Citizens’ Critical Information Needs & Local TV News

JUNE 2015

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Ashtyle Hazen Markish Aleben--

---“a silent cantor has no voice.”

--Yiddish proverb
The cornerstone of democracy rests on the foundation of an educated electorate.

—Thomas Jefferson
Critical information needs (CINs) are essential areas of public concern about which citizens should know in order to function in their daily lives, both on the individual and community levels. In large measure, people turn toward local television news to fulfill those needs. Currently, there is no mechanism that evaluates to what extent, if any, local television news addresses CINs. This research developed such a model. The *Broadcast News CIN Model*, includes two crucial variables, information level and CIN category, which, together, assess if a news story fulfills a citizen’s critical information need. Using content analysis, the model was tested in the Columbia, South Carolina television market. The findings from this research, while illustrative in its specifics, demonstrate the validity of the *Broadcast News CIN Model*. The development of this model adds to media theory, has wide and immediate policy implications for media consolidation, and is a tool for policymakers and citizens, alike, to assess the effectiveness of local television news in addressing critical information needs of the American public.
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News media are critical in the development of an informed electorate. It is the source for citizens to access information about their communities, which is essential for them to become active and engaged in society. Specifically, local news informs citizens about the issues and politics that directly affect them and their families. When searching for local news, the primary resource for citizens is local television (Mitchell, 2014; Graber 2010). Other news platforms, such as the Internet and cable television, while often utilized, are not the essential sources of local social and political information about communities. Along with newspapers, local television is, most often, an originator of information (Graber, 2010). This means that the content that local television news programs produce is all the more important, particularly because much of its content is repurposed and disseminated through other news platforms. Not only is it critical for empowering the public, but it is also crucial in the dissemination of information.

As the “primary authority for communications law,” the Federal Communications Commission (FCC) is tasked with maintaining a media landscape that protects the public interest through its expressed power as the arbiter of ownership and licensing agreements (Federal Communications Commission, 2015). The Commission, bound by Section 257 of the Communications Act of 1934 and the Telecommunications Act of 1996, is required to review the effect that ownership laws have on the media ecosystem every four years and report to Congress whether or not they are consistent with the public interest, convenience, and necessity (47 U.S.C. § 257; “Statement of work,” 2011). Ownership and licensing agreements, which serve the public interest, can be understood as those that promote news that is local, diverse, and competitive (Federal Communications Commission, 2015).

In an effort to fulfill this requirement for 2010, the Commission initiated “The Pilot Test of Research Design for a Multi-Market Study of Critical Information Needs.” According to the Commission’s statement of work for this project, the pilot test was a necessary step if any policy action was going to take place in reference to market entry barriers. It states, “[i]n order to develop
a policy that would eliminate market barriers and advance the goal of diversity and competition, the Commission needs to conduct or commission research that illuminates the relationship between market entry barriers and the critical information needs of local communities” (“Statement of work,” 2011, p. 1). This test is the logical step to take in understanding the relationship between media outlets and critical information needs.

The Commission released a request for a proposal to conduct a literature review. The Annenberg School of Communication and Journalism at the University of Southern California (USC) was selected. USC then subcontracted work to other researchers at the University of Wisconsin-Madison’s Center for Communication and Democracy and Fordham University and the group formed a collaboration called the Communication Policy Research Network, a group of leading media research scholars and journalists. Together they generated the Review of the Literature Regarding Critical Information Needs of the American Public (hereafter called the Review) to create a foundational understanding of citizens’ critical information needs and propose a framework for a practical assessment of those needs.

Because such an extensive review was an ambitious task, the Commission, following the suggestion of the study, took further action to evaluate CINs. The Commission established a contract through an expedited process with a small, minority, women and military veterans firm, Social Solutions International, Inc. (SSI). SSI organized a working group of scholars and practitioners familiar with media and communications research, but from diverse disciplines, to build on the theoretical underpinnings of the Review to determine a practicable set of methodologies that might be used to determine whether the public was being provided CINs. SSI was further charged with summarizing the results of that meeting and proposing a research plan.

Proposals fell into one of two categories: the supply side and the demand side. The supply side, or rather the media market census component, included broadcast news content, newspaper content, radio news content, Internet content, and a qualitative analysis of
media providers. These content analyses set out to analyze CINs across their respective media platforms over the course of one constructed week (See: “Method” section for explanation of constructed week). The qualitative analysis of media providers focused on how local media services met CINs by conducting a series of interviews and examining ownership characteristics, employment data, and demographics (“Statement of work,” 2011).

The demand side, also referred to as the community ecology study, included a general population survey, diary study, and in-depth neighborhood interviews. The general population survey aimed to provide a lens into CINs by measuring both perceived and actual critical information needs. In a similar manner, the diary study sought to measure actual experiences with CINs by tracking both citizens’ exposure and the decisions that media entities make regarding CINs. Lastly, to extend the analysis from the individual to the community level, the neighborhood interviews component planned to study individuals within diverse neighborhoods (“Statement of work,” 2011). In addition to identifying the populations/universes in which to assess CINs, components of both the media market census and the community ecology study were charged with creating a detailed research design to evaluate CINs within their respective areas.

The research began in late 2013; however, within a few months, the Commission terminated the study. The main opposition to the study came from the National Broadcasters Association and Republican members of the U.S. House of Representatives. They protested that the community ecology component was an infringement on the First Amendment, arguing that asking media providers about their news selection decisions was a government intrusion (the diary study). The House Energy and Commerce Committee is responsible for the congressional oversight of the Federal Communications Commission. Chairman Fred Upton, on behalf of the committee, wrote an open letter noting that the free speech of citizens and the freedom of the press of broadcasters were jeopardized because of the diary study (“Open Letter To,” 2013). The Republican commissioners on the Federal Communications Commission also advocated for the termination
of the study; they too cited the study as an infringement on the First Amendment.

Moreover, with the degree of political contention surrounding the study, continuing with the research would have required the FCC to spend a significant amount of political capital. In addition to the controversy surrounding the CIN study, the FCC had a number of “high-stakes” rulings on the horizon, specifically the upcoming decision (at that time) on net neutrality.¹

By the time the FCC cancelled the study, the University of Delaware had already developed the model to be tested and collected data from the selected market. We chose to continue the work. The model created and analyzed in this research was developed for the purposes of the study initiated by the Commission. The objective of this research was to test the validity of what we have called the Broadcast News CIN Model. The examination of the broadcasts in the Columbia, SC television market affirmed both the internal and construct validity of the model.

¹ On February 26, 2015 the FCC reclassified broadband under Title II of the Federal Communications Act, thereby preserving net neutrality and the FCC’s capacity to regulate the service. The ruling was immediately supported by media reformers and strongly criticized by internet service providers. As of April 2015, seven lawsuits have been filed against the FCC’s ruling.
Media in Democracy

The media has changed. We now give broadcast licenses to philosophies instead of people. People get confused and think there is no difference between news and entertainment. People who project themselves as journalists on television don’t know the first thing about journalism. They are just there stirring up a hockey game.

-Gary Ackerman, former U.S. Congressman

Media are fundamental to America’s democracy. While their form in society has changed over time, media has remained integral in informing citizens. The U.S. media system is unlike any other in the world because it is protected by law under the founding principles of the United States. The First Amendment of the Constitution is revolutionary in its guarantee of the freedom of the press. Freedom of the press is a source of empowerment and provides a voice for the people that is independent of the government. Media serve as the people’s connecting thread to the government by providing a lens through which people become informed on the issues that mean the most to them. I deliberately use the phrase means the most to them to convey the range of issues that are important to citizens. There is no model which determines whether or not media are serving as that connecting thread and acting as the resource for such information. This research is innovative in its development of such a model for local television news.

Robert McChesney (2008) in his book, The Political Economy of the Media, maintains that “journalism in any meaningful sense cannot survive without a viable democracy” (p. 34). A democratic society not only provides a forum in which journalists can act, but it also delivers an audience to listen (McChesney, 2008). However, the corollary is also true. Democracy cannot survive without viable journalism. At the core of a democratic society is a self-governing public and it cannot govern properly without an entity to provide insight into the actions of the officials whom it has elected.

In fulfilling its role, the media is often referred to as the “Fourth Estate” or fourth branch of government, arguably elevating it to the same stature as the Constitutionally expressed government branches. Media has earned the reputation as a "watchdog" for citizens—a role that has not been taken lightly. McChesney (2008) aptly describes the great significance of this phenomenon and the function that media plays in a democratic society:

Democratic theory generally posits that society needs a journalism that is a rigorous watchdog of those in power and those who want to be in power, can ferret out truth
from lies, and can present a wide range of informed positions on the important issues of the day.

However, fostering this type of system is filled with complexities and faces a multitude of challenges. McChesney continues:

...Each medium [TV, radio, newspaper, etc.] need not do all of these things, but the media system as a whole should make this caliber of journalism readily available to the citizenry. How a society can construct a media system that will generate something approximating democratic journalism is a fundamental problem for a free society, as powerful interests tend to wish to dominate the flow of information” (p. 25).

To expand on this framework, Shanto Iyengar (2011) enumerates how journalism serves the needs of the people in a democratic society:

1) Provides a forum, before a national audience, where candidates and political parties can debate their qualifications for office;

2) Educates citizens by providing a variety of perspectives on the important issues of the day;

3) And, serves as a watchdog that scrutinizes the actions of government officials on behalf of citizens, “most of whom do not have the opportunity to closely follow the actions of politicians and the government (p. 20).

The expectation of media to scrutinize government officials is acknowledged by a number of communications scholars. Doris Graber (2010) affirms that “[i]f media surveillance causes governments to fall and public officials to be ousted, democracy is well served” (p. 17). This reinforces the idea that the news media is the entity that holds the government accountable to the public. This not only encourages investigative journalism, but it also provides a sense of security for the public.
However, media’s tendency to nurture the status quo has led to the contention that media’s role as a “watchdog” is one that is carried out in theory and not in practice. Rather, the news “media limit their criticism to what they perceive as perversions of the public’s basic social and political values…and rarely question the widely accepted fundamentals of the political system” (Graber, 2010, p.18). Phrased differently, the media covers “newsworthy” stories as long as they fit into a particular lens that pushes a greater agenda forward. For example, media organizations are significantly concerned with maintaining relationships with their sources, who are often people of power, and increasing their organization’s profit. As such, the press may shy away from publishing certain stories in order to avoid portraying one of their sources in a negative light (Bennett, 2012; McManus, 2012).

