage dealt more with crimes and accidents. Topic-wise city budgets and taxes were the most heavily covered. The most commonly used sources were local government officials, followed by business people and ordinary citizens.

Becker, S., Crandall, M., Coward, C., Sears, R., Carlee, R., Hasbargen, K., & Ball, M. A. (2012). Building Digital Communities: A framework for action. Washington, DC: Institute of Museum and Library Services. Retrieved June 1, 2012, from tascha.uw.edu/publications/building-digital-communities

As access to high-speed broadband becomes increasingly important to full participation in society, communities need to develop strategies to address the technological needs of all their residents. This document is developed in response to the Federal Communications Commission's National Broadband Plan. It proposes a community-wide framework detailing ways in which libraries, businesses, hospitals, schools, cultural institutions, technology centers and local governments can help create and sustain access to broadband and digital content. The report outlines a multiple access, adoption, and application principles and strategies.

Becker, S., Crandall, M. D., Fisher, K. E., Blakewood, R., Kinney, B., & Russell-Sauve, C. (2011). Opportunity for All: How Library Policies and Practices Impact Public Internet Access. Washington, DC: Institute of Museum and Library Services. Retrieved June 1, 2012, from tascha.uw.edu/usimpact/documents/OPP4ALL2_FinalReport.pdf

This report investigates the users and uses of public access technology in public libraries. It seeks to identify ways in which those institutions can maximize their contribution to the community and addresses policy priorities at the national level. The study is based on interviews with users, library staff, and community stakeholders.
The following suggestions for best practices are highlighted in the document:

> Integrating technology services with other library services
> Using activity-based budgeting to help account for the cost of public access services
> Providing ongoing technical training for library staff
> Formalizing relationships with community-based organizations
> Establishing a set of common indicators for public library technology services
> Using data and stories to communicate the value of public access technology
> Leveraging library technology resources to enhance broadband adoption and support

Beresteanu, A., & Ellickson, P. B. (2007). Minority and Female Ownership in Media Enterprises. Washington, DC: Federal Communications Commission. Retrieved June 11, 2012, from: www.fcc.gov/mb/peer_review/prstudy7a.pdf

This report finds that minorities and females are clearly underrepresented in radio, TV and newspaper markets in the U.S. relative to their proportion in the population. Access to capital is a primary cause of under-representation. Moreover, the report finds major problems with the nature and quality of minority ownership data collected by the FCC. The authors thus propose that the FCC should improve its data collection process by a) integrating and incorporating female or minority ownership data within the broader census of media firms and b) indicating whether the firms are publicly traded or privately owned.

Bertot, J. C., McDermott, A., Lincoln, R., Real, B., & Peterson, K. (2012). 2011-2012 Public Library Funding and Technology Access Survey: Survey Findings and Results. Information Policy & Access Center: University of Maryland. Accessed June 14, 2012, at www.plinternetsurvey.org

This report outlines findings from the latest of 13 national surveys studying access to technology in public libraries.The instrument collected data about a range of available services and facilities in over 8 thousand library branches across the U.S.
The results indicate that public libraries provide a wide range of Internet-related resources to their communities. Those resources include broadband connectivity, public-access computers, digital literacy programs, online resources, assistance in seeking employment, and conducting e-government transactions, as well as access to secondary and higher education coursework. Even though communities appeared to be relying heavily on local libraries, the survey

registered decreases in several key areas: funding, open hours, fully trained staff, equipment upgrades, high-speed bandwidth and infrastructure. As a result, over half (52%) of U.S. public libraries across the country reported that, at certain times of the day, they did not have enough open access workstations to meet demand. Close to half said their Internet connection speeds were insufficient at times, and close to a third indicated that they would like to upgrade their Internet service, but cannot afford it.

Butler, B. (2011). 2011 NABJ Diversity Census: An Examination of Television Newsroom Management. National Association of Black Journalists. Retrieved June 1, 2012, from www.nabj.org/resource/resmgr/2011_nabj_diversity_census.pdf

The National Association of Black Journalists conducts an annual survey to assess the level of diversity in decision-making positions for local television news operations in the U.S. The study compiles information from a variety of sources in order to capture the characteristics of individuals empowered to make key decisions about TV coverage. The data is later sent to the respective stations for verification.

