Introduction

The *Complete Broadcasting Industry Guide: Television, Radio, Cable & Streaming* fills the need for current, comprehensive television, radio, cable and streaming industry information for both U.S. and Canadian markets, and has consistently done so for more than 80 years. We are pleased to continue to offer authoritative information on this dynamic industry in both print and online formats.

Important Features
Users will find clear separation of U.S. and Canadian material for television, radio and cable, as well as a fully updated section on the ever-expanding streaming industry. Comprehensive sections include market areas, call letter lists and station profiles. Each station profile separates important elements, such as web sites, ownership, and programming. Key contact names are indented for quick recognition; all television stations include virtual as well as digital channels, and all radio stations include Nielsen Audio's market area.

The *Complete Broadcasting Industry Guide* includes twelve major sections, with the "big three"—television, radio and cable—the most significant and most detailed. More than just call letters, this industry guide includes professional services from producers and engineers to equipment manufacturers and legal services, as well as those who consult and advocate for this diverse industry. Our researchers have updated thousands of listings and added hundreds.

The Streaming Services section is designed to reflect how consumers receive their favorite programs and music. Detailed listings appear under two subcategories—Audio Streaming Services and Video Streaming Services—that include those prominent companies that currently offer streaming services.

The front matter of the 2022 edition includes: Chronology of Electronic Media, from 1666 to today; The FCC and Its Regulatory Authority; Glossary of Terms; and List of Abbreviations. The Television section starts with Broadcast Market Research, 65 Years of Station Transactions, Sales of Television Receivers, and "Digital media trends, 15th edition." The Radio section starts with Radio Market Rankings, Sales of Home and Clock Radios, and "The Infinite Dial 2021."

As usual, each new annual edition reflects the most recent changes to this dynamic industry. With an eye to the rapidly expanding realm of streaming media, this new edition includes significant additions to the Streaming Services section, including Apple TV+, Discovery Plus, AMC+, Paramount+, Peacock and others.

Praise for previous edition:

> *". . . three major sections . . . a few smaller chapters . . . useful chronology of electronic media . . . associations . . . regulatory agencies . . .trade shows . . . awards. . . . [U]seful for major research libraries with specialized media collections serving communications graduate programs. Recommended."*
>
> *—Choice*

> *" . . . For libraries serving users in the broadcasting industry or for anyone working in these fields, this is a valuable assemblage of a massive amount of information. . . . Highly recommended."*
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> *—American Reference Book Annual*

Television
U.S. television starts with statistics that include ranking data. This is followed by detailed listings of national, regional networks, and group owners. TV stations are arranged by DMA (Designated Market Area). These station listings include dozens of technical details direct from the FCC, such as digital and virtual channel numbers, hours of operation, frequency, and antenna height. Corporate information follows—licensee, owner and network—plus names of important decision makers, such as President, Station Manager, Program Director and more.

Following the U.S. stations, are informative lists—TV stations by call letters, by digital and virtual channels, and a list of U.S. stations that broadcast in Spanish. Comprehensive Canadian TV information follows the U.S. sections—including networks, group owners, detailed station listings, and lists by call letters and channels.

Radio
The U.S. radio section starts with a statistical summary, which is followed by detailed listings of national, and regional radio networks, and group owners, all with key contact names. Listings are arranged by state of license, then city within the state. Like the television stations, these listings include dozens of technical details direct from the FCC, such

as power, frequency and hours of operation, plus the station's market area. Users will find type of programming and special programming, including hours of news programming, and target audience. Long lists of key contacts and decision-makers follow.

Following the detailed station listings is information on international radio, satellite radio, and call letters listed by AM, FM, and frequency. The U.S. radio section ends with detailed programming information—putting each radio station into one or more listening designations, from Adult Contemporary to Vietnamese. This programming index is followed by special programming, with specific details, like where to find a jazz station in Chicago on a Tuesday night.

Comprehensive Canadian radio information follows the U.S. sections—including networks, group owners, detailed station listings, lists by call letters and frequency, and programming.

Cable
The cable section starts with a variety of updated statistics on U.S. cable programming, followed by detailed listings of national and regional cable networks, with a separate section on regional cable sports networks. Cable data for Canada follows, with detailed listings of Canadian cable networks. This section also includes industry statistics.

Streaming Services
This section includes nearly 230 detailed listings that include valuable details such as launch date, specialized content, markets, cost, and number of users/subscribers. Audio streaming listings range from Spotify and Apple Music to Bandcamp, Soundcloud and dedicated podcast outlets, plus Internet radio platforms like AccuRadio and MyTuner Radio. Video streaming listings range from Netflix and Amazon Prime to traditional network entrants into the scene, such as Discovery Plus and Peacock.

Technical Equipment and Services
In addition to the detailed station listings, the *Complete Broadcasting Industry Guide* includes current, comprehensive information on those who provide services, materials and equipment to the industry. From major television syndicates to radio news services, from producers to distributors, from equipment manufacturers to cable audio services, this 2022 edition will help you find the product or service you need.

Professional Services and More
This comprehensive guide also includes listings of employment services, technical consultants, legal services, and talent agents. There is a separate section on associations, trade shows and vocational schools and complete listings for the FCC and other regulatory agencies, as well as Canadian agency information.

Your key to this dynamic industry in one, easy-to-use source, with valuable profiles, industry statistics, and comprehensive indexes, the *Complete Broadcasting Industry Guide* provides specifics of thousands of stations in the U.S. and Canada, including audience, programming and contact information, and further, includes sections on what schools offer industry training, and how to keep up on the latest industry regulations.

Online Database
For even easier access to this information, the *Complete Broadcasting Industry Guide* is available by subscription to our online database—G.O.L.D. For more information or a free trial, call 800-562-2139 or visit www.greyhouse.com.

A Chronology of the Electronic Media

From Isaac Newton to Streaming Media

1666
Sir Isaac Newton performs basic experiments on the spectrum.

1794
Allessandro Volta of Italy invents the voltaic cell, a primitive battery.

1827
George Ohm of Germany shows the relationship between resistance, amperage and voltage. Sir Charles Wheatstone of England invents an acoustic device to amplify sounds that he calls a "microphone."

1844
Samuel F.B. Morse tests the first telegraph with "What hath God wrought?" message sent on link between Washington and Baltimore.

1858
First trans-Atlantic cable completed. President James Buchanan and Queen Victoria exchange greetings.

1867
James Clerk Maxwell of Scotland develops the electromagnetic theory.

1875
George R. Carey of Boston proposes a system that would transmit and receive moving visual images electrically.

1876
Alexander Graham Bell invents the telephone.

1877
Thomas A. Edison applies for a patent on a "phonograph or talking machine."

1878
Sir William Cooke of England passes high voltage through a wire in a sealed glass tube, causing a pinkish glow—evidence of cathode rays. It's the first step toward the development of the vacuum tubes.

1884
Paul Nipkow of Germany patents a mechanical, rotating facsimile scanning disk.

1886
Heinrich Hertz of Germany proves that electromagnetic waves can be transmitted through space at the speed of light and can be reflected and refracted.

1895
Wilheim Conrad Roentgen of Germany discovers X-rays.

Guglielmo Marconi sends and receives his first wireless signals across his father's estate at Bologna, Italy.

1896
Marconi applies for British patent for wireless telegraphy. He receives an American patent a year later.

1899
Marconi flashes the first wireless signals across the English Channel.

1900
Constantin Perskyi (France) coins the word television at the International Electricity Congress, part of the 1900 Paris Exhibition.

1901
Marconi at Newfoundland, Canada, receives the first trans-Atlantic signal, the letter "S," transmitted from Poldhu, England.

1906
Dr. Lee de Forest invents the audion, a three-element vacuum tube, having a filament, plate and grid, which leads to the amplification of radio signals.

1909
Nobel Prize awarded to Karl Ferdinand Braun and Guglielmo Marconi for the development of radio

1910
Enrico Caruso and Emmy Destinn, singing backstage at the Metropolitan Opera House in New York, broadcast through the De Forest radiophone and are heard by an operator on the SS Avon at sea and by wireless amateurs in Connecticut.

United States approves an act requiring certain passenger ships to carry wireless equipment and operators.

1912
The Titanic disaster proves the value of wireless at sea; 705 lives saved. Jack Phillips and Harold Bride are the ship's wireless operators.

1920
On August 20, 8MK (later, WWJ) in Detroit, owned by the Detroit News, starts what is later claimed to be regular broadcasting.

The Westinghouse Co.'s KDKA(AM) Pittsburgh broadcasts the Harding-Cox election on returns November 2 as the country's first licensed commercial radio station.

1921
The Dempsey-Carpentier fight is broadcast from Boyle's Thirty Acres in Jersey City through a temporarily installed transmitter at Hoboken, New Jersey. Major J. Andrew White was the announcer. This event gave radio a tremendous boost.

1922
The superheterodyne circuit is demonstrated by its inventor, Edwin H. Armstrong. It dramatically improves AM radio reception.

WEAF(AM) New York broadcasts what is claimed to be the first commercially sponsored program on September 7. The advertiser is the Queensborough Corp., a real estate organization.

WOI(AM) Ames, Iowa, goes on air as the country's first licensed educational station.

1923
Dr. Vladimir K. Zworykin files for a U.S. patent for an all-electronic television system.

A "chain" broadcast features a telephone tie-up between WEAF(AM) New York and WNAC(AM) Boston.

1924
The Republican convention in Cleveland and the Democratic convention in New York are broadcast over networks.

1925
President Calvin Coolidge's inaugural ceremony is broadcast by 24 stations in a transcontinental network.

1926
President Coolidge signs the Dill-White Radio Bill creating the Federal Radio Commission and ending the chaos on the radio dial caused by the wild growth of broadcasting.

National Broadcasting Co. is organized on November 1 with WEAF(AM) and WJZ(AM) in New York as key stations and Merlin Hall Aylesworth as president. Headquarters are at 711 Fifth Ave., New York.

1927
The Columbia Broadcasting System goes on the air with a basic network of 16 stations. Major J. Andrew White is president.

Philo T. Farnsworth applies for a patent on his image dissector television camera tube.

1928
NBC establishes a permanent coast-to-coast radio network.

1929
William S. Paley, 27, is elected president of the Columbia Broadcasting System.

Vladimir Zworykin demonstrates his kinescope or cathode ray television receiver before a meeting of the Institute of Radio Engineers on November 19.

1930
Experimental TV station W2XBS is opened by National Broadcasting Co. in New York.

1931
Experimental television station W2XAB is opened by Columbia Broadcasting System in New York.

The first issue of Broadcasting magazine appears on October 15.