Journalists, therefore, face a multitude of challenges. Not only are they tasked with producing stories that are for the public good, but they must also generate stories that serve the profit goals of their corporate managers. If sources, specifically government officials, become alienated because of a media organization’s negative coverage, that organization can potentially lose access to future information that that source can provide. This propensity to appease corporate influences contradicts the traditional role of media in democracy as discussed above because media organizations’ “self-interest conflicts more than coincides with serving the common good” (McManus, 2012, p. 81).

Lance Bennett (2012) characterizes the U.S. media system as one with a shifting balance of power between the people, the press, and politicians. He argues that the assumption that a free press means quality information is a false one and portrays America’s media system as a carefully crafted construction. First, there is a symbiotic relationship between the press and politicians—politicians cannot survive without the press and the press cannot survive without politicians. The news media is the megaphone through which officials push their agendas. Without the attention of the press, politicians cannot communicate their messages to the public. If a “conversation” is not established between officials and
the public, policy agendas do not gain traction and elections are lost.

Likewise, the news media rely on government officials as sources for their stories. If this is lost, the press can no longer operate as a watchdog for citizens. The people provide both the audience and the voting pool for the press and politicians, respectively. In this depiction of America’s media system, it is clear that the power lies not with the people as the Founders intended, but rather with the interests of the government elite and the news media (Bennett, 2012).

Given that the public is the least powerful entity in this arrangement, the question emerges if the public is receiving the information that best serves its needs or those of the press and politicians. Many media experts contend that the answer is the latter and that news has shifted from an information resource to one of “infotainment,” where entertainment is camouflaged as news and, alternatively, news is presented in a sensationalized, dramatic manner (Bennett, 2012; McManus, 2012).

Bennett (2012) highlights four information biases that are utilized in news production: personalization, dramatization, fragmentation, and authority order—disorder bias. These biases, often utilized in conjunction with one another, create a specific lens through which consumers view stories. This lens is meant to form a connection with viewers, attempting to decrease the likelihood that they will shift their attention elsewhere.

Personalization refers to media’s tendency to include a personal element in stories, making the viewer feel like the action of the story could have happened to them. This involves coverage of the feelings/opinions of individuals rather than an analysis of the issue(s) at hand. Bennett (2012) deems this as “surface” coverage (p. 45).

Dramatization works alongside the personalization narrative where the most dramatic elements of a story are emphasized to create a sense of urgency.
Fragmentation is the “isolation of stories from each other and from their larger contexts,” making it difficult to gain a full scope of the bigger picture and often providing confusion for viewers (Bennett, 2012, p. 47).

The last news property that Bennett outlines is the authority order—disorder bias where the capabilities of officials are brought into question. In this bias, journalists cover the actions of officials and speculate if, given the nature of the story, they can return a sense of normalcy to the community (Bennett, 2012). These biases are not inherently bad or good. However, they provide a conceptual understanding of news production in the United States.

News production in the United States is affected by an inherent dilemma because the news system is based on the delivery of a public good (news) by private means. The tension is how do news producers present information that is both in the public interest and profitable. Media reform advocates claim that as news becomes commodified, profit trumps public interest, while media executives assert precisely the opposite reality. Reformers contend that when citizens are overwhelmed with spin, infotainment, and news packaging, they opt out of the news system. It becomes too difficult for citizens to uncover the facts of a particular story and the easiest response is not to engage. News producers challenge that this disengagement arises when news does not capture consumers’ attention. Media executives counter that news produced in an entertainment framework provides citizens with the media system that they want, which means that news is in fact serving the public interest. This logic conflates the *public interest* with what the public is interested in.

Navigating America’s media system to determine how the major players interact often results in an inability to gain an accurate picture of the media landscape. Bennett (2012) captures the exchange among the actors:

Given such diverse forces shaping the future of news and public information, it seems reasonable to ask how we...
might promote the best possible outcomes for democracy. Many Americans seem to live with the false sense of security that the First Amendment and the Constitution will somehow guarantee a quality press...there is no overarching plan to keep an ideal democratic information system in order...The irony of this is that the First Amendment with its protection of press freedom was intended to enable an independent press to stand up to government power. While the press freedom remains a crucial protection in democracy, it has also become a shield for corporate media to avoid social responsibility (p. 26).

The First Amendment is a central consideration regarding the operation of the media system in the United States. It provides the press with the autonomy to produce content without any regulation by the government. There is a difference, though, between regulating the content that a media organization produces and regulating the manner in which it is distributed. Since America’s media system delivers a public good through private means, it is necessary guard against market monopolization. The Federal Communications Commission was created in 1934 as such a protection. As the primary regulatory body of communications law in the United States, it is charged with regulating communications through the information dissemination methods of radio, television, wire, satellite, and cable (U.S. Senate, 1934; Federal Communications Commission, 2015).

The Commission regulates based on three principles: diversity, competition, and localism—which together foster a broadcast media system that serves the public interest. It is also seen as the pathway to achieving a broadcast media environment that is comprised of independent voices, informed debates, diverse viewpoints, and unbiased, factual information.

In order for stations to produce news and broadcast their content within this system, they must have access to the electromagnetic spectrum. This spectrum, owned by the public, yet controlled by the Commission, is finite. The only way for stations to gain access is
to acquire a license from the Commission, which are granted to stations for free.

These licenses are granted to commercial enterprises and “a recurring challenge for Congress and the FCC has been how to reconcile the competitive commercial pressures of broadcasting with the needs of a democracy when the two seem in conflict” (Advisory Committee on Public Interest Obligations of Digital Television Broadcasters, 1998, p. 18). As the FCC wrestled with the issue of the extent to which the public interest can be served by a commercial media system, it developed informal guidelines regarding the amount of time that should be devoted to public affairs programming. In 1976, the agency adopted a generally accepted proportion of ten percent of non-entertainment television programming to meet the public interest standard—5% total local programming and 5% informational programming (Federal Communications Commission, 2004). However, by the mid-1980’s the FCC adopted a more market-driven approach to regulation and argued that the competitive forces of the market were the best mechanism to meet the public interest standard (Varona, 2009). Moreover, the Telecommunications Act of 1996 significantly expanded the renewal period for licensure from every three years to eight years. The Commission has the authority to deny the renewal on the grounds that the station has not met the public interest requirement. Steve Waldman (2011) in his report, The Information Needs of Communities—a study on the media landscape, funded by the Federal Communications Commission, is blunt in his critique.

Over the FCC’s 75-year existence, it has renewed more than 100,000 licenses. It has denied only four renewal applications due to the licensee’s failure to meet its public interest programming obligation. No license renewals have been denied on those grounds in past 30 years. The current system operates neither as a free market nor as an effectively regulated one; and it does not achieve the public interest goals set out by Congress or the FCC (Waldman, 2011).
Local TV’s Role

The first step in meeting the needs of communities is recognizing that each community has individual concerns. This is precisely why television markets across America are geographically based and reflect a local population distribution. In an age where news is rapidly becoming digitized, most people assume that local TV news is no longer relevant to the everyday lives of citizens. But, that is not the case. There is no question that the Internet plays a huge part in the delivery of news in America; however, that fact is not synonymous with local TV news losing its significance or impact on democratic societies. Local TV, “in many ways...is more important than ever” (Waldman, 2011, p. 13).

PEW’s State of the News Media 2014 report highlights that “[l]ocal television...remains the primary place American adults turn to for news” (Mitchell, 2014, p. 3). Local TV not only reaches 9 out of 10 Americans, but it is also the number one starting point for conversations about the news of the day among citizens (Mitchell, 2014; TVB, 2013). Local TV has seen “its audience increase for the first time in five years,” making it the “the single most visible presence in the news space” (Mitchell, 2014, p. 3; Mitchell & Holcomb, 2015, p. 1). Simply put, local TV is just as, if not more, pertinent to meeting the needs of citizens as it has ever been.

It is also imperative to note that local television news programs are the leading source for original content (Graber, 2010). That is, when consumers see local news on the Internet, social networking sites, or their mobile devices, the content of the story often originates somewhere else, most frequently local TV news outlets. Most commonly, the Internet, social networking sites, and mobile phones are methods of information dissemination and not producers of news.

Waldman (2011) substantiates these conclusions. He first observes that 78 percent of Americans cite local TV news as their main source of news. In addition, 50 percent of Americans consume local TV news on a regular basis (Purcell, 2010; Rosenstiel, 2010). Moreover, the number of local news hours produced has increased 35 percent between 2003 and 2009 (Papper, 2010). The most
recent version of Papper’s study, the *TV and Radio News Staffing and Profitability Survey*, confirms that this trend is continuing, citing that “the average television station set a new record for the amount of local news aired” (Papper, 2012, p. 1).

Stations are expanding the way in which they disseminate their information. In addition to broadcasts, local TV stations are now utilizing the Internet and mobile phones to reach citizens, making the content that local TV stations produce all the more significant (Waldman, 2011). This reinforces the argument that, even if a citizen is not using local TV broadcasts as her main source of news consumption, the sources she does use are still greatly influenced by local TV news.

Despite the fact that the availability of local TV news content is greater than it has ever been and viewership has increased, it is necessary to note that there has been a decrease in the original content produced by stations. Pew’s 2014 State of the Media report observes that just about a quarter of the 952 television stations in the United States do not produce their own content. This means that in multiple markets across America, consumers are seeing the same presentation of news on multiple channels. Waldman (2011) attributes this consolidation to the pooling of resources among local TV stations through the use of service agreements² (Yanich, 2011). The research on service agreements is extensive and has an immense impact on the state of local TV news production, particularly in examining the competitive advantage of stations. This is outside the scope of this research. Briefly, it is important recognize that if stations that are not engaged in these agreements are failing to meet CINs, then there is no reasonable expectation that stations involved in consolidation would be meeting these needs.

In sum, based on the literature reviewed, it is clear that local TV news remains an integral part of citizens’ daily lives and access to local TV content has become more readily available. But because of

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² Service agreements include joint sales/service agreements, shared services agreements, local marketing agreements, and local news sharing agreements. (See Yanich, 2011).
the reduction of original content, there is a question regarding whether this information is meeting citizens’ needs.
Defining Critical Information Needs

The most important political office is that of the private citizen.