The 2011 NABJ report confirms a trend known from previous research: the higher the position, the less likely it is to be occupied by a person of color. According to the 2010 United States Census, non-Whites comprise over a third of the U.S. population. This study finds, however, that people of color fill only 12% of the newsroom management positions at stations owned by ABC, Belo, CBS, Cox, Fox, Gannett, Hearst, Lin Media, Media General, Meredith, NBC, Nexstar, E.W. Scripps, Post-Newsweek, and Tribune.

Center for the Digital Future (2000-2011) Digital Future Survey Data Sets.
Retrieved June 1, 2012, from www.digitalcenter.org

For more than a decade the Center for the Digital Future (CDF) has collected nationally representative data about the online behavior of Americans. The phone surveys conducted for this project include questions about individual information-seeking patterns, both on the Internet and in traditional media. Respondents are also asked to evaluate the quality and comprehensiveness of the acquired information.

Coulson., D., St. Cyr, C., & Lacy, S. (2000). City hall reporters' evaluation of coverage.
Newspaper Research Journal, **21(3), 27-38.**

This study is based on a national survey of 227 city hall reporters writing for daily newspapers in 1997. It finds that reporters generally believe their papers are doing a good job of covering the beat. The quantity of coverage remained similar compared to 1993, while there has been a slight decline in the number of city hall reporters.

Dailey, D., Bryne, A., Powell, A., Karaganis, J., & Chung, J. (2010) Broadband Adoption in Low-Income Communities. New York, NY: Social Science Research Council. Retrieved June 1, 2012, from www.ssrc.org/publications/view/1EB76F62-C720-DF11-9D32-001CC477EC70/

"Commissioned by the Federal Communications Commission (FCC) to analyze the factors shaping low rates of adoption of home broadband services in low-income and other marginalized communities, this SSRC study is one of the few large-scale qualitative investigations of barriers to adoption in the U.S. and complements FCC survey research on adoption designed to inform the 2010 National Broadband Plan. The study draws on some 170 interviews of non-adopters, community access providers, and other intermediaries conducted across the U.S. in late 2009 and early 2010 and identifies a range of factors that make broadband services hard to acquire and even harder to maintain in such communities." The study is notable in that it focuses on interaction effects between socio-economic factors and technology rather than simple technical benchmarks of exclusion. It also points to the intersection between different forms of exclusion within single communities that can compound impediments to broadband adoption or 'un-adoption'.

ESRI (2012). ESRI Business Analyst. Retrieved June 1, 2012, from www.esri.com/software/arcgis/extensions/businessanalyst/data-us.html

This GIS (Geographic Information System) analysis and visualization software includes comprehensive demographic and other data for the U.S. In addition to population and employment variables, the dataset includes segmentation/classification of neighborhoods, consumer spending, and business information.

ESRI (2012). ESRI Community Analyst.Retrieved June 1, 2012, from www.esri.com/software/arcgis/community-analyst/variables.html

A web-based tool that provides GIS mapping software and a variety of datasets for the U.S. The data provided with the application includes demographic, business, financial, health, education, transportation, energy, family and other variables.

Fuentes-Bautista, M. (2009). Beyond Television: The Digital Transition of Public Access. Amherst, MA. Retrieved June 1, 2012, from hmediaresearchhub.ssrc.org/publications/Fuentes-Bautista_Beyond%20Television.pdf

This case study focuses on channelAustin, a nonprofit that manages the City of Austin's digital media center and community television. The paper develops a framework helping researchers and practitioners understand the value of community digital access. It also proposes a set of metrics for evaluation.

The authors suggest that to strengthen media localism, local capacity needs to be extended to include a wide range of digital media content. The public should be engaged through dominant digital media platforms (e.g. cable, Internet). Amateur digital media production is a fertile area where community video producers can develop skills. Those skills can then be applied to public

media content and outreach. Access to affordable training programs and equipment was key for residential engagement in community life in Austin. This was especially true in diverse and low-income areas.

Gallup and the Knight Foundation (2008-2010) Knight Soul of the Community.
Retrieved June 1, 2012, from www.soulofthecommunity.org

Knight Soul of the Community (SOTC) is a study conducted by Gallup in 26 locations over three years. The goal of the project is to identify the factors that make residents attached to their community. SOTC also examines the role of community attachment for the area's economic growth and development. The surveys cover topics like local infrastructure, economy, safety, education, social interactions and civic engagement.