The National Association of Broadcasters reports that more than half of the nation's radio stations are operating without a profit.

1932
CBS, NBC, and New York area stations, notably WOR(AM), go into round-the-clock operations to cover the Lindbergh kidnapping, radio's biggest spot-news reporting job to date.

NBC lifts its ban on recorded programs for its owned-and-operated stations, but continues to bar them from network use.

NBC withdraws prohibitions against price mentions on the air during daytime hours; two months later, both NBC and CBS allow price mentions at nighttime as well.

1933
Associated Press members vote to ban network broadcasts of AP news and to restrict local broadcasts to bulletins to stipulated times with air credit to member newspapers.

The American Newspaper Publishers Association declares radio program schedules are advertising and should be published only if paid for.

CBS assigns publicity director Paul White to organize a nationwide staff to collect news for network broadcast. General Mills agrees to sponsor twice-daily newscasts.

1934
Congress passes the Communication Act, which, among other things, replaces the Federal Radio Commission with the Federal Communications Commission.

1935
RCA announces that it is taking television out of the laboratory for a $1 million field-test program.

1936
A year of TV demonstrations begins in June with the Don Lee Broadcasting System's first public exhibition of cathode ray television in the U.S., using a system developed by Don Lee TV director Harry Lubcke. One month later, RCA demonstrates its system of TV with transmissions from the Empire State Building, and Philco follows with a seven-mile transmission in August.

FM (frequency modulation) broadcasting, a new radio system invented by Major Edwin H. Armstrong, is described at an FCC hearing as static-free, free from fading and cross-talk, having uniformity day and night in all seasons and greater fidelity of reproduction.

A.C. Nielsen, revealing his firm's acquisition of the MIT-developed "Audimeter," proposes a metered tuning method of measuring radio audience size.

1937
WLS(AM) Chicago recording team of Herb Morrison, announcer, and Charles Nehlsen, engineer, on a routine assignment at Lakehurst, New Jersey, records an on-the-spot account of the explosion of the German dirigible Hindenburg. NBC breaks its rigid rule against recordings to put it on the network.

1938
Broadcasting publishes the first facsimile newspaper in a demonstration at the National Association of Broadcasters convention.

1939
After 15 years of litigation, the patent for iconoscope-kinescope tubes, the basis for electronic television, is granted to Dr. Vladimir Zworykin.

A telecast of the opening ceremonies of the New York World's Fair marks the start of a regular daily television schedule by RCA-NBC in New York.

The first baseball game ever televised—Princeton vs. Columbia—appears on NBC.

1940
The FCC authorizes commercial operation of FM, but puts TV back into the laboratory until the industry reaches an agreement on technical standards.

CBS demonstrates a system of color TV developed by its chief TV engineer, Dr. Peter Goldmark.

1941
Bulova Watch Co., Sun Oil Co., Lever Bros. and Procter & Gamble sign as sponsors of the first commercial telecasts on July 1 over NBC's WNBT(TV) New York (until then W2XBS).

President Roosevelt's broadcast to the nation on December 9, the day after war is declared, has the largest audience in radio history—about 90 million listeners.

1942
The Advertising Council is organized by advertisers, agencies, and media to put the talents and techniques of advertising at the disposal of the government to inspire and instruct the public concerning the war effort.

1943
Edward J. Noble buys the Blue Network from RCA for $8 million in cash. RCA had two networks, NBC Red and NBC Blue.

1944
With the FCC approval of the transfer of owned stations, the Blue Network assumes the name of its holding company, the American Broadcasting Co.

1945
Pooled coverage of the Nazi surrender in May brings the American people full details of the end of the war in Europe. Peace heralds a communications boom: Not only will programming restrictions end, but new station construction, frozen for the duration, will proceed at an explosive pace soon after V-J Day in August.

1946
A telecast of the Louis-Conn heavyweight title fight, sponsored by Gillette Safety Razor Co. on a four-city hookup, reaches an estimated 100,000 viewers and convinces skeptics that television is here to stay.

RCA demonstrates its all-electronic system of color TV.

Bristol-Myers is the first advertiser to sponsor a television network program (Geographically Speaking) which debuted October 27 on NBC TV's two-station network.

1947
Radio comedian Fred Allen uses a gag, which NBC had ruled out, about network vice presidents, and is cut off the air while he tells it. The story is front-page news across the country as the sponsor's ad agency demands a rebate for 35 seconds of dead air.

1948
Texaco puts an old-style vaudeville show on NBC TV; the hour-long series stars Milton Berle.

1949
The Academy of Television Arts & Sciences presents the first Emmy Awards at ceremonies televised by KTSL(TV) Los Angeles.

1950
General Foods drops actress Jean Muir, who denies any communist affiliations or sympathies, from the cast of The Aldrich Family (NBC TV) after protests against her appearance by "a number of groups." The Joint Committee Against Communism claims credit for her removal, announcing a drive to "cleanse" radio and television of pro-communist actors, directors, and writers.

The FCC approves CBS's color TV system, effective November 20. The network promises 20 hours of color programming a week within two months. TV set manufacturers are divided, however, over whether to make sets, since the CBS system is incompatible with black-and-white broadcasts. In the meantime, RCA continues work on its color system.

1951
Witness Frank Costello's hands provide TV's picture of the week as he refuses to expose his face to cameras covering New York hearings on organized crime of the Senate Crime Investigation Committee, chaired by Senator Estes Kefauver (D-Tenn.)

Sixteen advertisers sponsor the first commercial color telecast, an hour-long program on a five-station East Coast CBS TV hook-up.

Bing Crosby Enterprises announces the development of a system for recording video and audio programs on magnetic tape. The pictures shown at demonstrations are described as "hazy" but "viewable." A year later the images are described as improved "more than 20-fold."

1952
By rushing equipment across the country, from Bridgeport, Connecticut, to Portland, Oregon, KPTV(TV) Portland goes on the air as the first commercial UHF TV station.

On September 6, 1952, Canadian television was first introduced, in the form of (CBC) CBMF-TV Montreal, followed by CBLT-TV Toronto two days later.

1953
With the end of daylight-saving time, CBS TV and NBC TV inaugurate "hot kinescope" systems to put programs on the air on the West Coast at the same clock hour as in the East.

RCA demonstrates black-and-white and color TV programs recorded on magnetic tape. RCA-NBC Board Chairman David Sarnoff says two years of finishing touches are needed before the system is ready for market.

The FCC approves RCA's compatible (with black-and-white transmission) color TV standards. System supplants the incompatible CBS system.

1954
CBS President Frank Stanton broadcasts the first network editorial, urging that radio and TV be allowed to cover congressional hearings.

1955
A contract between the DuMont TV network and Jackie Gleason Enterprises calls for Gleason's The Honeymooners to be done as a filmed program for CBS TV on Saturday nights.

1956
Ampex Corp. unveils the first practical videotape recorder at the National Association of Radio and Television Broadcasters convention in Chicago. The company takes in $4 million in orders.

1957
Videotape recorders are seen as the solution to the TV networks' daylight-saving time problems.

1958
Subliminal TV messages are put under the spotlight at hearings in Los Angeles and Washington.

The BBDO ad agency converts live commercials to videotape.

1959
Sixty-eight TV stations defy the broadcasters' code of conduct by refusing to drop Preparation H commercials.

The quiz show scandal climaxes when famed Twenty-One prizewinner Charles Van Doren admits to a House committee that he had been provided with answers and strategies in advance. The sad ending to the quiz show era prompts cancellation of big-prize shows and vows by NBC and CBS to end deceptive practices.

1960
A satellite sends weather reports back from a 400-mile-high orbit.

RKO-Zenith plans a $10 million test of an on-air pay TV system in Hartford, Connecticut.

Sam Goldwyn offers a package of movies to television.

The last daytime serial on network radio ends.

The opening Kennedy-Nixon debate attracts the largest TV audience to date.

1961
FCC Chairman Newton Minnow shakes up the National Association of Broadcasters convention with his assessment of TV programming: Although it occasionally shines with programs like Twilight Zone and CBS Reports, it is, more than anything, from sign-on to sign-off "a vast wasteland."

Off-network shows become popular as syndicated fare.

The Ampex "electronic editor" permits inserts and additions to be made in videotape without physical splices.

ABC TV engineers develop a process for the immediate playback of videotape recordings in slow motion.

1962
John Glenn's orbital space flight is seen by 135 million TV viewers.

Telstar, AT&T's orbiting satellite, provides a glamorous debut for global television.

1963
Astronaut Gordon Cooper sends back the first TV pictures from space.

All radio and TV network commercials and entertainment programming are canceled following the assassination of President Kennedy. In the same week, the first trans-Pacific broadcast via satellite previews live TV coverage of the 1964 Olympics in Tokyo.

1964
The government and the tobacco companies each ponder their next move after the surgeon general's report links cigarette smoking and lung cancer. Within weeks, American Tobacco drops sports broadcasts, radio stations begin to ban cigarette ads and CBS TV orders a de-emphasis of cigarette use on programs.

1965
Early Bird, the first commercial communications satellite, goes into stationary orbit, opening trans-Atlantic circuits for TV use.

1966
Fred W. Friendly quits as president of CBS News when his new boss, John Schneider, CBS group vice president for broadcasting, cancels coverage of a Senate hearing on the Vietnam War and runs a rerun of I Love Lucy instead.

Network TV viewers see live close-up pictures of the moon—sent back by Surveyor I—as they come into the Jet Propulsion Laboratory.

1967
ABC Radio introduces a radical plan: four networks instead of one, each tailored to suit different station formats.

President Johnson signs the Public Broadcasting Act into law, establishing the Corporation for Public Broadcasting, federal funding mechanism.

1968
The Children's Television Workshop is created by the Ford Foundation, the Carnegie Corp., and the Office of Education to develop a 26-week series of hour-long color programs for preschool children. Sesame Street is the result.

The U.S. Supreme Court gives the FCC jurisdiction over all cable TV systems.

Pictures taken inside Apollo 7 in flight and sent back to Earth revive public interest in the space program.

NBC TV earns the life-long ire of sports fans when it cuts off the end of a Jets-Raiders game to air its made-for-TV movie Heidi. Viewers miss the Raiders' two-touchdowns-in-nine-seconds defeat of the Jets.

1969
The Corporation for Public Broadcasting plans the creation of the Public Broadcasting Service to distribute programming to noncommercial TV stations.