-Louis D. Brandeis, Supreme Court Justice

The Review of Literature Regarding Critical Information Needs of the American Public (CIN Review) provides the theoretical framework for the development of the Broadcast News CIN Model. It acted as the catalyst for the FCC’s initiation of the “Pilot Test of Research Design for a Multi-Market Study of Critical Information Needs,” in which the Broadcast News CIN Model is a component. In addition to Waldman’s The Information Needs of Communities, the principle investigators of this review examined an extensive amount of scholarly literature, close to 500 sources, to fulfill the Commission’s Request For Quotation. These sources spanned multiple disciplines ranging from communications, to urban planning, economics, library and information sciences, and geography. Consistent with the sources cited above, the review maintains that:

In a federal democracy, the challenge of communication participation begins in local communities, and must stay rooted in local communities. Despite the vast amount of information, entertainment, and basic human connection that the Internet provides, it cannot by itself substitute for meeting the local information needs of American communities (Friedland, Napoli, Ognyanova, Weil, & Wilson, 2011, p. xii).

When citizens are faced with an issue that directly affects them, such as a sick child, they are going to look to their communities’ resources for answers and not towards national media outlets. This need for local news echoes the sentiments of numerous media scholars and highlights the void that exists because of the lack of studies which assess how citizens meet their information needs and the role that media plays in the process.

The Review notes that the “information needs of local communities are...unique and specific” (Friedland, et al., 2011, p. xii). This point is crucial because it illustrates the complexities involved in producing a general research model that aims to examine a concept that varies so greatly in its specifics. The resulting research model, while expansive, was broad in the needs...
that it identifies, but specific in the concepts it examined. Information needs were defined as those that people require “to navigate the course of their daily lives...areas in which individuals need to make informed decisions, both as consumers...and as citizens” (Friedland, et al., 2011, p. 6).

Driven by three core questions, the study outlined eight information areas that the researchers believe were integral to citizens’ welfare. These areas were evaluated on multiple societal levels, including the local, state, and national scales. The core questions that guided this research were:

1) How do Americans meet critical information needs?

2) How does the media ecosystem operate to address critical information needs?

3) What barriers exist in providing content and services to address critical information needs (Friedland, et al., 2011)?

While all three of these questions were key factors in developing the Broadcast News CIN Model, the most pertinent one was the second; how the media ecosystem operates to address critical information needs. Central to answering this question was the contention that information must be made available to citizens in a “timely manner,” an “interpretable language,” and through a media source that is “reasonably accessible” (Friedland, et al., 2011, p. v).

Investigators defined eight specific types of information needs: 1) Emergencies and Public Safety; 2) Health; 3) Education; 4) Transportation Systems; 5) Environment and Planning; 6) Economic Development; 7) Civic Participation; and 8) Political Life. Researchers conducted an in-depth analysis of these eight categories, which directly informed the Broadcast News CIN Model (See: Method). Below is a brief summary of the information needs from the report. The method section details how those needs were applied to the Broadcast News CIN Model.
Critical Information Need Areas

Emergencies and Public Safety: This need “is clear and incontestable,” according to the review (Friedland, et al., 2011, p. 7). It was defined as anything that could pose imminent danger or could threaten the well-being of citizens. This included public safety threats (i.e. terrorism, and amber alerts), natural disasters, dangerous weather alerts, and hazardous outbreaks. Waldman noted that “local TV station[s are] often considered to be as vital a part of the local community as the police and fire departments” (Waldman, 2011, p. 79).

Health: This area focuses on health behavior, both by promoting healthy practices and discouraging unhealthy ones. The category, though, was not limited to health behaviors and wellness. It also included information on the spread of diseases, health services and costs, vaccinations, and local health campaigns (i.e. smoking prevention). Waldman (2011) highlighted that this need is the most apparent when there are epidemics such as the H1N1 flu or, more recently, the Ebola outbreak.

Education: Investigators faced difficulties in defining this need because there was “a surprising lack of scholarly literature addressing local educational communication” (Friedland, et al., 2011, p. 17). Most often, research covered the politics of education, rather than curricular substance. The description of this need, however, was expansive. The authors identified anything from school performance/assessment, to enrichment program, curriculum, educational opportunities, charters, decision–making, and resource allocation as an educational need.

Transportation Systems: Similar to education, there was a significant lack of literature on transportation information as a need in communities. The resulting description in the CIN Review was, therefore, straightforward. It focused on providing citizens with timely information on transportation systems across multiple platforms from the neighborhood, city, and national level. This included updates on traffic reports and road conditions, as well as policy debates/actions in transportation.
Economic Opportunities: Economic needs of communities were addressed on multiple levels, both as individuals and businesses, and as community and nation-wide development. A summation of past research was inconclusive. The CIN Review defined the need as information on job trainings, apprenticeship, skill development and availabilities; as for businesses, any information on start-up assistance, capital resources, and development initiatives was included.

Environment and Planning: The need of communities to be informed about the state of the environment was rooted in sustainability and conservation. Additionally, it included natural resource development, promoting healthy water and air standards, alerts about possible hazards, and, similar to the other information needs, all policy debates.

Civic Participation: Broadly, civic life was classified into two categories: resources and participation. In terms of resources, civic life referred to information on libraries, non-profit organizations, and civic institutions. Civic participation was all-encompassing in its definition. It referred to community-wide programs, recreational opportunities, cultural and arts events, and religious institutions’ programming.

Political Life: Citizens’ need to be informed about political life lies at the center of democracy. Therefore, the review noted that it is crucial for public to be informed about the happenings across all units of government: local, state, and national. This need included information regarding the actions of officials--both volunteer and elected--candidates for office, the actions of school board and community councils, voting information, town hall meeting locations, and local and national policy formation.

The CIN literature review revolved around two main points, identifying what citizens’ critical information needs look like and evaluating research, which assessed how media platforms address those needs. The core conclusion from the review was that an expansive study of critical information needs across media platforms needed to be conducted, using the description of the
information needs provided by the CIN Review. Past research on these areas is inconclusive, disjointed, and lacks a comprehensive view.

Generally, needs were broken into two types: those that are fundamental to the everyday lives of individuals and those that affect the community as a larger group (Friedland, et al., 2011, p. 40). More specifically, the Review concluded that, as marginalized populations, women and minorities’ information needs were being disproportionately served. This finding spurred the formulation of the Review’s contention that critical information needs be made available to the public in a timely manner, understandable language and on an easily accessible media platform. This increases the likelihood that impoverished and/or non-English speaking individuals can meet their information needs.

The Review reinforced, once again, the great importance of local television in addressing community needs. It posited that information needs were inadequately met, both in airtime and resources. It also questioned the extent to which local stations fulfilled their public interest obligations, challenging that they have “largely been eliminated” because of the inadequacy of “the process of FCC oversight over broadcast licensees” (Friedland, et al., 2011, p. 48). This affirms the link between media consolidation and citizens’ critical information needs.

However, examining such a link is beyond the scope of this research and a point for future study. The goal of this research was to develop a model that begins the discussion surrounding if/how broadcast television addresses citizens’ critical information needs.
The purpose of this study was to develop a research model that evaluates citizens’ critical information needs in local television news programming. To create this model, we used the data gathering method of content analysis. (Riffe, Lacy, & Fico, 2005). Content analysis is the process of systematically turning qualitative observations into quantitative data points. It utilizes a set of instructions referred to as a coding scheme, which assigns numbers to correspond with individual content attributes. This allows coders to represent information content in a numerical manner. To determine the accuracy, reliability, and validity of the model, the coding scheme was tested in the Columbia, South Carolina television market.

Research Questions
The guiding question for creating this model was as follows:

**RQ1:** In the Columbia, South Carolina local television news market what was the distribution of stories across critical information needs and information level between November 11th, 2013 and December 29th, 2013?

Subsequently:

**RQ2:** Did local television stations provide citizens with information that fell into a CIN category?

**RQ3:** Did local television stations provide citizens with a level of information on which to act?

**RQ4:** Is there a relationship between the level of information a CIN story provides and the presentation mode of the story?

**RQ5:** Is there a relationship between the level of information a CIN story provides and the location of the story?

The Sample
The Federal Communications Commission was in charge of choosing the market that was the test case for measuring CINs. In
choosing a market, the FCC identified a number of areas that it considered representative of media markets across the United States. Ultimately, the Commission decided on Columbia, South Carolina citing its diverse demographic makeup and medium size. Columbia, South Carolina is one of 210 Designated Market Areas (DMA)\(^3\) in the United States. DMA’s are ranked by size, which is defined by the number of television households in the market (The Nielsen Company, 2013). According to the Nielsen Media Company (2013), the Columbia, SC DMA ranks number 77, reaching 398,510 households in 2013. In Columbia, SC there are four stations that deliver daily newscasts: WOLO (ABC affiliate), WIS (NBC affiliate), WLTX (CBS affiliate) and WACH (FOX affiliate). WOLO, WIS, and WACH also produce a daily morning show. Morning shows were included in the sample and treated differently than newscasts because they were produced in a different format. The treatment of newscasts and morning shows is explained the Coding Scheme section.

The broadcasts that comprised our sample were provided by Dateline Media, a media monitoring organization that possesses an extensive television news archive. The University of Delaware has worked with Dateline Media on previous research studies, which made it a natural partner for this study (Ruiz, 2013). The sample time period formed a constructed week and was randomly drawn to begin on November 11th, 2013 and extended until December 29th, 2013. A constructed week consists of broadcasts gathered over a span of time; the sample time frame includes the Monday of the first week, the Tuesday of the second week, the Wednesday of the third week, and so on until a full week is “constructed” (Yanich, 2011). To select the sample, we took the highest-rated broadcast of each station and randomly chose two other newscasts aired on the stations that day. Additionally, we stratified the sample by separating morning shows from newscasts and breaking them down into half-hour blocks. A half-hour block was randomly chosen from each station that aired morning shows on the days included in our sample. In total there were 77 broadcasts, 62 of which were newscasts and 15 of which were morning shows.

\(^3\) DMA® is a registered service mark of the Nielsen Company. Used under License.
Unit of Analysis

The unit of analysis was individual news stories. In its entirety, there were 2,101 broadcast segments in the sample. That included news stories and structural broadcast segments. News stories were identified by type--crime; health issues; business & economy/stock; environment; education; public issues; soft news/human interest; city government; county/state government; federal government; political campaign/politics; consumer news; fires/accidents/disasters; international story; entertainment; Afghanistan/Iraq hard news; Afghanistan/Iraq soft news; war on terror hard news; war on terror soft news; traffic; weather; sports; promos for news/station/network; and commercials. Structural broadcast segments were identified as commercials, promos, weather segments, or sports segments and they were not subjected to analysis. There were 1,191 individual news stories and 910 structural broadcast segments.