Gantz, W., Schwartz, N., Angelini, J.R., & Rideout, V. (2008, January). Shouting to Be Heard:
Public Service Advertising in a Changing World. Kaiser Family Foundation: Menlo Park, CA.
Retrieved on June 1, 2012 from http://www.kff.org/entmedia/7715.cfm

Public Service Announcements (PSAs) are still a core component of many major public education efforts. This report presents a wide variety of statistics about donated and paid PSAs. The study examined a week of television content on affiliates of ten major broadcast and cable networks: ABC, CBS, Fox, NBC, CNN, ESPN, MTV, Nickelodeon, TNT, and Univision. For each network, programming was sampled on local affiliates in seven different markets across the country: Atlanta, Chicago, Dallas, Denver, Los Angeles, New York, and Seattle. The results indicated that overall, the stations donated 17 seconds an hour to PSAs, which constituted about .5 % of all TV airtime on these channels. Across all stations in the study sample, close to half of the time donated to PSAs occurred between the hours of midnight and 6 am. More than one out of three donated PSAs (38%) concerned a children's issue, and one out of every four (26%) was on a health-related topic.

Hampton, K., Goulet, L. S., Rainie, L., & Purcell, K. (2011). Social Networking Sites and Our
Lives: How People's Trust, Personal Relationships, and Civic and Political Involvement are
Connected to Their Use of Social Networking Sites and Other Technologies. Washington, DC:
Pew Research Center. Retrieved June 1, 2012, from pewresearch.org/pubs/2025/

This report focuses on the relationship between the use of social media, mobile phone, and the Internet on measures of well-being, including trust, social support, political participation, civic engagement, and the size and diversity of people's personal networks. The report is based on an analysis of data collected from a large, random survey of American adults. The report points to the increasingly important role that social media play in the everyday life of American adults. The report also identifies the relatively consistent, positive relationship between use of these technologies and social well-being. Substantive findings include a strong, positive relationship between the use of Facebook and the number of close supportive relations, access to social support, political participation and trust.

Hampton, K., Goulet, L. S., Marlow, C., & Rainie, L. (2012). Why most Facebook users get more than they give. Washington, DC: Pew Internet & American Life Project

This study examines a variety of behaviors related to social media use in the U.S. The report is partly based on findings from a nationally representative U.S. phone survey conducted in 2010. The authors also collaborated with Facebook to secure additional data from the online service. Twelve percent of the survey respondents allowed Facebook to share their activity logs with the researchers.

According to the report, half of the adults and three-quarters of the teenagers living in America used social networking sites. The most frequently mentioned platform was Facebook. On average, users of the site received more messages and comments than they sent out. The same pattern was true for friendship requests, "likes", and tags. The average number of new friendships per month was seven, and users rarely dissolved those relationships or removed another person's content from their feed. The study suggests that making friends on Facebook and posting status updates on the site may be associated with higher levels of social and emotional support.

Hampton, K., Sessions, L., Her, E. J. & Rainie, L. (2009). Social Isolation and New Technology: How the Internet and Mobile Phones Impact Americans' Social Networks. Washington, DC: Pew Research Center. Retrieved June 1, 2012, from pewresearch.org/pubs/1398/

This report explores the relationship between Internet and mobile phone use and a series of measures of well-being, include the number of close relationships, neighborhood involvement, and civic engagement. The report is based on a large, random survey of American adults. Findings include a positive, substantive relationship between Internet and mobile phone use and the number and diversity of close friends. Numerous positive and no negative relationships were uncovered between the use of new communication technologies and civic engagement. The study highlights the role that Internet use can have on neighborhood relationships. Those who use social media to interact with people locally know more of their neighbors, and are more likely to talk to neighbors in person, talk on the telephone, discuss issues with neighbors, and provide neighbors with informal aid or support.

Horrigan, J., & Rainie, L. (2002). The broadband difference: How online Americans' behavior changes with high-speed Internet connections at home. Washington, DC: Pew Internet and American Life Project.

This research explores how Internet usage differs between broadband and dial-up Internet with a survey of 1391 users in 2002. It shows that broadband not only changes the scope and frequency of Internet usage, but also transforms the online experience, which can be summed up as follows:

People become creators of online content. About six out of ten broadband users have created content or shared files with others online, about double the proportion for dial-up users.