In the same week that ABC-TV announces its $8 million Monday Night Football deal (games to begin in 1970), Apollo 10 sends back the first color TV pictures of the moon and of Earth from the moon.

The world watches live coverage of Neil Armstrong's walk on the moon.

1970
House and Senate conferees agree on legislation to outlaw cigarette advertising on radio and TV, but change the bill's effective date from January 1, 1971, to January 2, so commercials can appear on New Year's Day football telecasts.

The FCC rules that TV stations in the top 50 markets cannot accept more than three hours of network programming between 7 and 11 p.m., and bars them from domestic syndication and from acquiring subsidiary rights in independently produced programs.

First cable TV networks are introduced.

1971
National Public Radio debuts with a 90-station interconnected lineup.

1972
Judge Benjamin Hooks of Memphis, Tennessee, is nominated to the FCC. He becomes the first black to serve on a federal regulatory agency.

Home Box Office Inc., New York, is formed as a subsidiary of Sterling Communications to provide pay-cable TV systems with live and film programming.

1973
Western Union becomes the first company to receive federal permission to launch a commercial communications satellite in the U.S.

Broadcast media around the world open their coverage of the Senate select committee's investigation of the Watergate scandal.

1974
RCA inaugurates the nation's first domestic satellite communications service, using a Canadian satellite.

More than 110 million viewers watch President Nixon announce his resignation.

1975
Home Box Office, Time Inc.'s pay cable subsidiary, announces that it will inaugurate a satellite delivery network in the fall.

1976
Ampex Corp. and CBS develop the electronic still-store system, which uses a digital recording technique to store 1,500 frames in random mode, each accessible in 100 milliseconds.

Cable network launches include Showtime and Univision.

1977
ABC's eight-day telecast of the miniseries Roots becomes the most watched program in television history, with ratings in the mid-40s and shares in the mid-60s. Eighty million people watch at least some part of the final episode.

Sony unveils its Betamax videocassette in August and later the same month RCA introduces its SelectaVision home videotape recorder.

1978
The U.S. Supreme Court upholds the FCC in the "seven dirty words" case involving Pacifica's WBAI(FM) New York. The ruling says the FCC may regulate and punish for the broadcasting of "indecent material."

1979
Ampex demonstrates its digital videotape recorder at the Society of Motion Picture and Television Engineers conference in San Francisco in February. Sony unveils its version two months later.

Cable network launches include C-SPAN, ESPN, The Movie Channel, and Nickelodeon.

1980
"Who Shot J.R.?" episode of Dallas garners the highest rating for any program in modern TV history, with a 53.3 rating and a 76 share.

Cable network launches include Cable News Network, Black Entertainment Television, the Learning Channel, Bravo, and USA Network.

1981
With five ENG cameras rolling, the shooting of President Reagan becomes history's most heavily covered assassination attempt.

The first U.S. demonstration of high-definition television (HDTV) takes place at the annual convention of the Society of Motion Picture and Television Engineers. The Japanese Broadcasting Corp.'s (NHK) 1,125-line analog system draws raves from engineers and filmmakers.

Cable network launches include MTV: Music Television and the Eternal Word Television Network.

1982
Having reached a settlement with the Justice Department to divest itself of its 23 local telephone companies, communications giant AT&T hopes to lead the country into the "information age." The National Cable Television Association, Congress, and the FCC wonder what the agreement has wrought.

Cable network launches include the Weather Channel and the Playboy Channel.

1983
Reagan appointee Mark Fowler, chairman of the FCC, tells a common carrier conference that the U.S. is heading toward a regulation-free telecommunications marketplace.

In February, the two-and-a-half-hour final episode of CBS's M*A*S*H is the most watched program in TV history, garnering a 60.3 rating and a 77 share.

Cable network launches include the Disney Channel and Country Music Television.

1984
The U.S. Supreme Court rules that home videotaping is legal.

Congress passes the Cable Telecommunications Act of 1984, landmark legislation deregulating cable. Law accelerates the growth of cable.

Cable network launches include the Arts & Entertainment Network (A&E), American Movie Classics, and Lifetime.

1985
Ted Turner makes inquiries at the FCC about a possible takeover of CBS. Later, in March, media company Capital Cities Communications purchases ABC for $3.5 billion. Turner's efforts to acquire CBS fail by the end of July, when a federal judge approves the network's stock buyback plan.

The Advanced Television Services Committee (ATSC) votes in favor of the NHK HDTV standard: 1,125 lines, 60 fields, 2:1 interlace, 5.33:3 ratio. This standard is put forward by the U.S. to the International Radio Consultative Committee (CCIR) for consideration as the international standard. The CCIR adopts the recommendation later in the year.

Having lost his bid to buy CBS, Ted Turner makes a $1.5 billion offer for MGM/UA.

Cable network launches include The Discovery Channel, Home Shopping Network, and VH-1.

1986
MGM and Color Systems Technology sign an agreement for the conversion of 100 of the studio's black-and-white films to color.

Cable network launches include C-SPAN2 and QVC.

1987
Fox Broadcasting Co. introduces its primetime lineup with 108 affiliates in its bid to become the fourth major U.S. commercial television network.

The National Association of Broadcasters and the Association for Maximum Service Television broadcast HDTV over standard TV channels during public demonstrations in Washington.

President Reagan vetoes legislation to write the fairness doctrine into law. The doctrine required broadcast stations to allow opposing views of issues, but critics claimed that it discouraged open debate.

Cable network launches include Movietime (renamed E! Entertainment Television in 1990), The Travel Channel, and Telemundo.

1988
The FCC adopts preliminary ground rules for HDTV. It tentatively decides to require HDTV broadcasts to be compatible with NTSC sets and says it will not make additional spectrum available outside the VHF and UHF bands for HDTV because there is enough already available to accommodate the service.

Cable network launches include Turner Network Television.

1989
Time Inc. and Warner Communications agree to swap stock and merge into what will be world's largest media and entertainment company.

1990
Digital audio broadcasting is demonstrated at the National Association of Broadcasters convention and is heralded as the HDTV of radio.

General Instrument revolutionizes the development of high-definition television by proposing an all-digital system. The video compression system also has implications for satellite transmissions.

Cable network launches include CNBC and The Inspiration Network (INSP).

1991
The U.S. air attack on Iraq begins January 16 with dramatic live coverage from network reporters in Baghdad. CNN is the lone network to maintain contact with its Baghdad reporters through the night.

Free to move around Moscow and ready to commit resources to coverage, television and radio provide gripping details of the short-lived Soviet coup and the collapse of communism in the Soviet Union. During his detention in the Crimea, Soviet President Mikhail Gorbachev keeps track of events by listening to the BBC, Voice of America, and Radio Liberty.

Cable network launches include Court TV, Comedy Central, and Encore.

1992
In March, the Supreme Court let stand an appeals court ruling that struck down the FCC's around-the-clock ban on broadcast indecency as unconstitutional and requiring the commission to establish a safe harbor—a part of the day when few children are tuning in and during which radio and TV stations may broadcast without fear of FCC sanctions for indecency.

General Instrument and MIT show the first over-the-air digital HDTV transmission to Washington lawmakers and regulators. The 12-minute transmission of 1,050-line video was broadcast by noncommercial WETA-TV Washington.

The FCC raises the limit on radio stations a single company may own from 12 AM and 12 FM to 30 of each, then backpedals and lowers the caps to 18 each, with no more than two AMs and two FMs in large markets and three stations—only two in the same service—in small markets.

Fox expands its programming lineup to seven nights a week, ending its status as a "weblet" and becoming the fourth full-fledged commercial TV network in the U.S.

The FCC unanimously approves allowing broadcast TV networks to purchase cable systems that serve no more than 10 percent of U.S. homes and up to 50 percent of a particular market's homes.

The FCC tells TV broadcasters they will have five years to begin broadcasting in HDTV once the agency adopts a standard and makes channels available.

Cable network launches include The Cartoon Network and the Sci Fi Channel.

1993
Warner Bros. announces it will launch a fifth broadcast TV network in 1994.

The FCC expands the AM band's upper limit from 1605 kHz to 1705 kHz.

General Instrument, Zenith, AT&T, and the ATRC join forces as the "Grand Alliance" to develop a single HDTV system. Later in the year, the Grand Alliance announces its support of the emerging MPEG-2 digital compression HD system: six-channel, CD-quality Dolby AC-3 music system; 1,920-pixel by 1,080-line interlaced scanning picture; and progressive scanning.

Paramount Communications begins talks with TV stations about forming a fifth broadcast TV network.

Southwestern Bell and Cox Cable form a $4.9-billion partnership.

Cable network launches include ESPN2 and the Television Food Network.

1994
Two companies, Hubbard's United States Satellite Broadcasting and Hughes's DirecTV, begin direct broadcast satellite transmissions to 18-inch home dish antennas from a shared satellite.

Paramount and Viacom merge in a deal worth $9.2 billion, forming the world's most powerful entertainment company. Viacom's Sumner Redstone becomes the new company's chairman. Later in the year, Viacom adds Blockbuster Entertainment to its portfolio.

Cable network launches include FX, Home & Garden TV, the International Film Channel, Starz!, Trio, the Game Show Network, and Turner Classic Movies.

1995
Seagram pays $7 billion for the 80 percent of Hollywood studio MCA Inc. owned by Matsushita Electric Industrial Co. Seagram is controlled by the Bronfman family and is headed by President/CEO Edgar Bronfman Jr.

The Megamedia Age begins when, in the same week, Walt Disney Co. announces it is buying Capital Cities/ABC for $18.5 billion and then Westinghouse Electric Co. releases word of its purchase of CBS Inc. for $5.4 billion.

Time Warner and Turner Broadcasting System agree to merge in an $8 billion stock swap deal.

Live television coverage of the verdict in the O.J. Simpson murder trial sets viewing records when 150 million people watch the jury return a "not guilty" verdict.

Microsoft buys 50 percent stake in NBC's cable channel America's Talking for $250 million. AT's talk format will be dropped and the network will become a news operation after being rechristened MSNBC.

The FCC repeals its Prime Time Access and Fin-Syn rules. These rules restricted the major broadcast networks from owning interest in their own primetime programming.

Cable network launches include CNN/fn, The Golf Channel, Great American Country, the History Channel, and the Outdoor Life Network.

1996
Congress passes—and President Clinton signs—the Telecommunications Act of 1996, the first major overhaul of telecommunication legislation since 1934. Its key provisions include: replacing the 12-station TV ownership limit with a national home coverage cap of 35 percent; eliminating the national ownership limits on radio stations and allowing one company to own different numbers of stations locally, depending on the market size; requiring TV sets sold in the U.S. to be equipped with a V-chip to enable blocking of channels based on encoded ratings; deregulating cable rates.