Developing the Model

A study like this has not been conducted before. The greatest obstacle we faced in constructing the model was determining the most effective way of operationalizing a concept as complex, subjective, and as varied as citizens’ critical information needs. As a natural starting point, we used previous media research conducted at the University of Delaware as the framework for our model. The coding scheme used in Local TV News & Service Agreements: A Critical Look (2011) was adapted for this research and then modified to complete the task.

CIN Coding Instrument: Operationalization

The operationalization of all the variables in the Broadcast News CIN Model can be found in Appendix A. For each broadcast the station, network, and type (newscast or morning show), time, length, and date of broadcast were recorded. These were considered identifying aspects of the broadcast as a whole. Individual attributes of stories were measured through story identifiers, CIN elements, production factors, and locational variables. Story identifiers included story type, as discussed in the Unit of Analysis section and topic. Topic was the narrative of the story, which was recorded verbatim (i.e. man shot, restaurant...
opening, etc.). Topic’s main function was to assist researchers in identifying stories during the analysis.

**CIN Category and Information Level**

The first step we took in tailoring the Local TV News model to our research questions was to conduct a thorough assessment of critical information needs as defined by the CIN Review. Once there was a sufficient grasp of the concepts and each individual “need area”, it became clear that we needed to include CIN issue areas in the model. Appendix B provides the description of the CIN issue areas that coders used as a reference to place stories into a CIN category. Table 1 provides examples of typical stories that fell into CIN issue categories.

<table>
<thead>
<tr>
<th>CIN Area</th>
<th>Story Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emergencies &amp; Public Safety</strong></td>
<td>Robberies; Shootings; Missing Person Reports; Security Breaches, Dangerous Weather</td>
</tr>
<tr>
<td><strong>Health</strong></td>
<td>Flu Shots; Medicaid/Medicare Policy; Disease Awareness; Scientific Discoveries</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>School Budgets; Cost of College, Administrators Status; Contract Talks; New School Policies</td>
</tr>
<tr>
<td><strong>Transportation Systems</strong></td>
<td>Traffic Updates; Travel Information; Airports Finances; Public Transportation Costs</td>
</tr>
<tr>
<td><strong>Economic Opportunities</strong></td>
<td>Business Expansions; Stock Updates; Minimum Wage Protests; Saving Tips; Economy Updates; Unemployment Rates</td>
</tr>
</tbody>
</table>
Initially, a dichotomous variable was created to specify if a story presented CIN information. If it contained such information, the next step was to determine which CIN issue(s) it addressed: emergencies and public safety; health; education; transportation systems; economic opportunities; environment and planning; civic life and political life. These variables were also dichotomous—information was present in the story or it was not—but not mutually exclusive, as a story observation could fit into more than one category. For example, a health outbreak could be categorized as both an emergencies and public safety issue and as well as a health issue. This version of the coding scheme was tested and inter-coder reliability demonstrated that this was not the best approach to measure CINs.

Instead of using eight separate variables that corresponded to the eight CIN areas, we constructed one variable called CIN Category, with the CIN issue areas as the possible attributes. Coders were instructed to place every story observation into a CIN category. Sports, weather, promos, and commercials are structural features of a news broadcast and do not have any effect on CINs. Through testing, we arrived at the conclusion that CIN category did not apply to every single broadcast unit. For instance, a story about the new Apple phone did not fall into a CIN category, and should therefore, not be forced into one. This clarification refined the model and produced the inter-coder reliability statistics stated below in The Final Version of the Model.
Simultaneous to the development of the CIN category variable, we also created a variable defined as information level. We recognized that it was not sufficient to simply acknowledge a topic that a about which a citizen should be informed. That is, merely providing an information category did not fully answer the question of whether citizens’ information needs were met. The charge behind the CIN study was to create a model that assessed whether citizens’ CINs were met in order to be active in their communities. We, therefore, needed to create a variable that assessed whether the information being provided by local television news programs was active.

*Information level* consisted of three attributes: episode/surveillance, context, and actionable. The description of each attribute that was provided to coders is below:

1) Episode/Surveillance—a snippet of a topic or issue; lacks a connection to a larger set of issues; the most basic form of news presentation; at the very least a story observation is at this level;

2) Context—presents the broader picture, encompasses why the story is being presented, provides a connecting thread among the facts;

3) Actionable—story provides next steps for consumers, based on the information that they receive, citizens can now take mobilizing steps.

To define “actionability” we looked to James B. Lemert et. al’s (1977) piece, *Journalists and Mobilizing Information*. The article identified mobilizing information as “information which allows people to act on those attitudes which they might already have”. It detailed three different types of mobilizing information: locational, identificational, and tactical (Lemert, Mitzman, Seither, Cook, & Hackett, p.721). Locational information was defined as anything that dealt with time and place of a potential activity; identificational, typically included locational information in addition to an identification such as a name, physical description,
or brand; and tactical referred to any information that concerned explicit or implicit behavioral models. These descriptions were given to coders before the coding process began.

Coders were instructed that every story observation must be assigned an information level, or be labeled as missing or not applicable. Such was the case with weather/sports segments, promos, and commercials. A story in which the information was identified as “actionable” was required to be placed in a CIN category. Therefore, if a story was “actionable” then citizens’ CINs were met. This included any information that told the consumer what to do, whether it was advice on how to act or what mobilizing steps needed to be taken. To be clear, this variable solely assessed the information provided by the news program and did not provide any insight into whether citizens were taking the steps suggested by the newscast.

Production Factors: Place, Block, Reporter Affiliation, Mode

It is imperative to examine the production factors of a broadcast. *Local TV News & Shared Services Agreements: A Critical Look* (2011) describes how these factors illuminate the “economic calculus” that is central in the making of a newscast. Economic pressures both impact and inform which stories air, when they air, how they are depicted, and in what manner they are shown. These pressures include, but are not limited to, the desire to increase profit, and the responsibility of satisfying corporate influences. These are strategic factors that are taken into account in the construction of a newscast.

Place and Block

*Place* and *block* refer to the location of a particular story within a broadcast. For *place*, every unit of observation was assigned an individual number within the broadcast that corresponded to its chronological position. *Block* refers to the time between commercial breaks (Yanich, 2011). The first block begins with the opening of the broadcast and continues until the end of the first commercial break. When the broadcast returns, the second block begins. This continues until the end of the newscast.
**Reporter Affiliation**

*Reporter affiliation* assessed whether or not the reporter delivering the story was on the staff at the station. In an attempt to save money, there has been more news sharing between station affiliates (Yanich, 2014). For instance, an ABC affiliate in San Francisco, California can share a story with the ABC affiliate in Columbia, South Carolina, thus cutting the cost of producing a story. *Reporter affiliation* allowed researchers to ascertain if the story was produced by the Columbia, SC station on which it appeared or imported from a station in another market. In this model *reporter affiliation* was measured as a dichotomous variable —the reporter was either employed by the station or not.

**Mode**

Presentation *mode* is the manner in which a news story is communicated to the audience; specifically it is a “system of professional broadcast techniques” that convey “the narrative and/or images of the stor[y]to the” viewer (Yanich, 2011, p.14) It is the most cost sensitive factor in news production because the greatest resource expense of a news station is its personnel, especially the anchor(s). To offset this, more newscasts are employing fewer reporters to cover stories because dispatching a reporter to cover a live story requires significant more expenditures than broadcasting live in the newsroom. Stories coded under the *Broadcast News CIN Model* were classified as one of the following modes: anchor read, voiceover by anchor, package, live location, panel/speech/editorial, reporter live in newsroom, or other (See: Table 2).
Table 2: Presentation Mode

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchor Read</td>
<td>Anchor presents the story with only a picture juxtaposed next to his or her face.</td>
</tr>
<tr>
<td>Voiceover by Anchor</td>
<td>Anchor presents the narrative of the story while video footage or a series of pictures air on screen.</td>
</tr>
<tr>
<td>Package</td>
<td>Anchor introduces the story; tosses it to a reporter who delivers the narrative for a pre-recorded story.</td>
</tr>
<tr>
<td>Live Location</td>
<td>Anchor introduces the story; tosses it to a reporter who is live at the location of the story.</td>
</tr>
<tr>
<td>Panel/Speech/Editorial</td>
<td>A discussion presented to the audience.</td>
</tr>
<tr>
<td>Reporter Live in Newsroom</td>
<td>Anchor introduces story; tosses it to a reporter who presents the story from a location within the newsroom.</td>
</tr>
<tr>
<td>Other</td>
<td>Any story delivery that was not described above, i.e., phon-a-thon, cooking segment</td>
</tr>
</tbody>
</table>

Locational Variables
The Broadcast News CIN Model contained four variables, which determined the location of the story. These variables were constructed to examine, to what extent, newscasts fulfilled their obligation to provide local information to communities. They were key factors in the model because they directly correlated to the Commission’s localism mandate. While the theory of localism was integral in developing this research, it was not indicative of a
fulfilled CIN. Rather, localism assisted in creating the broadcast environment for stations to meet citizens’ CINs.

**In/Out DMA:** The most crucial locational variable was in/out DMA. DMAs, designated market areas, are geographically bounded areas that specify localities. As such, whether the action of a story was inside or outside of the DMA provides an appropriate construct for determining local content. For the purposes of this research, coders were provided a list of counties that fall in the Columbia, South Carolina DMA.

**City/Place, County, and State/Country:** These locational variables were incorporated into the model in an effort to be as precise as possible with the location of a story. News stories varied in the level of locational information they provided. If the specifics of the location was not given in the story, but a place (i.e. building) was indicated, coders were instructed to search the place in Google and record the details of the location. The variation of location content (i.e. some stories only gave the city, others provided the county) attributed to *in/out DMA* being the only locational variable used in the analysis. *In/out DMA* was the only locational variable that consistently applied to the units of observation in the model. *In/out DMA* was measured as a dichotomous variable.