People conduct a lot of searches. Close to nine out of ten broadband users say the Internet has improved their ability to learn new things.

People do many things online. The average broadband user does seven things online on a typical day, compared to dial-up user who does three.

J-Lab and the William Penn Foundation (2010) Philadelphia Media Project.
Retrieved June 1, 2012, from www.j-lab.org/publications/philadelphia_media_project

This project includes a series of studies exploring the media landscape of Philadelphia. The reports identify ways to incentivize media collaborations and support online journalism in the city. In order to improve the information provided to residents of the area, J-Lab (funded by the William Penn Foundation) investigates gaps in public affairs reporting, map assets, and opportunities for philanthropic media investment.
Some relevant comments and critiques of the study were summarized by the New America Foundation (at bit.ly/bEOizj)

Jefferson Institute, the Christian Science Monitor, the Knight Foundation (2008-2012)
Patchwork Nation. Retrieved June 1, 2012, from www.patchworknation.org

The data analyzed for this project comes from the U.S. Census Bureau and the Glenmary Research Center. The study explores a range of demographic, economic, and religious adherence indicators. Based on those factors, U.S. counties are classified into 12 categories. The measures available for each type of community include average income, economic activities, as well as ethnic and religious composition of the population.

Knight Center. (2009). Community information toolkit: A guide to building stronger communities through information exchange. Washington, D.C.: Knight Commission on the Information Needs of Communities in a Democracy.

This online toolkit is an instruction manual for communicators attempting to start community information initiatives. Importantly, the article identifies several key aspects of communication "ecologies," including not only the supply of information, but also the communication infrastructure of the community as well as the communicative skills of community members. The toolkit goes on to guide practitioners through the process of setting up initial plans, conducting pilot workshops in the community, and launching the initiative.

Knight Commission. (2009). Informing Communities: Sustaining Democracy in the Digital Age. the Information Needs of Communities in a Democracy. Washington DC: Aspen Institute 2009. Retrieved June 1, 2012, from www.knightcomm.org/read-the-report-and-comment/

This report is the result of a high-level commission focused on how to create "informed communities". It recommends not only maximizing the availability and credibility of information, but also strengthening the capacity of individuals to engage with the information effectively.

Marcotte, M., Mills, K., & Martin, S. (2010). A Census of Journalists in Public Radio and Television. Public Radio News Directors Inc., Corporation for Public Broadcasting.

The census of journalists in public radio and television was conducted in 2010 by PRNDI (Public Radio News Directors Inc.). It counted a total of 5991 people who had direct responsibilities for originating local news or public affairs at CPB-eligible public broadcasting organizations. The study found that almost half of all journalists (46%) were non-professionals - students, interns, volunteers and other contributors. That number was particularly high for radio stations.
The census also showed that local public media journalists were predominantly non-Hispanic White (80%), followed by 7% African-Americans, 6% Latinos and 3% Asian employees.

Matsaganis, M. D., Tomas Rivera Policy Institute, Time Warner Cable Research Program on Digital Communications (2012) Broadband Adoption and Internet Use among Latinos.
 Retrieved June 1, 2012, from
www.twcresearchprogram.com/pdf/TWC_MatsaganisReport.pdf

This study reports the results of a 2010 telephone survey evaluating patterns of Internet access and connections to communication resources among Latinos. The study focuses on four metropolitan statistical areas containing the cities of Charlotte (North Carolina), Chicago, Los Angeles, and New York.
The survey captures a range of socio-demographic characteristics and their association with technology use. It also investigates the communication ecologies and media consumption patterns of Latinos in the U.S. Digital literacy concerns are outlined and evaluated.

Metamorphosis Research center (2000-2012) Communication infrastructure and neighborhood storytelling networks in LA Communities.
Retrieved June 1, 2012, from www.metamorph.org, www.metaconnects.org/findings

In a series of studies, the Metamorphosis research group collects data about twelve Los Angeles neighborhoods. Surveys, focus groups, content analysis, interviews, and participant observation are used to identify the connections of residents to local communication resources. The project evaluates individual and community levels of civic engagement in the study areas. It examines the role of residents, media, local organizations, and city authorities in the neighborhood storytelling network.