Westinghouse/CBS buys Infinity Broadcasting for $4.9 billion, creating the country's largest radio station group in terms of earnings. The deal results in Westinghouse/CBS owning 83 radio stations in 15 markets.

The FCC releases its first list of proposed digital TV channel assignments for all U.S. analog television stations.

In July, WRAL-HD Raleigh, North Carolina, begins HDTV transmission on channel 32 under an experimental FCC license, making it the first HDTV station to broadcast in the U.S.

The Washington-based Model HDTV Station Project demonstrates live, over-the-air digital TV transmission and reception. A few months later, it bounces digital signals off a satellite and displays them on a receiver.

Cable network launches include Animal Planet, Fox News Channel, MSNBC, the Sundance Channel, and TVLand.

1997
After several starts and stops, the TV industry unveils content-based V-chip ratings to mixed reviews. Recalcitrant NBC maintains it will not implement the new ratings.

Paxson Communications chief Bud Paxson announces plans to launch a new television network, Pax Net, using his 73 owned UHF stations as a base and airing family friendly off-network programming.

ABC Television Network President Preston Padden and Sinclair Broadcasting President David Smith say broadcasters ought to consider using DTV channels for broadcasting multiple channels of conventional TV rather than a single channel of HDTV.

Hearst Corp. (8 TVs) and Argyle Television (6 TVs) join their TV stations and create a new company, Hearst-Argyle Television Inc., that is valued at $1.8 billion.

The FCC gives TV broadcasters a second channel for the delivery of HDTV and other digital services and said that all network affiliates in the top 10 markets have 24 months to start broadcasting a digital signal; those in markets 11-30 have 30 months; all other commercial stations have five years. Noncommercial broadcasters have six.

DTV service provider EchoStar plans to launch two satellites that will give it the ability to provide local broadcast TV signals to about 43 percent of the U.S.

Cable network launches include WE.

1998

The National Association of Broadcasters agrees to support plans by satellite TV providers to retransmit local TV station signals into their markets as long as the satellite services carry all a market's signals.

At 2:17 p.m. on February 27, WFAA-TV Dallas broadcast what it claims is the first non-experimental HDTV signal (in 1080i, 16:9 format). The broadcast began with a half-hour of taped HD programming, followed by a live simulcast of the station's NTSC programming that was upconverted to HDTV. The next month, Sinclair Broadcasting becomes the first TV group owner to broadcast multiple digital channels.

AT&T pays $50 billion for cable system giant Tele-Communications Inc.

Paxson Communications launches its broadcast television network, now called Pax TV, with a lineup of 90 stations covering about 75 percent of U.S. TV homes.

Radio group owner Clear Channel Communications purchases competitor Jacor Communications for $4.4 billion. The deal gives Clear Channel 453 stations in 101 markets. The year's other big deals include: Chancellor Media's purchase of Capstar Broadcasting for $3.9 billion; Hearst-Argyle Television's purchase of Pulitzer Broadcasting for $1.85 billion; Chancellor's purchase of LIN Television for $1.5 billion; and Sinclair Broadcast Group's purchase of Sullivan Broadcasting for $1 billion.

CBS is the first broadcast TV network to air a live HDTV sports event with its Nov. 8 telecast of the New York Jets-Buffalo Bills NFL game. It is carried by CBS stations in New York; Philadelphia; Washington; Cincinnati; Charlotte, North Carolina; Raleigh, North Carolina; and Columbus, Ohio.

Hughes Electronics Corp., parent of DBS provider DirecTV, announces deal to buy rival U.S. Satellite Broadcasting from Hubbard Broadcasting for $1.3 billion. The DBS business now has three providers: DirecTV, EchoStar, and Primestar.

Cable network launches include BBC America, the Biography Channel, Cinemax, Tech TV, and Toon Disney.

1999

Hughes Electronics Corp., parent of DBS provider DirecTV, buys rival Primestar for $1.1 billion plus stock. The DBS business now has two providers: DirecTV and EchoStar.

Paxson Broadcasting sells its 30 percent interest in The Travel Channel to the cable channel's 70 percent owner, Discovery Channel.

MSO Comcast offers $58 billion for MediaOne Group's cable systems. AT&T then comes in with a $69 billion offer that has AT&T swapping and selling Comcast systems with 2 million subscribers for roughly $9 billion. In return, Comcast agrees to withdraw its $58 billion offer.

CBS pays $2.5 billion for syndication giant King World Productions, whose properties include the hit shows Oprah, Wheel of Fortune, and Jeopardy!

FCC votes to allow a broadcaster to own two TV stations in a market under certain conditions and liberalizes its radio/TV cross-ownership restrictions. A flood of station deals follow.

Viacom Inc. buys CBS Corp. for $36 billion, merging Viacom's Paramount Station Group, UPN network, cable networks, and other properties, with those of CBS.

Clear Channel Communications pays $23.5 billion in stock and assumption of debt for the 443 radio stations of AMFM Inc., the country's largest radio broadcaster. Clear Channel will have to divest about 100 stations to comply with FCC and Justice Department regulations. Those spinoffs will bring Clear Channel $4.3 billion.

Legislation takes affect allowing satellite delivery of local television stations in their markets, increasing DBS providers' ability to compete with cable.

2000

America Online Inc. and Time Warner merge in a deal worth $181 billion. The merged company, AOL Time Warner, combines the company that serves the largest number of Internet users with the largest producer of TV shows and movies and cable programming, plus cable systems passing 20 percent of U.S. homes.

Tribune Co. buys Times Mirror Co. for $6.5 billion, acquiring seven daily newspapers and various magazines. The deal will give Tribune co-ownership of TV stations and major daily newspapers in the top three markets and the assets to sell packages of multimedia advertising to clients on national, regional, and local levels.

Harry Pappas, head of Pappas Television, the country's largest privately held TV station group, announces plans to launch Azteca America, the third U.S. Hispanic television network (Univision and Telemundo are the others) in 2001.

Cable network launches include Oxygen.

2001

FCC approves the $5.4-billion sale of Chris-Craft Broadcasting's ten TV stations to Fox Television.

DBS operator EchoStar Communications engineers a $26-billion bid for competitor DirecTV, owned by GM's Hughes Corp. The move follows attempts by Rupert Murdoch's News Corp. to acquire DirecTV. But regulatory reviews keep the deal in limbo.

XM Satellite Radio begins broadcasting a nationwide radio service of 200 channels from two satellites—"Rock" and "Roll"—in orbit above the equator. The Washington-based company charges subscribers $9.95 a month for the service. A rival, New York-based Sirius Satellite Radio, plans to launch a similar service later in the year.

The September 11 terrorist attacks on New York and Washington result in around-the-clock news coverage, dropping commercials. It's estimated that the networks lost $200 million-$300 million in the first four days of coverage. Four FM and nine New York TV stations whose antennas were on top of the World Trade Center are knocked off the air and several stations lost employees who had been manning the transmitters in Tower 1. Across the country, broadcasters raised money and arranged blood drives. The fall TV season is delayed, late-night talk/comedy shows are put on hiatus, the Emmy Awards are postponed, and several industry gatherings are canceled.

NBC buys Telemundo, the No. 2 U.S. Spanish-language TV network, for $2.7 billion.

Comcast negotiates $72 billion merger with rival cable operator AT&T Broadband, topping bids by AOL Time Warner and Cox Communications.

Cable network launches include ABC Family, Hallmark Channel, and National Geographic Television.

2002

Sirius Satellite Radio launches its satellite-delivered subscription radio service in four markets in February, then rolls out nationally in July. Sirius follows XM Satellite Radio to become the second U.S. satellite radio programmer.

Prompted by lawsuits from Fox, Viacom, NBC, and Time Warner, a three-judge panel of the federal appeals court in Washington refuses to uphold an FCC rule limiting a TV station group owner's audience reach to 35 percent of U.S. TV households and strikes down a rule barring a cable system from owning TV stations in its market. The court orders the FCC to rewrite or justify the ownership limit rule.

Tom Brokaw of NBC News announces he will step down as evening news anchor after the 2004 presidential election, to be succeeded by NBC's Brian Williams. Brokaw will then focus on in-depth reporting projects.

The Securities and Exchange Commission begins a formal investigation into the accounting practices of cable MSO Adelphia Communications. Five of Adelphia's top executives—including founder John Rigas and his two sons, Michael and Tim—are arrested on fraud charges, alleging that the family used the company as a "personal piggy bank," financing various personal transactions, including $3.1 billion in loans for stock and family businesses.

The FCC mandates that all TV sets must be equipped with digital tuners by 2007 and proposes strong copy-protection measures intended to prevent widespread copying and streaming of content over the Internet.

Lifestyle diva Martha Stewart, whose media empire included TV, magazines, and books, is investigated by the Justice Department for allegedly lying to federal authorities looking into insider trading involving Stewart's sale of ImClone Systems stock the day before it became public that the Food and Drug Administration had denied the company's application to market a new cancer drug.

In October, both the FCC and the Department of Justice reject DBS operator EchoStar Communications' proposed $26-billion purchase of competitor DirecTV, and a revised agreement fails to sway either agency. In December, EchoStar withdrew its merger request from the FCC. Rupert Murdoch's News Corp., whose previous bid for DirecTV had been rebuffed, puts together a new deal.

2003

Rupert Murdoch's News Corp. receives FCC and Justice Department approval of its deal to acquire 34 percent of DBS operator DirecTV's parent company Hughes Electronics for $6.6 billion in cash and stock.

New York City's Metropolitan Television Alliance agrees to place a new broadcast tower for New York-area television stations on top of the Freedom Tower, a 1,776-foot office tower that will be built on the site of the World Trade Center, where the stations' towers were located prior to 9/11. The MTVA comprises all the city's major TV broadcasters. After the terrorist attacks, most of the stations operated from backup facilities atop the Empire State Building. Ground is expected to be broken on the Freedom Tower in the summer of 2004, and broadcasters should begin operating from the tower by 2008.