**The Final Version of the Model**

In total there were four versions of the coding scheme. For each version of the model, we applied it to a randomly selected broadcast to see if it met the needs of the market. Modifications were continuously made to the coding scheme until we felt that the current model assessed CINs in local communities in the most effective way possible. Once we felt the model met the needs of the market, we conducted inter-coder reliability tests to arrive at the final version of the coding instrument.

Four students served as coders for this project. Three were undergraduate students in either the digital marketing and entrepreneurship or communications majors. I served as the director of the coding process and as the fourth coder. Coders were provided with a thorough description of all of the variables,
specifically *Information Level & CIN Category Descriptions* (Appendix B). The coding training process took place over the course of a month. There were three rounds of inter-coder reliability conducted, using a new, randomly drawn newscast from the sample each time. The third round of inter-coder reliability results produced the statistics found in Table 3. They proved highly reliable across all three evaluation standards.

**Table 3: Inter-coder reliability statistics**

<table>
<thead>
<tr>
<th></th>
<th>Fleiss’s Kappa</th>
<th>Cohen’s Kappa</th>
<th>Krippendorff’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Story Type</td>
<td>.856</td>
<td>.856</td>
<td>.858</td>
</tr>
<tr>
<td>Information Level</td>
<td>.765</td>
<td>.765</td>
<td>.767</td>
</tr>
<tr>
<td>CIN Category</td>
<td>.733</td>
<td>.734</td>
<td>.736</td>
</tr>
<tr>
<td>In/Out DMA</td>
<td>.863</td>
<td>.864</td>
<td>.864</td>
</tr>
<tr>
<td>Mode</td>
<td>.9</td>
<td>.902</td>
<td>.902</td>
</tr>
<tr>
<td>Reporter Affiliation</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

We ran reliability statistics on six of the variables: *story type, CIN category, information level, in/out DMA, mode, and reporter affiliation*. Inter-coder reliability statistics were run on only six variables because those variables were subjective observations, whereas the remaining variables were observable facts (i.e. the beginning/ending time of the broadcast). Once the inter-coder reliability statistics proved strong, the coding began. Coding of the 77 broadcasts took five weeks. Over the course of two weeks, the dataset was cleaned and verified, with the finished product resulting in the one analyzed in Findings.

**The Application of the Model on Morning Shows**

As mentioned above, morning shows were included in the sample. This was because morning shows are classified as “news programs” by all of the stations. In order for us to accurately assess CINs in the Columbia, SC market, we needed to ensure that our approach in creating the *Broadcast News CIN Model* is reflective of how the market identifies itself. However, morning shows are often
produced in a different format than straight newscasts. As such, the Broadcast News CIN Model required some alterations when applied to a morning shows. These alterations came only in the form of clarifications on how a specific story observation—conversations amongst anchors about various stories—should be coded. The anchors’ thoughts about a particular topic were not considered news, which is why coders were instructed to code these instances as “(topic of story) chat.” The type variable was coded as a “human interest/soft news story”; information level, CIN category, location variables, and reporter affiliation were not applicable; mode was coded as a “panel/speech/editorial”. The above reliability statistics and training process included the morning shows.

**Operationalizing the Research Questions**

In order to determine if the coding instrument, in fact, measure CINs on local television news programming, the model must first allow researchers to determine what it means to fulfill a CIN need. This question is answered by RQ1, RQ2 and RQ3.

**RQ1:** In the Columbia, South Carolina local television news market what was the distribution of stories across critical information needs and information level between November 11th, 2013 and December 29th, 2013?

This question was answered by creating a dichotomous variable to ascertain if a story contained CIN information. In addition, another dichotomous variable was created to identify if a story contained “actionable” information.

**RQ2:** Did local television news programming provide citizens with information that fell into a CIN category?

Information that was about citizens’ critical information needs was measured by the CIN category variable. If this variable could be applied to a story observation, meaning that it was not coded as “missing/not applicable,” then the story observation provided consumers with information regarding their critical information needs.
**RQ3:** Did local television news programming provide citizens with a level of information on which to act?

Every news story on a broadcast was required to have an information level. Active story observations were those that were identified as “actionable.”

With the operationalization of RQ1, RQ2 and RQ3, one could then answer if CINs were met. Story observations that were “actionable” and provided information that was applicable to CIN category fulfilled CINs. If a story observation was identified as anything other than that, then CINs were not met.

**RQ4:** Is there a relationship between the level of information a CIN story provides and the presentation mode of the story?

RQ4 aimed to determine if there was a relationship among “actionable CIN stories” and the manner in which a story was presented. Story presentation included the variables mode and reporter affiliation.

**RQ5:** Is there a relationship between the level of information a CIN story provides and the location of the story?

Location referred to whether the action of the story occurred “within the DMA”. The other locational variables in the model were not used in the analysis. DMA was the only locational variable that was consistently measured across stories.
The findings below confirm that the *Broadcast News CIN Model* successfully identifies citizens’ critical information needs. It also examines the relationships between CINs, production factors, and locational elements. In total there were 2,101 broadcast segments. However, in accordance with the coding scheme, a “99” was entered when the variable did not apply to a broadcast segment. Missing values were not included in the analysis. All of the variables in the model were nominal; as such, crosstabs, chi-square, and Cramer’s V⁴ were used to identify the existence of a relationship between variables and, if a relationship existed, the strength of it.

To begin, I first looked at general findings, which confirmed the presentation of news stories that met citizens’ critical information needs. Next, an analysis was conducted of the specific variable attributes of *CIN category* and *information level* and their respective relationships with production factors and locational elements.

**Distribution of CINs and Information Level**
Local television stations met citizens’ critical information needs when the story they produced fell into a CIN category and was identified as containing “actionable” information. As such, *CIN category* and *information level* were recoded into dichotomous variables to establish the presence of fulfilled CIN’ stories. Stories were identified as either “in” or “out” of a *CIN category* and as either an “actionable” or “not actionable” *information level*. Table 4 shows this distribution.

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⁴ **Crosstab**: table that displays the multivariate frequency distributions of two or more variables;  
**Chi-square**: statistic which shows a significant relationship between variables, defined as p = ≤ .05;  
**Cramer’s V**: statistic which determines the strength of the relationship between variables, ranging from -1 to 1. The closer to one in either direction, the stronger the relationship.
There were 1,191 stories after structural features (i.e. commercials, promos, sports and weather segments) were removed from the data. Only 556 of those stories in the sample were classified as “CIN stories,” which means that less than half (47%) of news stories aired provided relevant information to meet the criterion of CINs. Only 232 of these stories were identified as “actionable,” and therefore, met citizens’ critical information needs. That is, “actionable” stories made up 42 percent of CIN stories and only 20 percent of all stories.

Table 5 displays the distribution of “CIN” and “actionable” stories across stations. While grouped together in the table, the analyses of both variables and their respective relationships with stations were conducted separately. In both cases, there was no statistically significant relationship between station and either variable, meaning that the station on which the news stories were presented did not have an effect on whether the story met the CIN criterion or whether it was “actionable”.

Table 4: Distribution of Actionable Stories

<table>
<thead>
<tr>
<th>CIN Stories</th>
<th>Not Actionable</th>
<th>Actionable</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>324</td>
<td>232</td>
<td>556</td>
</tr>
</tbody>
</table>

Note: Statistically significant at \( p < .05 \) and a strong relationship with a Cramer’s V of .526

Table 5: Distribution of CIN & Actionable Stories Across Stations

<table>
<thead>
<tr>
<th>Station</th>
<th>Not in CIN Ctgry (%)</th>
<th>In CIN Ctgry (%)</th>
<th>Not Actionable (%)</th>
<th>Actionable (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WACH</td>
<td>57</td>
<td>43</td>
<td>86</td>
<td>14</td>
</tr>
<tr>
<td>WIS</td>
<td>53</td>
<td>47</td>
<td>81</td>
<td>19</td>
</tr>
<tr>
<td>WLTX</td>
<td>56</td>
<td>44</td>
<td>76</td>
<td>24</td>
</tr>
<tr>
<td>WOLO</td>
<td>53</td>
<td>47</td>
<td>81</td>
<td>19</td>
</tr>
</tbody>
</table>
Similarly, the same analysis was performed for the distribution of “CIN” and “actionable” stories across story types (Table 6). In this instance, the relationship between these variables and story type was statistically significant (p=≤ .05). In order to conduct this analysis the 20 story types identified in the coding scheme were collapsed into 6 logical categories: crime, public issues, government action/politics, soft news/human interest, and other (entertainment, consumer news, and fires/accidents/disasters). Crime was identified as its own category because it is the most covered story type on local television news (Yanich, 2004). Commercials, promos, weather and sports segments were eliminated from the data because by definition, they could not have had CIN information in them.

Table 6: Distribution of CIN & Actionable Stories Across Story Type

<table>
<thead>
<tr>
<th>Story Type</th>
<th>Not in CIN Ctgry (%)</th>
<th>In CIN Ctgry (%)</th>
<th>Not Actionable (%)</th>
<th>Actionable (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crime</td>
<td>44</td>
<td>56</td>
<td>83</td>
<td>17</td>
</tr>
<tr>
<td>Public Issues</td>
<td>29</td>
<td>71</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>Govt/Politics</td>
<td>28</td>
<td>72</td>
<td>89</td>
<td>11</td>
</tr>
<tr>
<td>International</td>
<td>89</td>
<td>11</td>
<td>97</td>
<td>3</td>
</tr>
<tr>
<td>Human Interest</td>
<td>65</td>
<td>35</td>
<td>73</td>
<td>27</td>
</tr>
<tr>
<td>Other</td>
<td>80</td>
<td>21</td>
<td>87</td>
<td>13</td>
</tr>
</tbody>
</table>

Note: Significantly significant at p=≤.05; Cramer’s V of .177 & .389, respectively. N=1,191.

The condensed classification of story type illustrated that a substantial portion of the stories were identified as government action/politics (72%), public issues (71%), or crime (56%) provided information that fell into a CIN category. However, even though these stories met the threshold criterion for CIN information, less than half of them 42 percent (n = 232) provided actionable information. The story types that had the greatest number of actionable stories were soft news/human interest (27 %), public issues followed at 20 percent and crime was at 17 percent. Understanding the basic distribution, meaning presence or not, of
CIN and actionable stories allowed for a more in-depth analysis of the specific variable attributes of CIN stories.