Modarres, A., & Pitkin, B. (2006). Technology and the Geography of Inequality: Assessing the Digital Divide in Los Angeles. Retrieved June 1, 2012, from www.zerodivide.org/sites/default/files/CTF_Report.pdf

This project examines the relationship between access to technology and traditional measures of inequity. Los Angeles County is selected as a test case for the study. The analysis uses a comprehensive database of socio-demographic variables and census-tract-level information about access to communication networks, housing, employment, and public transportation. The study creates a typology of various communities in the area and places them in a socio-spatial hierarchy. The next phase of the project combines resident focus groups with an in-depth analysis of the socioeconomic structure of the County. The findings are used to explain observed patterns of access to technology.

National Newspaper Association (2011) Community Newspaper Readership Survey Report. Retrieved June 1, 2012, from nnaweb.org/ir-2009-readership-survey

This 2011 National Newspaper Association (NNA) report examines small U.S. communities with local newspaper circulation size of 15,000 or less. A phone survey is conducted to assess public attitudes, perceptions, and readership of editorial and advertising content in local papers. The NNA also collects data about primary and preferred sources of local information. The study reports levels of Internet access and online news consumption in the target communities.

New America Foundation, Media Policy Initiative (2010) Information Ecosystem Case Studies in Five U.S. Communities: Minneapolis-St. Paul, Raleigh-Durham, Scranton, Seattle & Washington DC. Retrieved June 1, 2012, from mediapolicy.newamerica.net/information_communities_case_studies

These case studies investigate the information ecologies of five communities: Minneapolis-St. Paul, Raleigh-Durham, Scranton, Seattle, and Washington DC. The Media Policy Initiative researchers examine the availability of relevant information provided by traditional and digital news sources in each area. The reports also explore the role of local city governments, residents and businesses in creating a productive environment for the next generation of information-sharing and community engagement.

Nielsen Claritas (2012). Nielsen SiteReports. Retrieved June 1, 2012, from www.claritas.com/sitereports

SiteReports is an online source for U.S. population data. It offers current year information and five-year projections about demographics, business, consumer buying power, and lifestyle segmentation.

Papper, B. (2004-2011). RTDNA / Hofstra University Annual Survey, Women and Minorities Data. Radio-Television News Directors Association. Retrieved June 1, 2012, from www.rtdna.org/pages/research/women-and-minorities.php

Since the 1990s, the Radio Television Digital News Association supports an annual survey that provides data about women and minorities in broadcasting. Results from 2011 showed an increase in the proportion of minorities employed in both TV and radio. However, that growth was small, and the bigger picture remained unchanged. According to the report, in the last 21 years the minority population of the U.S. has risen 9.5%, while the minority workforce in TV news is up 2.7%. Still, TV diversity remained far ahead of that in the newspaper industry.

Pew Internet & American Life Project (2010) Online News Data Set. Retrieved June 1, 2012, from www.pewinternet.org/Shared-Content/Data-Sets/2010/January-2010--Online-News.aspx

This dataset is based on phone interviews conducted by Princeton Survey Research and representative of U.S. adults. The study investigates how Americans get their daily news. It focuses particularly on online and mobile information-seeking behaviors. The survey includes questions about customizing the individual news reading experience on the Web. It also examines different ways in which people use online tools (including social media platforms) to filter, evaluate, share, and comment on news.

Pew Internet & American Life Project (2010) The Social Side of the Internet Data Set. Retrieved June 1, 2012, from www.pewinternet.org/Shared-Content/Data-Sets/2010/December-2010--Social-Side-of-the-Internet.aspx

This data set contains the results of a 2010 survey on Americans' use of the Internet. The study investigates the role of technology in group formation and engagement. It explores individual participation in online and offline communities, voluntary groups and organizations. Respondents also report on a range of online activities and practices, including the use of social media platforms like Facebook or Twitter.

Pew Research Center for the People & the Press (2006, 2008, 2010) Biennial Media Consumption Data Set. Retrieved June 1, 2012, from www.people-press.org/category/datasets

The Pew Research Center biennial media consumption datasets are based on nationally representative U.S. phone surveys. The project measures Americans' average time of exposure to different types of media. The surveys also evaluate how often individuals consume specific TV and radio programs, as well as print publications and news websites. The participants are further asked about various aspects of their technology use and patterns news consumption through a variety of devices.