The FCC releases new media ownership rules in response to a federal appeals court ruling in 2002. Among the changes: raising the national coverage cap for TV groups from 35 percent to 45 percent; allowing ownership of two TV stations (duopoly) in markets with five or more commercial stations; allowing ownership of three TV stations (triopoly) in markets with at least 18 stations; newspaper-TV cross-ownership is permitted in markets with at least four TV stations; radio-TV cross-ownership now include newspapers in the formula—owners in markets with nine or more TV stations face no cross-ownership restrictions per se but are limited by individual radio and TV limits applicable to specific markets. TV-duopoly owners would not be permitted to own newspapers in markets with fewer than nine TV stations. In markets with three or fewer TV stations, no cross-ownership of TV, radio, or newspapers is permitted. In markets with four to eight TV stations, an owner may form one of the following combos:

(1) A daily newspaper, one TV station, up to one-half the number of radio stations permitted to one owner in that market.

(2) A daily newspaper, the total number of radio stations permitted to one owner there, no TV stations.

(3) Two TV stations and the total number of radio stations permitted there.

Congress quickly reacts with legislation introduced by Rep. John Dingell (D-Mich.), which would restore the 35 percent cap. Other critics of the new rules challenge them in federal court.

Liberty Media pays $7.9 billion for Comcast's 56 percent stake in home shopping giant QVC. With 2002 sales of $4.4 billion, QVC is not just the largest shopping network, it's the second-largest television network of any kind.

A panel of federal appeals court judges in Philadelphia agrees with public advocacy groups and imposes a stay of the FCC's new broadcast-ownership rules scheduled to take effect on September 4. The stay will remain in effect until lawsuits to overturn the new rules are settled. The Philadelphia court then decides to retain the case attacking the new FCC broadcast-ownership limits rather than granting broadcast networks' pleas to transfer it to a court in Washington.

The Bush White House brokered a surprise compromise over media deregulation by agreeing to permanently set the national TV station ownership cap at 39 percent of U.S. television households. That percentage allows Fox and Viacom to retain all their stations. Wielding a threat to veto a catch-all spending bill over a provision that would roll the limit back to 35 percent, aides to President Bush persuaded Senate Appropriations Committee Chairman Ted Stevens (R-Alaska) to back down from the tighter limit. Stevens's action came less than a week after he had persuaded reluctant House leadership to go along with the old level. The compromise splits the difference between the 45 percent limit set by the FCC in June and the previous 35 percent level that rank-and-file lawmakers on both sides of Capitol Hill had been pushing to reinstate. The agreement is part of a spending bill that funds the FCC and many other agencies in fiscal 2004.

After a 36-year run, the California Cable Telecommunications Association's annual Western Cable Show makes its curtain call in December, citing consolidation in the cable industry and economic pressure.

Cable network launches include Spike TV.

2004

NBC gets Federal Trade Commission approval for its $14 billion purchase of Vivendi Universal Entertainment, its last regulatory hurdle. The FCC was not required to review the deal because it involved no station licenses. Among other things, NBC acquires USA Network and the Sci Fi Network. The new entity will be called NBC Universal.

Congress and the FCC react swiftly to the "wardrobe malfunction" that bared Janet Jackson's breast during the MTV-produced half-time entertainment in CBS TV's Super Bowl broadcast. Congress passes legislation that dramatically increases the limits on FCC fines for indecency violations.

Congress and the FCC take the first steps toward punishing stations that air "excessively" violent shows. Under orders from leaders of the House Commerce Committee, FCC Chairman Michael Powell by the end of the year will start investigating whether the commission should restrict onscreen violence. Cable can't count on immunity either. Growing ranks of lawmakers say cable must do more to make sure that children aren't exposed to potentially traumatizing content.

A panel of federal appeals court judges in Philadelphia concludes that the FCC wasn't justified in its June 2003 decision relaxing ownership restrictions in the newspaper, television, and radio industries. The rules, which were blocked from taking effect in September 2003, have been sent back to the FCC for a rewrite. A frustrated FCC Chairman Michael Powell criticized the decision, claiming that it created a "clouded and confused state of media law" and makes it nearly impossible for his agency to design standards for ownership limits.

Cable network launches include TV One.

2005

George W. Bush, on January 20, becomes the first president to have his inauguration covered in HDTV. ABC News deploys 36 HD cameras and four HD production vehicles throughout the parade route to give viewers an unparalleled view of American history.

President Bush chooses FCC commissioner Kevin Martin to be chairman of the agency.

In a King Solomon-like answer to critics that Viacom has become too big to grow, Chairman Sumner Redstone proposes cleaving it in half. The resulting companies would be Viacom and CBS Corp.

Longtime ABC World News Tonight anchor Peter Jennings, 67, died August 7 at his home in Manhattan, four months after being diagnosed with lung cancer.

Following Hurricane Katrina, local TV broadcasters and cable operators in the Gulf Coast area say rebuilding their stations and plants could take several months.

The Disney-ABC Television Group announces that three ABC shows, Desperate Housewives, Lost, and Night Stalker will be available for purchase from the Apple iTunes store for $1.99 an episode. The announcement prompts the other big media companies to begin "repurposing" primetime programming on the Internet. It's soon clear that the Web is the next big TV medium.

2006
In January, PBS dips into the ranks of its member stations and selects Paula Kerger of WNET New York to succeed Pat Mitchell as president of the noncommercial "network."

After battling to be the broadcasting fifth network for 11 years and mostly lackluster years, WB and UPN stun the broadcasting industry in January by deciding to merger into The CW. To fill the vacuum created by the loss of one network, Fox creates My Network Television, a mini network built around telenovelas, a popular Spanish TV format. Both CW and MNT debut in September.

Two years after the Janet Jackson "wardrobe malfunction" at the Super Bowl, broadcasters are still feeling the fallout. In March, the FCC issues another round of fines topped by $3.6 million against CBS affiliates for airing an episode of Without a Trace. A few months later, Congress increases ten-fold the base indecency fine to $325,000 per incident.

Ending a year of speculation, CBS announces in March the hiring of Katie Couric, the popular co-host of NBC's Today Show, to anchor the CBS Evening News. With new set and features, she begins her reign as anchor on September 5. Longtime anchor Dan Rather resigned from the job in March 2005 after botching a 60 Minutes story critical of President Bush's military record. CBS News's Washington Bureau Chief Bob Schieffer anchored the news during the Rather-Couric interregnum.

2007
On January 29 ION Media Networks Inc. changed the name of its TV network from "I" to ION Television.

In 2007 The Sopranos ended an eight-year run on HBO. There was much speculation about the final moments of the finale when the show faded to black.

After years of acquiring stations, on April 20 Clear Channel Communications Inc. entered into an agreement to sell its Television Group. And, as of June 30, the company had entered into definitive agreements to sell 389 radio stations in 77 markets.

2008
On July 25 the FCC approved the merger of Sirius Satellite Radio Inc. and XM Satellite Holdings Inc. On July 29 the two companies announced they had completed their merger, and that the new company would change its name to Sirius XM Radio Inc.

The FCC announced that Wilmington, NC, would be the first market to test the transition to digital television before the nationwide transition to DTV on February 17, 2009. The commercial broadcasters serving the Wilmington market agreed to turn off their analog signals at noon on September 8, 2008. Beginning at noon on September 8 WWAY (ABC), WECT (NBC), WSFX-TV (Fox), WILM-LP (CBS) and W51CW (Trinity Broadcasting) planned to broadcast only digital signals to their viewers in the five North Carolina counties that comprise the Wilmington, NC, market.

2009
The nationwide transition from analog to digital television, scheduled for February 17, 2009, was delayed until June 12, 2009 to allow more time to get ready for the digital transition. The National Telecommunications and Information Administration (NTIA) provided consumers with a TV converter box coupon program to help the consumers make the switch to digital TV. Both the FCC and TV stations across the U.S. made a mighty effort to inform consumers about, and make, the switch. Some TV stations made the switch to digital television early. Notably Hawaii's full-power stations made the switch to digital TV on January 15, 2009. Finally on June 12, 2009 full-power TV stations all over the U.S. became all-digital, when the FCC reported 971 full-power TV stations made the switch.

Later in June 2009 the FCC adopted an order allowing AM radio stations to use FB radio translators to increase their reach within a local community. The FCC action gave AM stations an opportunity to overcome technical problems in their coverage areas.

Walter Cronkite, anchor and managing editor of the CBS Evening News from 1962 to 1981, died on July 17, 2009. A memorial service was held on September 9 at Lincoln Center in New York.

2010
Apple, Inc. introduced the iPad, the first mobile computer tablet to achieve worldwide commercial success. Many manufacturers followed with their own tablet.

2011
"The Oprah Winfrey Show" ends after 25 seasons, and Oprah Winfrey launches OWN - Oprah Winfrey Network.

Satellite TV provider DISH Network acquires Blockbuster LLC.

Axel Technologies releases Fuugo Video 1.0, which aggregates online video content from multiple sources into a single application, and Fuugo TV, a broadcast digital TV application for computer tablets, smart phones, and other portable devices.

Steve Jobs, influential head of Apple, Inc., dies.

2012
Satellite TV provider DISH Network announces its remote access application, which provides the capability of streaming on-demand movies and TV shows to the iPad.

2013
Netflix earns 14 Primetime Emmy Award nominations, becoming the first online-only web television network to be recognized by the Emmys. David Fincher wins Outstanding Directing for a Drama Series for Netflix's *House of Cards.*

2014
President Obama demands that the FCC enforces strong rules in order to defend net neutrality, the principle that Internet service providers treat all internet data equally and not discriminate based on users, content, sites, platforms, applications, types of attached equipment, or modes of communication.

The debate as to whether or not Internet service providers should be permitted to charge certain net organizations for "data-heavy" services (such as Netflix) continues. Net neutrality advocates argue that doing so would sabotage the ideology of a free and equal internet for everyone.
The FCC delayed a decision until 2015 of how it manages the internet.

2015
In January 2015, the FCC concludes its wireless spectrum auction with a total of $44.9 billion raised, over twice as much as the previous 2008 auction. The auction successfully sells spectrum of frequencies between 1700 and 2100 megahertz to wireless carriers.

The FCC passes a net neutrality regulation in a 3-2 vote. Supported by President Obama, the regulation prevents the favoritism of certain technology companies and Internet traffic based on payments made to broadband providers. According to the FCC, net neutrality will ensure fair treatment of all Internet data.

Microsoft launches a Preview Program that enables test users to view live television channels through Xbox One video game consoles.

2016
Authorized by Congress in 2012, the FCC launches the first incentive auction in March 2016. The goal of this two-stage initiative is to encourage broadcasters to offer some of their spectrum usage rights for sale so that they can be resold and relicensed to wireless bidders. In exchange, the sellers are awarded a portion of the funds. The FCC's aim in this undertaking is to keep up with the demand for wireless service, and offer a continued investment in maintaining the television broadcast industry.