**CIN Categories: Detailed Findings**

In total, there were 556 stories that contained information that pertained to citizens’ critical information needs. *CIN category* differed from the term CIN story. CIN story referred to any news story that contained any CIN information (meaning any of the eight issues areas), whereas *CIN category* referred to the specific category of the CIN information. Figure 1 displays the distribution of stories that fell into specified CIN categories.

![Fig. 1: Distribution of stories across CIN categories (%)](image)

Note: Due to rounding, the percentages do not equal 100 percent.

In terms of providing information to consumers, local news programs in the sample covered all eight information areas. However, there were noticeable differences between the information categories and how much coverage each CIN area was given. Civic participation and emergencies and public safety received the most attention, accounting for 59 percent (32% and 27% respectively) of the total number of CIN stories that aired. Political life and health both individually made up 12 percent of CIN stories. Lastly, the four remaining CIN categories—transportation systems (9%), economic opportunities (5%), education (3%), and
environment and planning (1%)–comprised 18 percent of CIN stories, with environment and planning receiving the least amount of coverage.

Narrowing the focus only to CIN stories (N=556), an analysis of the distribution of CIN categories across stations proved statistically significant (p≤.05). Figure 2 illustrates this distribution and it is statistically significant.

*Fig. 2: CIN Categories across Stations (%)*

The distribution across stations made it apparent that some CIN categories received more coverage than others. Generally, there was a trend where, depending on the station, two or three CIN categories comprised a noticeably higher proportion of stories in comparison to the other categories. These categories were classified as “high percent” CINs.

Reinforcing the findings in Figure 1, civic participation and emergencies and public safety were consistently the two CIN categories that were most prominent across all stations. WLTX
(42%) and WOLO (30%) most frequently aired CIN stories that were classified as civic participation. Similarly, WIS (34%) and WACH (27%) most often aired stories that were characterized as emergencies and public safety.

Based on the general distribution of CINs found in Figure 1, it was evident that environment and planning accounted for an exceedingly low proportion (1%) of CIN stories. It was then expected that it would be the CIN category least covered across individual stations. That was not the case; WACH produced more environment and planning (4%) stories than education (1%) stories. This finding appeared to be an outlier. Two stations, WOLO and WIS, featured no stories that fell into environment and planning, and the only other station to air environment and planning stories was WLTX with it being only one percent of all CIN stories aired on the station.

In two instances, there was a third “high percent” CIN category (in addition to civic participation and emergencies and public safety). WACH dedicated substantial reporting to health stories, which accounted for one fifth (20%) of WACH’s CIN stories. WOLO aired a considerable number of stories that pertained to political life, with 18 percent of its CIN stories attributed to the category. In both of these cases, there was a sizable distance in the percentage between the second and third most featured CIN category.

The distribution of CIN categories was also examined across story type. Figure 3 shows this relationship with a statistical significance of \( p \leq .05 \). Emergencies and public safety was the only CIN category that accounted for the majority proportion of CIN stories across multiple story types. Such was the case when looking at the frequency of emergencies and public safety CIN stories across crime (88%), international (100%), and other (44%) story types. Political life consisted of 65 percent of government action/politics stories and civic participation was responsible for 94 percent of CIN stories in soft news/human interest. CIN stories across public issues were more evenly distributed, with the health category being the most featured CIN category at 34 percent. This made it the only
story type that did not have a specific category account for the majority of CIN stories.

**Fig. 3: CIN Categories across Story Type (%)**

There were four CIN categories with total percentages that were too small, according to Figure 1, to be the most frequent CIN category across any story type: transportations systems, economic opportunities, education, and environment and planning. Transportation systems made up 29 percent of public issues stories and 13 percent of other stories. Education comprised seven percent of public issues stories, four percent of government action/politics stories, and one percent of soft news/human interest stories. Environment and planning was the only CIN category to be featured solely across one story type and that was three percent of public issues stories.

**Information Level: Detailed Findings**

All of the 1,191 stories were assigned an information level. It is clear from Figure 4, which displays the frequency of information level, that the variables’ attributes were not evenly distributed. The information level of over half of the stories (58%) was identified as episode/surveillance. Context was the information level for 22 percent of stories and 20 percent of stories were identified as actionable.

Our sample shows that there was a strong, statistically significant relationship between information level and CIN category. The chi-
square was $p \leq 0.05$ and Cramer’s $V$ was $0.530$, which indicates that the relationship was positive. This relationship is shown in Figure 5. Civic participation was the only CIN category, which had more actionable (74%) stories than episode/surveillance (13%) and context (13%) combined. Economic opportunities and health also had more actionable stories than the other two information level attributes; however, actionable stories for both categories were only 41 percent.

Environment and planning was the only CIN category with context as its leading information level, with three-quarters of stories
identified as such. There were no environment and planning stories that were considered actionable, which resulted in the last 25 percent of the category being coded as episode/surveillance. This was the only instance where a CIN category did not contain all information levels.

The most frequent information level recorded for the remaining four categories was episode/surveillance. Transportation systems (76%), political life (54%), and education (53%) had more stories in episode/surveillance than in context and actionable combined. Emergencies and public safety did not have an information level that accounted for the majority of stories; rather episode/surveillance comprised 43 percent of its stories, making it the plurality in the category.

![Fig. 6: Information Level across Story Type (%)](image)

The same analysis was conducted for information level and its relationship to story type (Figure 6). It, too, was statistically significant at \( p \leq .05 \) and had a Cramer’s \( V \) of .178. For every story type, the greatest number of stories fell into the episode/surveillance level. Respectively, the distribution was as follows: other (75%), crime (63%), public issues (58%), international (57%), soft news/human interest (53%), and government action/politics (49%).

Soft news/human interest featured actionable as the second most frequent information level at 27 percent. This was a unique case.
Context was the second most frequent information level for the rest of the categories. For both government action/politics and international categories, 40 percent of stories contained contextual information. Public issues featured 22 percent and both crime and other story types featured 20 percent of stories as context. Notably, the story type with the least amount of actionable stories was international at three percent of stories.

In comparing CIN category to the recoded information level variable, the distinction between actionable CIN categories and not actionable CIN categories became more apparent (Figure 7). The relationship held statistical significance with a chi-square of $p \leq 0.05$ and a Cramer’s V of $0.496$. In only one category—civic participation—did actionable (74%) stories outweigh not actionable (26%) stories. In all other cases, the majority of stories were revealed to be not actionable.

More specifically, 59 percent of stories in both the health and economic opportunities categories were not actionable. The portion of stories that were not actionable increased for the rest of CIN categories.

Production Factors: Impact on CIN Category and Information Level
A statistically significant relationship only existed between *mode* and CIN stories when the sample included CIN stories across all information levels. When the sample was aggregated to contain only actionable CIN stories, there was no statistically significant relationship between the two variables. Figure 8 represents the relationship between all CIN stories (N = 556) and *mode*, where the chi-square was $p \leq .05$ and Cramer’s $V$ was .150.

*Fig. 8: Presentation Mode across CIN Category (%)*

With the exception of environment and planning, the most frequent form of story delivery for CIN categories was voice-over by anchor. In these CIN categories voiceover by anchor accounted for over 60 percent of stories.

Civic participation and health were the only categories where all seven *modes* of presentation were represented. In both instances, package was the second most common form of news delivery, with ten percent of civic participation stories and 17 percent of health stories attributed to package. These were also the only categories that had any stories that were presented in the *mode* identified as other. For both civic participation and health, other yielded two percent of stories.
There were two CIN categories where stories were only presented in two modes. In addition to the 80 percent of education stories that were delivered through a voiceover by anchor, 20 percent of education stories were also presented in a package. Additionally, package stories made up 75 percent of environment and planning stories and live in newsroom accounted for the remaining 25 percent of stories.

An unexpected finding occurred in the CIN category, economic opportunities. Panel/speech/editorial, which typically was not a common mode of presentation (Yanich, 2004; 2011; 2015) was the second most frequent delivery method (14%). It was also unusual for only three percent of economic opportunities stories to be attributed to package stories (Yanich, 2004; 2011; 2014; 2015).

An aggregated sample of actionable CIN stories was used to analyze the relationship between information level and reporter affiliation. Overwhelmingly, a reporter employed by the station delivered 97 percent of actionable CIN stories. Since there were no actionable environment and planning stories, they were not included in the aggregated sample.

*Fig. 9: Presentation Mode across CIN Category (%)*

Figure 9 examines reporter affiliation across specific actionable CIN categories. It was statistically significant at $p \leq 0.05$ and had a Cramer’s V of 0.224. Reporters employed by the station delivered all of the stories in four categories: civic participation, economic opportunities, education, and transportation systems. The
remaining three categories contained stories that were delivered by reporters not employed by the station. Political life contained the largest percentage of non-local reporter stories, with 17 percent of its total stories falling into the classification. Non-local reporters accounted for seven percent of health stories and six percent of emergencies and public safety stories.

**Locational Elements: Impact on CIN Category and Information Level**

Examining the impact of locational elements involved utilizing the same aggregated sample and applying it to *in/out DMA*. Figure 10 displays the results. Transportation systems was the only actionable CIN category where there was a greater percentage of stories located out of the DMA (80%) than in the DMA (20%). Education contained the same percentage of stories out of the DMA as in the DMA. One third of health stories (33%) were located out of the DMA and slightly above a fifth (21%) of emergencies and public safety stories were out of the DMA. Economic opportunities and political life stories both had 17 percent of its stories occur out of the DMA and 83 percent in the DMA. The actionable CIN category with the lowest proportion of stories located out of the DMA was civic participation with 12 percent of its stories.

*Fig. 10: In/Out DMA across CIN Category (%)*
The findings provide strong evidence that the Broadcast News CIN Model does measure the extent to which local television news provide information about citizens’ critical information needs. This model developed criteria to identify the presence of CIN information in news stories. In addition, it established a standard to determine if a news story provided actionable information. Columbia, South Carolina was the test case and illustrative of what types of findings the Broadcast News CIN Model can produce when applied to television markets.

The Analysis of Actionable Stories

Fulfilling critical information needs in news stories means that the stories contained actionable information for citizens. In Columbia, South Carolina one fifth (19.5%; n = 232) of the stories in the sample contained actionable information on critical information needs. This seemingly low percentage of actionable stories suggests that CINs were not sufficiently met. However, this model does not establish the threshold for what percentage of actionable stories would be considered acceptable. This model provides a basis on which the Federal Communications Commission could establish the threshold. A few key conclusions can be drawn from the data about what type of information the actionable component of the Broadcast News CIN Model generates:

1. Mode exposed the relationship between production costs and actionable CINs.

2. Stations located in the Columbia market produced the majority of actionable CIN stories.

3. Whether the action of the story was located in or out the DMA was integral in determining if stations actionable CINs assessed the specific needs of the Columbia community.