Project for Excellence in Journalism. (2010). *How News Happens:* **A Study of the News Ecosystem of One American City. Washington, DC.**
Retrieved June 1, 2012, from www.journalism.org/analysis_report/how_news_happens

This case study takes a close look at the news ecosystem of a large American city.
The project examined all outlets producing local news in Baltimore, MD: from radio, TV, and print, to online news sites and blogs. The full coverage was collected over a period of one week (July 19-25, 2009). Six major story threads that were prominent during that week were selected for a closer examination. The report discusses the proportion of original content produced by different media sectors. It also summarizes the leading story topics in traditional and new media.

Project for Excellence in Journalism (2007-2011) News Coverage Index Data Sets.
Retrieved June 1, 2012, from www.journalism.org/by_the_numbers/datasets

The data is based on 4 years of content analysis conducted for a range of news outlets from five industry sectors: print, cable TV, network TV, radio, and online media. The major news stories covered by each outlet are collected and coded into a range of categories. The attributes recorded for each story include topic and geographic scope (local, national, or international).

Project for Excellence in Journalism (2004-2011) The State of the News Media: An Annual Report on American Journalism*.* **Retrieved June 1, 2012, from** stateofthemedia.org

Every year this report provides an in-depth analysis of current trends in different media sectors – newspapers and magazines, network and cable television, radio, online and others. Part of the data presented in the study comes from affiliated experts and organizations. Another set of results, particularly those obtained through media monitoring and content analysis, are specifically collected and evaluated for this project. Original research is also conducted to produce a number of special reports and features provided by PEJ.

Project for Excellence in Journalism, Pew Internet & American Life Project, Knight Foundation (2011) Local News Data Set. Retrieved June 1, 2012, from www.pewinternet.org/Shared-Content/Data-Sets/2011/January-2011--Local-News.aspx

This 2011 nationally representative survey dataset contains a series of questions exploring the preferred sources of local news in the U.S. The study evaluates how well different types of media serve particular information needs by asking participants about the topical coverage, comprehensiveness and quality of news sources. The project examines specific aspects of the Internet as a major resource for local information, particularly among younger Americans.

Purcell, K., Rainie, L., Mitchell, A., Rosenstiel, T., & Olmstead, K. (2010). Understanding the Participatory News Consumer: How internet and cell phone users have turned news into a social experience. Washington, DC: Pew Internet & American Life Project. Retrieved June 1,

2012, from
www.journalism.org/analysis_report/understanding_participatory_news_consumer

This report describes findings from a nationally representative U.S. survey conducted between December 2009 and January 2010. The study captured patterns of traditional media and Internet use among Americans, focusing on news consumption practices.

According to the authors, respondents displayed no loyalty to particular news organizations or consumption technologies. On a typical day, the overwhelming majority of Americans (92%) used multiple platforms to get news. Six out of ten participants (59%) reported getting their news from a combination of online and offline sources. The Internet ranked as the third most popular news platform, behind local and national television. Most people (65%) did not have a preferred online news source, relying on multiple different sites instead. The most popular online news subjects included the weather, national and international events, health and business. Local news was not as frequently read on the Web: only half of the respondents (51%) looked for local information online.

Rainie, L., Purcell, K., Siesfeld, T., & Patel, M. (2011). How the public perceives community information systems. Washington, DC: Pew Internet and American Life Project.
Retrieved June 2, 2012, from
cms.pewresearch.org/pewinternet/files/2012/03/Pew_Monitor_Communityinfo.pdf

This report examines key components of the local information systems in three communities: Macon, Philadelphia, and San Jose. The document describes results from an eight-month pilot project testing a number of research methods, including community surveys. The study was commissioned by the Knight Commission and conducted with advisory help from the Pew Research Center's Internet & American Life Project.

The analysis found that residents who thought their local government was open to information-sharing were also more satisfied with the local civic life. Broadband users were somewhat less satisfied than other respondents. Social media platforms emerged as a key component of the information systems of communities.