The viewership of the first presidential debate between Hillary Clinton and Donald Trump reaches historic highs, with a record 84 million viewers tuning in to watch on television and live-stream. The viewership numbers beat out the Reagan-Carter debate of 1980, which pulled in 80.6 million views. The debate was broadcast across 11 channels, as well as social media sites including Facebook, Twitter, and YouTube. NBC drew in the highest number of watchers among major networks, beating out ABC, CBS, FOX, CNN, and MSNBC.

The course of the 2016 presidential election ushers in a drastic rise in "fake news," with sensationalist headlines being generated and going viral before they can be fact-checked. This phenomenon is far-reaching, impacting not only the hyper-partisan public, but also major news networks like CNN, who air some of these headlines as news. The trend spurs questions into the credibility and reliability of the media and journalism.

PEW Research, in its 2016 State of the News Media report, observes that despite the rise of digital developments, cable and network television continue to grow in revenue. Digital does continue to threaten legacy media, however, as newspapers battle with the rising demand for video content as opposed to print content.

Facebook leads an initiative to fact-check news materials in order to reduce "fake news" content. This was attempted by restricting and flagging stories that lacked sources or which failed verification tests.

2017
ABC makes plans to re-launch Fact Check, a joint venture with MIT's School for Communications and Media, which seeks to research claims made by various groups and individuals in public debates. The aim of the venture is to reduce the spread of misinformation through TV ads, debates, speeches, interviews and news releases.

The FCC issues a Notice of Proposed Rulemaking to authorize broadcasters to utilize ATSC 3.0, the second generation of digital television broadcast standard enabling television stations to improve features such as ultra-high-definition content, datacasting and targeted advertising. This decision followed a petition by America's Public Television Stations and the Communications Technology Association.

YouTube TV is launched, offering live streaming of programs from five major broadcast networks (ABC, CBS, NBC, Fox and The CW) as well as approximately 40 cable channels owned by NBCUniversal, CBS Corporation, 21st Century Fox and The Walt Disney Company.

2018
After 20 years on NBC's *The Today Show,* co-anchor Matt Lauer is dismissed in November 2017 following allegations of workplace sexual harassment. Hoda Kotb takes his place as co-anchor alongside Savannah Guthrie in the interim and is permanently appointed to the position in January 2018. For the first time, two women are the leading anchors of *The Today Show*. This is one the more high profile reckonings of the #MeToo Movement that gained momentum on social media in October 2017.

The FCC eliminates the Main Studio Rule in January 2018. AM, FM, and television broadcast stations will no longer be required to maintain a main studio located in or near its community of license. Additionally, main studios will no longer be required to have full-time management and staff present during business hours and program origination capability.

SiriusXM acquires music streaming service Pandora Media in an all-stock transaction valued at $3.5 billion to create the world's largest audio entertainment company.

2019
The United States Department of Justice orders Way Broadcasting (DBA RM Broadcasting), the owner and operator of Russian News WZHF Capitol Heights, Maryland/Washington, D.C., to register the station as a foreign agent, due to its affiliation with Radio Sputnik, of which it has a leasing arrangement with operator Rossiya Segodnya, the Russian Federation government-owned news agency that operates the service. The U.S. government alleges that Rossiya Segodnya "has complete control over the contents" of RM's station through a "Services Agreement" and is disseminating information to U.S. audiences "to advance Russian interests." The counterclaim also points to the way that RM is obligated to perform maintenance work on broadcasting equipment so that Sputnik content reaches as broad an audience as possible. Both parties dispute these allegations.

Sirius XM adds 100+ new "Xtra Channels" to its platforms and devices, utilizing the same setup as its recently acquired Pandora model.

The Simpsons is renewed for its thirty-first and thirty-second seasons, bringing the series to 713 episodes, making it the first American primetime scripted series to surpass 700 episodes.

The Walt Disney Company's purchase of 21st Century Fox consummates. This is the second spin-off of assets from the former News Corporation in five years; the company spun off its print assets in 2014. What is now Fox Corporation now only holds the Fox Broadcasting Company, its owned-and-operated station group, MyNetworkTV, and its news and national sports bureaus.

2020
Together At Home benefit concert for COVID-19 aid, organized by Global Citizen and curated by Lady Gaga, is streamed worldwide in April 2020. The special is broadcast in syndication on CBS, ABC, NBC and other global networks, and on several platforms including Apple Music, Facebook, Prime Video, Twitch, Twitter, and YouTube. The special raises nearly $128 million USD for COVID-19 health care workers.

HBO Max joins the ever-expanding pool of online streaming services in May 2020. As of December 1, the platform has 12.6 million subscribers.

November 28, 2020 marks the 95th anniversary of the "Grand Ole Opry," the longest-running radio broadcast in the United States and the second longest-running broadcast in the world. As of December 2020, a total of 4,954 episodes have aired. The program broadcasts out of Nashville, Tennessee.

The FCC launches a $20 billion Rural Digital Opportunity Fund to expand the rural broadband deployment in order to bridge the gap of the digital divide. It is the FCC's largest investment to date on the issue. The Fund aims to connect more rural homes and small businesses to high-speed broadband networks.

2021
Nielsen launches Gracenote Inclusion Analytics, a solution that combines entertainment metadata with audience measurement data to assess diversity in broadcast, cable, and SVOD television programs. The solution is designed to enable more inclusive content by providing insight into representation of gender, race, ethnicity, and sexual orientation in programming, and the degree to which this representation reflects viewing audiences.

The FCC opens the Emergency Broadband Benefit, a temporary Internet subsidy program for households struggling to pay for broadband service during the COVID-19 pandemic. As of September 2021, over six million households are enrolled in the program.

AT&T announces a $43 billion deal to merge its media subsidiary WarnerMedia with Discovery, Inc. The merger will combine the assets of WarnerMedia (including HBO Max, HBO, Warner Bros., CNN, Cartoon Network, and TBS) and Discovery (including Discovery+, Discovery Channel, Food Network, HGTV, and TLC) into an independent, publicly-traded media company. The new company, to be named Warner Bros. Discovery, will create a global streaming platform featuring original content and programming from the WarnerMedia and Discovery portfolios.

Amazon agrees to acquire film studio MGM for $8.45 billion in a move to enhance its Prime Video streaming service and its Amazon Studios film and television production division.

As a result of the United States' transition from analog to exclusively digital television, the FCC directs the last remaining "Franken-FMs"—low-power analog television stations operating as radio stations on 87.7 FM—to cease operations until digital conversions are completed. The FCC grants five of these stations special temporary authority to retain their analog radio signals, but also requires them to have a fully independent digital TV signal.

The FCC and Its Regulatory Authority

Revised September 2021

The Communications Act. The FCC was created by Congress in the Communications Act for the purpose of "regulating interstate and foreign commerce in communication by wire and radio so as to make available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex, a rapid, efficient, Nation-wide, and world-wide wire and radio communications service . . . ." (In this context, the word "radio" covers both broadcast radio and television.) The Communications Act authorizes the Commission to "make such regulations not inconsistent with law as it may deem necessary to prevent interference between stations and to carry out the provisions of the Act." It directs us to base our broadcast licensing decisions on whether those actions will serve the public interest, convenience, and necessity.

How the FCC Adopts Rules. As is the case with most other federal agencies, the FCC generally cannot adopt or change rules without first describing or publishing the proposed rules and asking the public for comment. We release a document called a Notice of Proposed Rule Making (NPRM) in which we explain the new rules – or rule changes being proposed – and establish a filing deadline for the public to comment. All FCC Notices are included in the Commission's Daily Digest and posted on our website at https://www.fcc.gov/proceedings-actions/daily-digest. After we hear from the public and consider all comments received, we generally have several options. We can:

- Adopt some or all of the proposed rules;
- Adopt a modified version of some or all of the proposed rules;
- Ask for public comment on additional issues relating to the proposals; or
- End the rulemaking proceeding without adopting any rules at all.

You can find information about how to file comments in our rulemaking proceedings by selecting https://www.fcc.gov/consumers/guides/how-comment. In addition to adopting rules, we establish broadcast regulatory policies through the individual cases that we decide, such as those involving license renewals, station sales, and complaints about violations of Commission rules.

The FCC's Structure and the Media Bureau. The FCC has five Commissioners, each of whom is appointed by the President and confirmed by the Senate. Serving under the Commissioners are a number of Offices and operating Bureaus. One of those is the Media Bureau, which has day-to-day responsibility for developing, recommending, and administering the rules governing the media, including radio and television stations. The FCC's broadcast rules are contained in Title 47 of the Code of Federal Regulations (CFR), Parts 73 (broadcast, including AM, FM, LPFM, and TV) and 74 (auxiliary broadcast, including low power TV and translator stations). Our procedural rules can be found in Title 47 CFR, Part 1. All of the Title 47 rules can be found on the Government Printing Office's website, https://www.ecfr.gov/current/title-47. Additional information about the Commission's Offices and Bureaus, including their respective functions, can be found on our website by selecting "Browse by Bureaus and Offices" at https://www.fcc.gov/.

FCC Regulation of Broadcast Radio and Television. The FCC allocates a portion of the broadcast spectrum to new broadcast stations based upon both the relative needs of various communities for additional broadcast outlets, and specified engineering standards designed to prevent interference among stations and other communications users. Whenever we review an application – whether to build a new station, modify or renew the license of an existing station or sell a station – we must determine if granting the application would serve the public interest. As mentioned earlier, we expect station licensees to be aware of the important problems and issues facing their local communities and to foster public understanding by presenting programming that relates to those local issues. Broadcasters – not the FCC or any other government agency – are responsible for selecting the material they air. The First Amendment and the Communications Act expressly prohibit the Commission from censoring broadcast matter. Our role in overseeing program content is very limited. We license only individual broadcast stations. We do not license TV or radio networks (such as CBS, NBC, ABC or Fox) or other organizations that stations have relationships with, such as PBS or NPR, except if those entities are also station licensees. In general, we also do not regulate information provided over the Internet, nor do we intervene in private disputes involving broadcast stations or their licensees. Instead, we usually defer to the parties, courts, or other agencies to resolve these disputes.