Actionable Stories: CIN Category

This model established actionability as a crucial aspect in fulfilling CINs. It is the pivotal attribute of a news story that purports to...
provide citizens with civic information. An actionable CIN story was synonymous with a fulfilled critical information need.

The application of the model allowed for researchers to identify the distribution of CIN stories. The Columbia sample showed an uneven distribution of actionable stories across CIN categories. In fact, there was an entire category of CIN stories that contained no actionable information (i.e. environment and planning). Essentially, the model provided a baseline for the distribution of actionable stories, which can assist policymakers in the determination of an acceptable threshold for meeting CINs.

In light of this sentiment, it is noteworthy that more than half (56%) of the stories in which there was actionable information fell into the civic participation CIN category. Such a high percentage of actionable stories suggested that civic participation was the need that was most often fulfilled in the Columbia market.

However, this finding does not imply that civic participation is generally the critical information need that is most often met by newscasts. Rather, this is an example of the type of analysis that could be conducted when the model is applied. Illustratively, the CIN Review identified civic participation as stories that provided information on programs offered by civic institutions and non-profit, religious, and community organizations. During the creation of the model, a broader definition of civic participation was employed to include any story that provided actionable information for a community event (i.e. community ceremonies, community plays). After examining the attributes of the Columbia market, researchers felt that this expanded definition of civic participation was necessary to adequately evaluate the CIN area.

Given this definition, it is necessary to acknowledge that the constructed week of our sample spanned November and December, the holiday season. For that reason, there appeared to be a disproportionate number of civic participation stories on the newscasts. There were numerous events created solely for the purpose of holiday entertainment, which received much coverage by local news programs. This proportion of coverage may not be
reflective of such attention to community events throughout the year.

Additionally, the sample contained fifteen half-hour blocks of morning shows because stations in the Columbia market advertise and identify their morning shows as news programs. Morning shows characteristically focus on more light-hearted, community-centric stories. As a result, these stories often contained information (i.e. location, time, etc.) for how the public could participate in the event. The model defined actionability as information on which citizens can act. By definition, these community-centric events met the actionability criterion and could be an explanatory factor as to why there was such a high proportion of actionable civic participation stories.

**Actionable Stories: Mode and Reporter Affiliation**

When news directors construct newscasts their primary concern is cost. Past research has determined that an effective method to evaluate some of the costs of a newscast from available information to the viewer is through measuring production factors such as presentation mode (Yanich, 2011). The *Broadcast News CIN Model* included such production variables and allowed for researchers to examine the relationship between cost factors and critical information needs. Findings from the Columbia market indicated that the anchor(s), or the “brand” of the station delivered almost three-fourths (74%) of actionable stories. The data showed that voiceover by anchor (where the anchor narrates the story while images and videos appear on the screen) accounted for close to two-thirds (63%) of actionable CIN stories and anchor read (where the anchor presents the story, possibly with an image juxtaposed next to her face) comprised 11 percent of actionable stories.

This was not a surprising finding and it is likely that the application of this model to other markets would elicit the same results. Anchors’ salaries are one of the biggest expenditures for stations and, like any business owner, station executives want to realize a return on their investment. The implications that this had on the relationship between actionability and *mode* was that actionable
stories were more likely to be delivered by someone familiar to the audience rather than a reporter who was not featured as much as the anchors.

The model also provided the measure through which researchers could determine whether actionable stories were produced by the television station broadcasting the newscast or by a station in a market located elsewhere in the United States. *Reporter affiliation* identified if the person delivering the story was on the staff of the broadcasting station; that is, if the station was using its own resources to deliver its actionable stories. If the reporter was not on the station’s staff, it implied that a station from another market packaged the story to broadcast across multiple markets. Almost all of the actionable stories (97%) in the sample were delivered by a reporter employed by the station. This signified that Columbia stations largely produced the actionable stories in the sample.

**Actionable Stories: In/Out of DMA**

The variable identified as *in/out of DMA* allowed researchers to determine to what extent stations’ actionable stories addressed the principal of localism as expressed by the Federal Communications Commission. If the action of the story was located in the DMA, it indicated that the story was tailored to meet the specific needs of individuals in the Columbia, South Carolina community. If the action of the story was located out of the DMA, it was likely that the story was critical information for the general public and not a specific community. Over four-fifths (81%) of the actionable stories in the sample occurred within the Columbia DMA, which strongly implied that stations addressed the localism criterion articulated by both the CIN Review and the FCC regulatory principles. It is important to note that, while the majority of CINs are met at the local level, CINs are not exclusively local. Critical information needs are also areas of public concern at the state and national levels.

When the model was applied to the aggregated sample of only actionable stories, it made it possible for researchers to easily identify which, if any, actionable CINs contained stories that were not local. The relationship between CIN category and DMA (Figure
10) in the Columbia sample illustrated that there were two CIN categories that did not have a majority of stories occur in the DMA — 50 percent of education stories and only 25 percent of transportation systems stories occurred within the DMA.

The ability to identify the proportion of actionable stories that was located in and out of the DMA was a crucial part of both the model and analysis. If a large portion of actionable stories were located out of the DMA, it suggested that the general information needs of citizens were met and not the specific, critical information needs of individuals in Columbia, South Carolina.

The Analysis of CIN Stories

An uneven distribution of stories was found when the analysis of the data was broadened to all CIN stories. *Information level, mode,* and *in/out DMA* provided supplementary information to understanding the attributes of CIN stories. They reinforced the model’s assessment of citizens’ critical information needs. However, because there was such variation in the coverage of CIN stories, there was no “template" of CIN stories across all of the variables in the model. However, some patterns were evident when examining the relationships between specific variables in the model and CIN stories. For example:

1) *Information level* served as an indicator for the mode of a story.

2) A trend was evident between CIN stories and both *reporter affiliation* and *in/out DMA.*

CIN Stories: Information Level and Mode

*Information level* acted as a precursor to how a story was presented. If a story contained an episodic/surveillance *information level*, it often consisted of quick snippets of information. As a result, the *mode* of the story was most likely anchor read or voiceover by anchor because those modes were typically the shortest duration. When the mode changed to one in which the story was “tossed” by the anchor to a reporter (i.e. package or live location), the duration of the story tended to be
longer, an observation that is consistent with previous research (Yanich 2004; 2011; 2014; 2015). Stories identified as providing context were more likely to be presented in this manner because there was a greater amount of time to provide a more detailed, comprehensive narration of the story.

*Information level* had a consistent effect for the presentation mode of actionable stories. Typically, these stories were delivered with a presentation mode in which the anchor, the “brand” of the station, was prominent.

**CIN Stories: Reporter Affiliation and In/Out DMA**

The application of the model revealed an interaction among *reporter affiliation* and *in/out DMA* and CIN stories. *Information level* did not act as an indicator as it did with *mode*. Rather, there were distinct patterns that existed among CIN stories and *reporter affiliation* and *in/out DMA*. In contrast to *mode*, the model established both variables as dichotomous, which meant that an observation could only be identified as one of two possibilities. Stories in the sample were delivered by either a local or non-local reporter and located either in or out of the DMA.

Once the data were gathered, it was clear that, similar to actionable stories, most CIN stories generally featured a reporter employed by the station. Because of the model, researchers could ascertain that 93 percent of all CIN stories were produced by a station located in the Columbia market.

The patterns that were identified between CIN stories and *in/out DMA* were not as stark as those found in *reporter affiliation*. While seven out of the eight categories had the majority of their stories
occur in the DMA, the proportion of those stories varied greatly across the CIN categories (51% to 86%).

Limitations of Research
The greatest limitation to this research was that the development of the Broadcast News CIN Model was derived through the analysis of newscasts in one market--Columbia, South Carolina. Therefore, it is not representative of the critical information needs of communities across the United States. While we designed the model with, what we believe, are the necessary features to analyze critical information needs across a spectrum of different communities, it is merely theory until the model is applied to a variety of America’s media markets. Only, then, can it be said with certainty that the Broadcast News CIN Model evaluates the degree to which local television news programs address citizens’ critical information needs.

Suggestions for Future Research
For the Broadcast News CIN Model to be accepted as the evaluation standard for determining if local television stations are meeting citizens’ critical information needs, it must be generalized to markets across the United States. As such, the first suggestion for future research is to apply the Broadcast News CIN Model to multiple media markets throughout the US, incorporating markets of a variety of sizes and geographical locations.

Second, the model needs to be tested in markets in which service agreements are present and markets in which they are not (See: Policy Implications). There are over a hundred markets (out of 210 markets in the U.S.) where stations are engaged in service agreements (Becker, 2013).

Lastly, the CIN Review listed three requirements for meeting CIN needs, one of which was that news must be delivered in an interpretable language. To incorporate this requirement into the Broadcast News CIN Model, a point for future research would be to apply the model to DMAs which contain Spanish-language stations.
Conclusion

Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it’s the only thing that ever has.

-Margaret Mead, scientist

The *Broadcast News CIN Model* accomplishes three things. First, it adds to theory in understanding the ecology of broadcast television news, specifically enhancing the theories of localism and diversity in local television news. Second, the model has immediate and significant policy, particularly for those policies that affect media consolidation (discussed further in *Policy Implications*). Thirdly, the *Broadcast News CIN Model* is a tool for policymakers, academics, research institutions, think tanks, media reform groups, and importantly, the public to evaluate the extent to which local television newscasts meet citizens’ critical information needs; and subsequently identify the strengths and weaknesses of the newscasts. Not only will this tool enhance the public information function of broadcast news, but it will also foster a more informed and engaged citizenry.

**Policy Implications**

On March 31, 2014, the Federal Communications Commission made a landmark decision in which it declared that it would no longer approve joint sales agreements (JSAs) if the agreement calls for stations to share more than 15 percent of ad sales revenue. Joint sales agreements are contracts between two stations where one station sells some or all of its advertising time to another station in an exchange for a portion of the ad sales revenue. This results in one “brokering” station and one “brokered” station, where the brokering station exerts power over the brokered station and has the capability to influence news content. This consolidation directly challenges the diversity and competition conditions of television markets in the U.S.