Rainie, L., Purcell, K., & Smith A. (2011). The social side of the internet. Washington, DC: Pew Internet & American Life Project. Retrieved June 12, 2012, from:
pewinternet.org/~/media//Files/Reports/2011/PIP_Social_Side_of_the_Internet.pdf

This report presents the results of a national survey by the Pew Research Center's Internet & American Life Project on online and offline social activities. The results indicate that 75% of all American adults are active in some kind of voluntary group or organization and internet users are more likely than others to be active: 80% of internet users participate in groups, compared with 56% of non-internet users. And social media users are even more likely to be active: 82% of social network users and 85% of Twitter users are group participants. In this survey, Pew Internet asked about 27 different kinds of groups and found great diversity in group membership and participation using traditional and new technologies. It becomes clear as

people are asked about their activities that their use of the internet is having a wide-ranging impact on their engagement with civic, social, and religious groups.

Rainie, L., & Smith, A. (2012). Social networking sites and politics. Washington, DC: Pew Internet & American Life Project. Retrieved June 12, 2012, from: pewinternet.org/~/media//Files/Reports/2012/PIP_SNS_and_politics.pdf

This report presents the results of a survey that focused on examining how social media sites are used as a form of political communication. In a survey completed in February 2012, the Pew Internet Project found that 80% of adults use the internet and 66% of those online Americans use social networking sites. Some 75% of SNS users say their friends post at least some content related to politics and 37% of SNS users post political material at least occasionally. The survey suggests that those SNS users are like other Americans in that many are not particularly passionate about politics. It also shows that many friendships are not centered on political discussion and that many networks are not built with ideological compatibility as a core organizing principle. The survey did find that a portion of SNS users have assessed some relationships based on political material that is posted on the sites. Some 18% of social networking site users have blocked, unfriended, or hidden someone based on some form of political expression.

Rosenstiel, T., & Mitchell, A. (2011) How mainstream media outlets use Twitter. Washington, DC: Project for Excellence in Journalism. Retrieved June 11, 2012, from: www.journalism.org/print/27311

This study looks at Twitter feeds from 13 major news organizations. To allow the comparison of the news agenda and nature of coverage on Twitter with legacy media, outlets are selected from the list that PEJ regularly monitors for its weekly News Coverage Index. The research, which examines more than 3,600 tweets over the course of a week, reveals that these news organizations use Twitter in limited ways—primarily as an added means to disseminate their own material. Both the sharing of outside content and engagement with followers are rare. The news content posted, moreover, matches closely the news events given priority on the news organizations' legacy platforms.

Schaffer, J. (2007). Citizen Media: Fad or the Future of News? The Rise and Prospects of Hyperlocal Journalism. J-Lab. Retrieved June 1, 2012, from www.j-lab.org/citizen_media.pdf

This study examines the development of hyperlocal community websites. The authors conduct in-depth interviews (sample of 31) and an online survey (sample of 191) with the founders, owners or operators of citizen media sites.
The report finds that citizen sites are emerging as a form of bridge media, linking traditional media with other forms of civic participation. The authors encounter many models of citizen media (one size does not fit all). Most of the respondents do not use traditional metrics (unique

visitors, page views, revenues) to measure success, which is instead defined in terms of community impact. The major challenges identified by participants involve finding ways to attract more contributors and operating support.

Smith, A. (2011). Why Americans use social media. A report of the Pew Internet & American Life Project. Retrieved June 14, 2012, from pewinternet.org/~/media//Files/Reports/2011/Why%20Americans%20Use%20Social%20Media.pdf

This study examines the reasons why Americans use social media. The results indicate that two-thirds of online adults (66%) use social media platforms such as Facebook, Twitter, MySpace or LinkedIn. These internet users say that connections with family members and friends (both new and old) are a primary consideration in their adoption of social media tools. Roughly two thirds of social media users say that staying in touch with current friends and family members is a major reason they use these sites, while half say that connecting with old friends they've lost touch with is a major reason behind their use of these technologies.

Other factors play a much smaller role—14% of users say that connecting around a shared hobby or interest is a major reason they use social media, and 9% say that making new friends is equally important. Reading comments by public figures and finding potential romantic partners are cited as major factors by just 5% and 3% of social media users, respectively.

The City of Madison, the University of Wisconsin-Madison (2008-2011) Neighborhood Indicators Project. Retrieved June 1, 2012, from madison.apl.wisc.edu

This case study comes from a collaborative initiative launched in Madison by the local authorities and the University of Wisconsin-Madison. The project uses a range of indicators – key characteristics at the neighborhood level associated with the quality of life in the city. The roster of indicators is developed with input from officials and residents. In addition to demographic and geographic characteristics, it captures levels of civic engagement, as well as public safety, housing, health, economic and other factors.