The Licensing of TV and Radio Stations

Commercial and Noncommercial Educational Stations. The FCC licenses FM radio and full power TV stations as either commercial or noncommercial educational (NCE). (Most AM radio stations are licensed as commercial facilities.) Class A television, low power television and television translator stations are neither designated commercial or NCE. Commercial stations usually support themselves through the sale of advertising. In contrast, NCE stations generally meet their operating expenses with contributions received from listeners and viewers, and also may receive government funding. In addition, NCE stations may receive contributions from for-profit entities and are permitted to acknowledge these contributions or underwriting donations with announcements naming and generally describing the contributing party or donor. However, NCE stations cannot broadcast commercials or other promotional announcements on behalf of for-profit entities. The limitations on NCE stations are discussed further in this Manual.

Applications to Build New Stations: Length of the License Period. Before a party can build a new TV or radio station, it first must apply to the FCC for a construction permit. The applicant must demonstrate that it is qualified to construct and operate the station as specified in its application and that its proposed facility will not cause objectionable interference to any other station. Once its application has been granted, the applicant is issued a construction permit that authorizes it to build the station within a specified period of time, usually three years. After the applicant (now considered a "permittee") builds the station, it must file a license application in which it certifies that it has constructed the station consistent with the technical and other terms specified in its construction permit. Once the FCC grants the application, the permittee becomes a "licensee," which authorizes the new licensee to operate for a stated period of time, up to eight years. At the close of this period, the licensee must renew its station's license.

Applications for License Renewal. Stations must renew their licenses before they expire. Renewal applications are due on a staggered basis depending upon the state in which the station is licensed. Before we can renew a station's license, we must first determine whether, during the preceding license term, the licensee has served the public interest, has not committed any serious violations of the Communications Act or the FCC's rules, and has not committed other violations which, taken together, would constitute a pattern of abuse. To assist us in this evaluative process, a station licensee must file a renewal application (FCC Form 303-S), to tell us whether:

- It has sent us certain required reports;
- It or its owners have, or have had, any interest in a broadcast application in an FCC proceeding in which character issues were resolved adversely to the applicant or were left unresolved, or were raised in connection with a pending application;
- Its ownership is consistent with the Communications Act's restrictions on licensees;
- Interests are held by foreign governments, foreign corporations, and non-U.S. citizens;
- There has been an adverse finding or adverse final action against it or its owners by a court or administrative body in a civil or criminal proceeding involving a felony, mass media-related antitrust or unfair competition law, the making of fraudulent statements to a governmental unit, or discrimination;
- There were any adjudicated violations of the Communications Act or the Commission's rules during the current license term;
- The licensee or its owners have been denied federal benefit due to drug law violations;
- Its station operation complies with the Commission's radiofrequency (RF) radio exposure standards;
- It has placed and maintained certain specified materials in its public inspection file in a timely manner;
- It has discontinued station operations for more than 12 consecutive months during the preceding license term and is currently broadcasting programming;
- It has adhered to its minimum operating schedule;

- Its advertising sales agreements discriminate on the basis of race or ethnicity and whether all such agreements held by the licensee contain nondiscrimination clauses;
- It has filed Form 396, Broadcast Equal Employment Opportunity Program Report; and
- In the case of an application for renewal of a television license, the station has complied with the limitations on commercial matter aired during children's programming and filed the necessary Children's Television Programming Reports (FCC Form 2100, Schedule H).

Digital Television. All full-power television stations have operated in digital mode since 2009. All Class A television stations began operating digitally in 2015. Low power television and television translator stations were required to complete their transition to digital by July 31, 2021.

Digital Radio. The FCC also approved digital operation for AM and FM radio broadcast stations (HD radio). As with DTV, digital radio substantially improves the quality of the radio signal and allows a station to offer multicasting over several programming streams, as well as certain enhanced services. Unlike the mandatory digital transition deadline for television stations, radio stations can continue to operate in analog and have discretion whether also to transmit in digital and, if so, when to begin operating digitally. To receive the digital signals of stations that choose to operate in digital, consumers will have to purchase new receivers.

Because digital radio technology allows a radio station to transmit simultaneously in both analog and digital, listeners can use their current radios to receive the analog signals of radio stations that transmit both analog and digital signals. Receivers are being marketed that incorporate both modes of reception, with the ability to automatically switch to the analog signal if the digital signal cannot be detected or is lost by the receiver. For additional information about digital radio, see https://www.fcc.gov/media/radio/digital-radio.

Public Participation in the Licensing Process

Renewal Applications. You can submit a protest against a station's license renewal application. Before its expiration, each station licensee must broadcast a series of announcements stating when its license expires, the filing date for the renewal application, the date by which formal petitions against the renewal must be filed, and how to obtain a copy of the application. Petitions to deny the application must be filed by the first day of the last full calendar month before the expiring license term. (For example, if the license expires on December 1, we must receive any petition at our Washington, D.C. headquarters by the end of the day on November 1.) Please note that a complaint submitted through the "File a Consumer Complaint" link on the FCC's website will NOT be treated as a petition to deny or informal objection against a station's license renewal application. Rather, a petition to deny or informal objection against a station's license renewal application must either be filed electronically in the FCC's electronic database for that application, or by mail.

Broadcast licenses generally expire on a staggered basis, by state, with most radio licenses expiring between October 1, 2019, and August 1, 2022, and most television licenses expiring between October 1, 2020, and August 1, 2023, one year after the radio licenses in the same state. Before you file a petition to deny an application, you should check our rules and policies to make sure that your petition complies with our procedural requirements. For a more complete description of these procedures and requirements, see https://www.fcc.gov/media/television/broadcast-television-license-renewal for television for television, and https:www.fcc.gov/media/radio/broadcast-radio-license-renewal for radio. Alternatively, you can also file an informal objection, which has fewer procedural requirements, often takes the form of a simple letter, and will be considered if received at any time before we either grant or deny the application. Instructions for filing informal objections can be found at https://www.fcc.gov/consumers/guides/filing-informal-complaint.

Other Types of Applications. You can also participate in the application process by filing a petition to deny when someone applies for a new station, when a station is being sold (technically called an "assignment" of the licensee), when its licensee is undergoing a major transfer of stock or other ownership or control (technically called a "transfer of control"), or the station proposes major facility changes. When filing these types of applications, the applicant is required to publish a series of notices, generally in a local newspaper, containing information similar to that noted above regarding renewal applications. Once the application is received, the FCC will issue a Public Notice and begin a 30-day period during which petitions to deny the application can be filed. (All FCC Public Notices are included in the Commission's Daily Digest and are posted at https://www.fcc.gov/proceedings-actions/daily-digest.) The Media Bureau's database will also indicate the date the application appeared on Public Notice. As with renewal applications, you can also file an informal objection to these types of applications, or any other application, at any time before we either grant or deny the application. Again, please note that a complaint submitted through the "File a Consumer Complaint" link on the FCC's website will NOT be treated as a petition to deny or informal objection against a station's pending application. Rather a petition to deny or informal objection against a broadcast station's pending application must either be filed electronically in the Media Bureau's database for that application, or filed by mail.

Broadcast Programming: Basic Law and Policy

The FCC and Freedom of Speech. The First Amendment, as well as Section 326 of the Communications Act, prohibits the Commission from censoring broadcast material and from interfering with freedom of expression in broadcasting. The Constitution's protection of free speech includes programming that may be objectionable to many viewers or listeners. Therefore, the FCC cannot prevent the broadcast of any particular point of view. In this regard, the Commission has observed that "the public interest is best served by permitting free expression of views." However, the right to broadcast material is not absolute. There are some restrictions on the material that a licensee can broadcast. These restrictions are discussed below.

Licensee Discretion. Because the Commission cannot dictate to licensees what programming they air, each individual radio and TV station licensee generally has discretion to select what its station broadcasts and to otherwise determine how it can best serve its community of license. Licensees are responsible for selecting their entertainment programming, as well as programs concerning local issues, news, public affairs, religion, sports events, and other subjects. As discussed further in this Manual, broadcast licensees must periodically make available detailed information about the programming they air to meet the needs and problems of their communities, which can be found in each station's public file. They also decide how their programs will be structured and whether to edit or reschedule material for broadcasting. In light of the First Amendment and Section 326 of the Communications Act, we do not substitute our judgment for that of the licensee, nor do we advise stations on artistic standards, format, grammar, or the quality of their programming. Licensees also have broad discretion regarding commercials, with the exception of those for political candidates during an election, and the limitations on advertisements aired during children's programming.

Criticism, Ridicule, and Humor Concerning Individuals, Groups, and Institutions. The First Amendment's guarantee of freedom of speech similarly protects programming that stereotypes or may otherwise offend people with regard to their religion, race, national background, gender, or other characteristics. It also protects broadcasts that criticize or ridicule established customs and institutions, including the government and its officials. The Commission recognizes that, under our Constitution, people must be free to say things that the majority may abhor, not only what most people may find tolerable or congenial. However, if you are offended by a station's programming, we urge you to make your concerns known in writing to the station licensee.

Programming Access. In light of their discretion to formulate their programming, station licensees are not required to broadcast everything that is offered or otherwise suggested to them. Except as required by the Communications Act, including the use of stations by candidates for public office, licensees have no obligation to allow any particular person or group to participate in a broadcast or to present that person or group's remarks.

Broadcast Programming: Law and Policy on Specific Kinds of Programming

Broadcast Journalism

Introduction. As noted above, in light of the fundamental importance of the free flow of information to our democracy, the First Amendment and the Communications Act bar the FCC from telling station licensees how to select material for news programs or prohibiting the broadcast of an opinion on any subject. We also do not review anyone's qualifications to gather, edit, announce, or comment on the news. These decisions are the station licensee's responsibility. Nevertheless, there are two issues related to broadcast journalism that are subject to Commission regulation: hoaxes and news distortion.

Hoaxes. The broadcast by a station of false information concerning a crime or catastrophe violates the FCC's rules if:

- The station licensee knew that the information was false;
- Broadcasting the false information directly causes substantial public harm; and
- It was foreseeable that broadcasting the false information would cause such harm.

In this context, a "crime" is an act or omission that makes the offender subject to criminal punishment by law, and a "catastrophe" is a disaster or an imminent disaster involving violent or sudden events affecting the public. The broadcast must cause direct and actual damage to property or to the health or safety of the general public, or diversion of law enforcement or other public health and safety authorities from their duties, and the public harm must begin immediately. If a station airs a disclaimer before the broadcast that clearly characterizes the program as fiction and the disclaimer is presented in a reasonable manner under the circumstances, the program is presumed not to pose foreseeable public harm.