The March 31st ruling was the first time the Federal Communications Commission directly addressed the effect that service agreements have on local media landscapes and the media environment in the United States, generally. The Commission specifically identified 15 percent as the maximum shared proportion of ad sales revenue as the ceiling because any ad sales exchange beyond that point is seen as exercising corporate control.
over the brokered station, rather than promoting the public interest.

This pertains to the Broadcast News CIN Model created in this research because the ruling also mandated that all existing JSAs make a case to the Commission that their agreement is in the public interest. If the Commission does not approve the request, the JSA must be terminated. Currently, the Commission has no model to evaluate the public interest performance of JSAs. This is one of the reasons that the Commission initiated the CIN study—to have an established model that can resolve questions like the ones posed by the JSA ruling.

This ruling was part of the Federal Communications Commission 2014 Quadrennial Regulatory Ownership Review. It was subject to much debate. Opponents to the mandate argued that existing JSAs at the time of the ruling should not have to defend the agreements before the Commission because they entered into these arrangements in good faith. Instead, they argue, they should be “grandfathered” in, with the existing JSAs staying in place. The ruling of the Commission in reference to “grandfathering” JSAs was as follows:

We reject arguments that we should automatically grandfather all television JSAs permanently or indefinitely. In these circumstances, we find that such grandfathering would allow arbitrary and inconsistent changes to the level of permissible common ownership on a market-by-market basis based not necessarily on where the public interest lies...Moreover...[current] licensees may seek a waiver of our rules if they believe strict application of the rules would not serve the public interest (“Further notice of”, 2014, p.172).

On May 4, 2015, S.1182: A bill to exempt application of JSA attribution rule in case of existing agreements, was introduced by Republican Roy Blunt in the Senate. The bill is bi-partisan, and as of June 9th 2015, it is co-sponsored by Democratic Senators Mikulski, Schumer, Durbin, and Republicans Scott and Johnson. It proposes
that companies currently engaged in JSAs be exempt from the Federal Communications Commission’s ruling. If passed this bill does not directly change JSA policy because that power lies solely with the Federal Communications Commission. However, this bill does illustrate the enormity of the Commission’s ruling and the magnitude of the political pressure that the Commission is facing to alter the decision.

The proposed Senate bill not withstanding, the deadline for stations to seek a waiver, which provides an exception to the JSA rule is December 2016 (“Congress extends television,” 2014). This obligates the Federal Communications Commission to establish an evaluation standard and an acceptable threshold for what it means for a local television station to meet the public interest. We believe that the Broadcast News CIN Model could be such an evaluation standard.


## Appendix A: Broadcast News CIN Model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Operationalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>CoderID</td>
<td>Coder name</td>
</tr>
<tr>
<td>ID#</td>
<td>Continuous- number of story</td>
</tr>
<tr>
<td>Broadcast number</td>
<td>Continuous--chronologically number each broadcast that is coded</td>
</tr>
<tr>
<td>Station</td>
<td>Call Letters</td>
</tr>
</tbody>
</table>
| Type of broadcast | 1=newscast  
|                | 2=morning show    |
| Time of broadcast | 12=12; 5=5; 530=5:30, etc |
| Time of day | 1=am  
|            | 2=pm             |
| Length of broadcast | 1=30/35 minutes  
|                   | 2=60 minutes     |
| Date of broadcast (dates of constructed week based on random sample and availability of raw content) | 1111  
|                | 1119             |
|                | 1129             |
|                | 125              |
|                | 1213             |
|                | 1221             |
|                | 1229             |
| Begin minute  | Minute on time counter in which story begins |
| Begin second  | Second on time counter at which story begins |
| Topic        | Narrative of topic of story; or specification as commercial, promo, sports or weather |
| Story type   | 1=Crime  
|             | 2=Health issues  
|             | 3=Business & economy/stocks  
|             | 4=Environment  
|             | 5=Educational  
|             | 6=Public issues (all public issues other than crime, health, business, environment, education)  
|             | 7=Soft news/human interest  
|             | 8=City govt (action taken by city govt)  
|             | 9=County/State govt  
|             | 10=Federal govt  
|             | 11=Political campaign/politics  
|             | 12=Consumer news  
|             | 13=Fires/accidents/disasters  
|             | 14=International story  
|             | 15=Entertainment  
|             | 16=Afghanistan/Iraq hard news  
|             | 17=Afghanistan/Iraq soft news  
|             | 18=War on terror hard news  
|             | 19=War on terror soft news  
|             | 20=Traffic  
|             | 21=Weather  
|             | 22=Sports  
|             | 23=Promos for news/station/network  
|             | 24=Commercial  
| Information Level | 1=Episode/Surveillance  
|                  | 2=Context  
|                  | 3=Actionable  
|                  | 99=N/A  
|                  | 1=emergency/public safety  
|                  | 2=health  
|
### Appendix A: Broadcast News CIN Model

<table>
<thead>
<tr>
<th>CIN category</th>
<th>3=education</th>
<th>4=transportation</th>
<th>5=economic opportunities</th>
<th>6=environment</th>
<th>7=civic information</th>
<th>8=political information</th>
<th>99=none</th>
</tr>
</thead>
<tbody>
<tr>
<td>REMEMBER: all information level 3 stories require a CIN category designation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>City/Place</th>
<th>Name of city/town in which action of story takes place. If city/town is not mentioned but a place/building etc is mentioned, search Internet for city/town in which it is located. If no city/town/place/building is mentioned use &quot;99&quot; as code.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>In/Out DMA (location of story)</th>
<th>0=Outside of DMA (television market)</th>
<th>1=inside DMA</th>
<th>99=N/A</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>County</th>
<th>Name of county in which action takes place if no city is mentioned. If city was provided, enter &quot;99&quot; for county.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>State/Country</th>
<th>Name of US state (use abbreviation) or foreign country in which action takes place</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Place</th>
<th>Chronological position of story within newscast: Continuous, 1, 2, 3 etc.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Block</th>
<th>Enter block # in which story appears. Blocks are separated by commercial breaks.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Mode (Primary mode of presentation)</th>
<th>1=Anchor read</th>
<th>2=VO/Anchor (Anchor presents story with video footage)</th>
<th>3=Package (Anchor introduces story the tosses it to reporter who presents a pre-recorded story)</th>
<th>4=Live location (Reporter is live on location of action of the story)</th>
<th>5=Panel/Speech/Editorial</th>
<th>6=Reporter live in newsroom</th>
<th>7=Other</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Reporter Affiliation (reporter is on staff of station)</th>
<th>0=reporter is not employed by the station</th>
<th>1=reporter is employed by the station</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Appr WACH</th>
<th>0=no; 1=yes</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Appr WOLO</th>
<th>0=no; 1=yes</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Appr WIS</th>
<th>0=no; 1=yes</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Appr WLTX</th>
<th>0=no; 1=yes (When coding morning shows enter &quot;99&quot; for WLTX--it presents no morning show)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>End minute</th>
<th>Minute on time counter in which story ends</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>End second</th>
<th>Second on time counter at which story ends</th>
</tr>
</thead>
</table>
Appendix B: Information Level & CIN Category Descriptions

<table>
<thead>
<tr>
<th>Information Level Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Episode:</strong></td>
</tr>
<tr>
<td>A snippet of a topic or issue</td>
</tr>
<tr>
<td>Lacks a connection to a larger set of issues</td>
</tr>
<tr>
<td>It is the most basic form of presentation</td>
</tr>
<tr>
<td>At the very least a story/segment is at this level</td>
</tr>
<tr>
<td><strong>Context:</strong></td>
</tr>
<tr>
<td>Look at the Broader Picture</td>
</tr>
<tr>
<td>Encompasses why the story is being presented</td>
</tr>
<tr>
<td>Only based off what is told in the presentation of story</td>
</tr>
<tr>
<td><strong>Actionable</strong></td>
</tr>
<tr>
<td>Provides mobilizing steps</td>
</tr>
<tr>
<td>Offers advice on what to do next (i.e. buy tickets to this event, where to look for more information, take these precautionary steps etc.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CIN Category Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emergencies and Public Safety</strong></td>
</tr>
<tr>
<td><em>Access to:</em> emergency information</td>
</tr>
<tr>
<td><em>Information on:</em> policing and public safety</td>
</tr>
<tr>
<td>Includes: Dangerous weather, environmental/bio hazardous outbreaks, public safety threats (amber alerts, terrorism)</td>
</tr>
<tr>
<td><strong>Health</strong></td>
</tr>
<tr>
<td><em>Information on:</em></td>
</tr>
<tr>
<td>Family and public health</td>
</tr>
<tr>
<td>Availability, quality, and cost of local health care</td>
</tr>
<tr>
<td>Availability of local public health information, programs, and services</td>
</tr>
<tr>
<td>Includes: wellness care and local clinics/hospitals</td>
</tr>
<tr>
<td>- timely information on: spread of disease and vaccinations local health campaigns</td>
</tr>
</tbody>
</table>
Appendix B: Information Level & CIN Category Descriptions

Education
Information on: all aspects of local education systems, public debates, decision-making, and resource allocation
  Includes: quality of administration of school system
  Availability of: educational opportunities, school performance assessments
  Enrichment, tutoring, after-school care and programs
  School alternatives: Charters, adult education, language courses, job training, GED programs, local opportunities for higher education

Transportation Systems
Access to: timely information on essential transportation services, mass transportation, traffic/road conditions, weather closings

Economic Development
Access to: employment information/opportunities, job training/retaining, apprenticeship, and other sources of reskilling and advancement
Information on: small business opportunities-startup assistance and capital resources; major economic development initiatives; toxic hazards; brownfields
Access to: environmental regions, activities for restoration, & opportunities for recreation

Civic Life
Information on: civic institutions, nonprofits, and associations
Access to: their services and opportunities for participation, libraries and community-based information services, cultural and arts information, social services & recreational opportunities, religious institutions and programs

Political Life
Information on:
  Candidates on all governmental levels, both elected & voluntary councils, School boards, city council/alder elections, city regions, county elections
Timely information:
  Public meetings & issues, including outcomes
  Where/how to register to vote
  Including requirements for identification and absentee
  State-level issues that impact local policy formation
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Newark, DE 19716  
(302) 831-8063  
titleixcoordinator@udel.edu

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Alison Hall, Suite 130  
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(302) 831-4643

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