Waldman, S. (2011). The Information Needs of Communities: The Changing Media Landscape in a Broadband Age. Working Group on Information Needs of Communities: Federal Communications Commission.

This comprehensive report prepared for the Federal Communications Commission examines the contemporary media environment in the U.S. The document outlines shifts brought about by digital technologies and investigates the capacity of different media sectors to adequately serve the information needs of communities. The working group preparing the text sets out to answers two major questions:

> Are citizens and communities getting the news, information, and reporting they want and need?
>
> Is public policy in sync with the nature of modern media markets, especially when it comes to encouraging innovation and advancing local public interest goals?

The first part of the report assesses the media and information landscape, looking at both commercial sectors and non-profit media. The second part examines policy and regulation, while the third one contains recommendations.

West, D. M., & Whitehurst, G. J., & Dionne, E. J. (2009) Invisible: 1.4 Percent Coverage for Education is Not Enough. Washington, DC: Brookings. Retrieved June 1, 2012, from www.brookings.edu/research/reports/2009/12/02-education-news-west

This report presents present the results of a national public opinion survey on education news conducted in December 2010. The survey contained a series of questions about education news consumption, focusing on where respondents got their information, how they assessed media sources, and how they envisioned the future of education reporting and school communication. The results indicated that most people would like to have more information on teacher performance (73%), student academic performance (71%), school crime or violence (69%), and school curricula (68%). The most common source of education news were friends and family (75%) followed by daily newspaper (60%) and school publications (56%).

West, D. M., & Whitehurst, G. J., & Dionne, E. J. (2011) Americans Want More Coverage of Teacher Performance and Student Achievement. Washington, DC: Brookings. Retrieved June 1, 2012, from www.brookings.edu/research/reports/2011/03/29-education-news

This report investigates the transforming business model of education journalism in a digital age. The authors interview leaders in the field and present case studies of specific ventures. The report summarizes new trends in education coverage and discusses how major news organizations are re-imagining their futures. It outlines the development of niche publications, news aggregators, social media, and new content providers. The study also explores alternative business models, including subsidized content, for-profit models, and indirect public subsidies.

West, D. M., & Whitehurst, G. J., & Dionne, E. J. (2010) Re-Imagining Education Journalism. Washington, DC: Brookings. Retrieved June 1, 2012, from www.brookings.edu/research/reports/2010/05/11-education-journalism

This report examines education-related media content. The authors point out a number of major problems in the area, the most basic of which is the almost total lack of education coverage in national news. Through secondary analysis of news data collected by the Pew Project for Excellence in Journalism, the researchers found that in 2009, only 1.4 percent of national news coverage from television, newspapers, news Web sites, and radio dealt with education. That proportion was even lower in 2008 (0.7%) and 2007 (1%).

Yanich, D. (2011) Local TV & Shared Services Agreements: Examining News Content in Honolulu. Center for Community Research & Service. Retrieved June 1, 2012, from www.ccrs.udel.edu/publications

This project studies local television as a critical news source for the American public. It investigates the effects of a Shared Services Agreement (SSA) among three of the five television stations in Honolulu, Hawaii. The impact of the agreement on news diversity is assessed through a content analysis of the daily newscasts for all five TV stations in the DMA. The distribution of stories in the SSA and non-SSA stations are compared for the time periods before and after the agreement. The report finds that the SSA has resulted in a reduced diversity of media content in local TV news.

Zickhur, K., & Smith, A. (2012). Digital differences. Washington, DC: Pew Internet and American Life Project. Retrieved June 6, 2012, from pewinternet.org/~/media/Files/Reports/2012/PIP_Digital_differences_041312.pdf

This analysis of a 2011 survey of 2260 adults provides a snapshot of the digital divide in the US. A major finding is the considerable number of Internet skeptics who refuse to go online. Among one in five Americans who do not use the Internet, almost half (48%) say they don't go online because they don't think the Internet is relevant to them. One in five (21%) mention price-related reasons, and only 6% cite lack of access of availability as the reason.

Another revelation is the increasing importance of the ways in which people connect. About six in ten adults (63%) go online wirelessly with a device other than a desktop computer. There were also notable differences according to ethnicity, with 38% of Black and Hispanics going online mostly using their cell phones, compared to only 17% for Whites.