News Distortion. The Commission often receives complaints concerning broadcast journalism, such as allegations that stations have aired inaccurate or one-sided news reports or comments, covered stories inadequately, or overly dramatized the events that they cover. For the reasons noted previously, the Commission generally will not intervene in these cases because it would be inconsistent with the First Amendment to replace the journalistic judgment of licensees with our own. However, as public trustees, broadcast licensees may not intentionally distort the news. The FCC has stated that "rigging or slanting the news is a most heinous act against the public interest." The Commission will investigate a station for news distortion if it receives documented evidence of rigging or slanting, such as testimony or other documentation, from individuals with direct personal knowledge that a licensee or its management engaged in the intentional falsification of the news. Of particular concern would be evidence of the direction to employees from station management to falsify the news. However, absent such a compelling showing, the Commission will not intervene.

Political Broadcasting: Candidates for Public Office. In recognition of the vital role that broadcasting plays in the electoral process, the Communications Act and the Commission's rules impose specific obligations on broadcasters regarding political advertising

- **Reasonable Access.** Section 312(a)(7) of the Communications Act and Section 73.1943 of the Commission's rules require commercial broadcast stations to provide reasonable access to candidates for federal elective office. This means that commercial television and radio stations must allow legally qualified federal candidates to purchase reasonable amounts of broadcast time throughout their campaigns in all dayparts (i.e., in all parts of the broadcast day), including television prime time and radio drive time. The right bestowed upon federal candidates to purchase broadcast time is not absolute. Stations may take into account certain factors in determining whether a request to purchase broadcast time is reasonable. Reasonable access does not extend to state and local candidates, and stations have discretion whether to accept or refuse requests for the purchase of broadcast time by candidates running in state and local elections.

- **Equal Opportunities.** Section 315(a) of the Communications Act and Section 73.1941 of the Commission's rules require that if a station allows a legally qualified candidate for any public office to use its facilities (i.e., make a positive identifiable appearance on the air for at least four seconds), it must give equal opportunities to all other candidates for that office to also use the station. Equal opportunities apply to all commercial and non-commercial stations, as well as all legally qualified candidates for public office (federal, state, and local) throughout their campaigns. Stations are prohibited from censoring ads that are paid for or sponsored by legally qualified candidates and their authorized organizations. As a consequence, stations are protected from liability if these ads contain defamatory material. Certain news-related programs are exempt from equal opportunities. Therefore, an appearance by a legally qualified candidate on a bona fide newscast, regularly scheduled bona fide news interview program, certain documentaries, and on–the–spot coverage of a bona fide news event (including debates and political conventions) does not trigger equal opportunities for opposing candidates.

- **Lowest Unit Charge.** Section 315(b) of the Communications Act and Section 73.1942 of the Commission's rules require that during the 45-days preceding a primary or primary runoff election and during the 60-days preceding a general or special election, stations cannot charge legally qualified candidates or their authorized organizations more than the lowest unit charge for the same class, same amount of time, and same daypart as they charge their most favored commercial customers. Therefore, during these narrow windows, candidates are entitled to the benefit of all volume discounts even if they purchase a single advertisement. At all other times during political campaigns (i.e., outside of the windows), stations can charge candidates no more than they charge commercial advertisers for comparable use of their facilities.

- **Online Political Files.** Section 315(e) of the Communications Act and Section 73.1943 of the Commission's rules require all stations to maintain online political files. Information must be uploaded to https://publicfiles.fcc.gov as soon as possible when a station receives a request for the purchase of airtime that is made by – or on behalf of – any legally qualified candidate (federal, state or local) or is made by an issue advertiser and the ad communicates a message relating to any political matter of national importance. In addition, records of all free time must be placed in the political file. The information that must be uploaded about requests for the purchase of broadcast time include whether the request is accepted or rejected, the rate charged, the date/time the ad ran or will run, the class of time purchased, the name of the candidate, the office being sought, the issues that are referenced, the name of the person or entity purchasing the time, and a list of executives of the sponsoring entity.

- **Sponsorship Identification.** Section 317 of the Communications Act and Section 73.1212 of the Commission's rules require stations to ensure that political ads have appropriate sponsorship identification. Therefore, all ads must identify the entity that is paying for or sponsoring the advertisement.

For additional information about the political rules, see https://www.fcc.gov/media/policy/political-programming.

Objectionable Programming

Programming Inciting "Imminent Lawless Action." The Supreme Court has ruled that the government can curtail speech if it is both: (1) intended to incite or produce "imminent lawless action;" and (2) likely to "incite or produce such action." Even when this legal test is met, any review that might lead to a curtailment of speech is generally performed by the appropriate criminal law enforcement authorities, not by the FCC.

Obscene, Indecent, or Profane Programming. Although, for the reasons discussed earlier, the Commission is generally prohibited from regulating broadcast content, the courts have held that the FCC's regulation of obscene and indecent programming is constitutional because of society's interest in protecting children from potentially harmful programming and supporting parents' ability to determine the programming their children will be exposed to at home.

Obscene Material. Obscene material is not protected by the First Amendment and cannot be broadcast at any time. To be obscene, the material must have all of the following three characteristics:

- An average person, applying contemporary community standards, must find that the material, as a whole, appeals to the prurient interest;
- The material must depict or describe, in a patently offensive way, sexual conduct specifically defined by applicable law; and
- The material, taken as a whole, must lack serious literary, artistic, political, or scientific value.

Indecent Material. Indecent material is protected by the First Amendment, so its broadcast cannot constitutionally be prohibited at all times. However, the courts have upheld Congress' prohibition of the broadcast of indecent material during times of the day when there is a reasonable risk that children may be in the audience, which the Commission has determined to be between the hours of 6 a.m. and 10 p.m. Indecent programming is defined as "language or material that, in context, depicts or describes, in terms patently offensive as measured by contemporary community standards for the broadcast medium, sexual or excretory organs or activities." Broadcasts that fall within this definition and are aired between 6 a.m. and 10 p.m. may be subject to enforcement action by the FCC.

Profane Material. Profane material also is protected by the First Amendment so its broadcast cannot be outlawed entirely. The Commission has defined this program matter to include language that is both "so grossly offensive to members of the public who actually hear it as to amount to a nuisance" and is sexual or excretory in nature or derived from such terms. This material may be the subject of possible Commission enforcement action if it is broadcast within the same time period applicable to indecent programming: between 6 a.m. and 10 p.m.

How to File an Obscenity, Indecency, or Profanity Complaint. In order to allow our staff to make a determination of whether complained-of material is actionable, the Commission requires that complainants provide certain information, including:

(1) the date and time of the alleged broadcast; (2) the call sign, channel or frequency of the station involved; and (3) the details of what was actually said (or depicted) during the alleged indecent, profane, or obscene broadcast. Submission of an audio or video tape, CD, DVD or other recording or transcript of the complained-of material is not required but is helpful, as is the specific name of the program, the on-air personality, song, or film, and the city and state in which the complainant saw or heard the broadcast.

The fastest and easiest way to file a complaint on this or any other broadcast issue is to go to the FCC's complaint page at https://consumercomplaints.fcc.gov/hc/en-us.

Violent Programming. An issue of concern to the public over the years has been violent television programming and the negative impact this broadcast material may have on children. At the request of 39 members of the U.S. House of Representatives, the FCC conducted a proceeding asking the public's comment on violent programming. In April 2007, the Commission delivered a Report to Congress recommending that the industry voluntarily commit to reducing the amount of this programming viewed by children.

The V-Chip and TV Program Ratings. In light of the widespread concern about obscene, indecent, profane, violent, or otherwise objectionable programming, in 1996 Congress passed a law to require TV sets with screens 13 inches or larger to be equipped with a "V-Chip" – a device that allows parents to program their sets to block TV programming that carries a certain rating. Since 2000, all sets manufactured with screens 13 inches or larger must contain the V-Chip technology. This technology, which must be activated by parents, works in conjunction with a voluntary television rating system created and administered by the television industry and others. It enables parents to identify programming containing sexual, violent, or other content that they believe may be harmful to their children. All the major broadcast networks and most of the major cable networks encode their programming with this ratings information to work with the V-Chip. However, some programming, such as news and sporting events, and unedited movies aired on premium cable channels, are not rated. In 2004, the FCC expanded the V-Chip requirement to apply also to devices that do not have a display screen but are used with a TV set, such as a VCR.

More information about this ratings program, including a description of each ratings category, can be found at https://www.fcc.gov/consumers/guides/v-chip-putting-restrictions-what-your-children-watch.

Other Broadcasting Content Regulation

Station Identification. Stations must air identification announcements when they sign on and off for the day. They also must broadcast these announcements every hour, as close to the start of the hour as possible, at a natural programming break. TV stations make these announcements on-screen or by voice only. Official station identification includes the station's call letters, followed by the community specified in its license as the station's location. Between the call letters and its community, the station may insert the name of the licensee, the station's channel number, and/or its frequency. It may also include any additional community or communities, as long as it first names the community to which it is licensed by the FCC. TV stations also may identify their digital multicast programming streams separately if they want, and, if so, must follow the format described in the FCC's rules.

Children's Television Programming. The Children's Television Act of 1990 (CTA) imposes two requirements on television broadcasters relating to children's video programming:

- Commercial television broadcast licensees must limit the amount of commercial matter that may be aired during children's programs to not more than 10.5 minutes per hour on weekends and not more than 12 minutes per hour on weekdays. The Commission has determined that these children's programming commercial limits apply to programs originally produced and broadcast for an audience of children 12 years old and under; and).

- Through its review of television broadcast license renewal applications, the Commission must consider whether television licensees have served "the educational and informational needs of children through the licensee's overall programming, including programming specifically designed to serve such needs."

Commercial Limits. As mentioned above, the Commission's rules implementing the CTA's limits on commercial matter in children's programming require commercial TV broadcasters to limit the amount of commercial matter in children's programs to no more than 10.5 minutes/hour on weekends and 12 minutes/hour on weekdays. The Commission applies these limits to all video programming, free or pay, directed to children 12 and under. For purposes of the commercial limits, commercial matter is airtime sold for purposes of selling a product or service and promotions of television programs or video programming services other than children's or other age-appropriate programming appearing on the same channel, or promotions for children's educational and informational programming appearing on any channel.

Commercial TV broadcasters must maintain records to verify compliance with commercial time limits and make these records available for public inspection. The records can be viewed in each station's online public inspection file on the Commission's website at https://publicfiles.fcc.gov.

Display of Internet Website Addresses. With respect to the display of Internet website addresses during children's programming, the Commission permits them to be displayed during program material (in a crawl or scroll at the bottom of the screen, for example) only if the website: 1) offers a substantial amount of bona fide program-related or other noncommercial content; 2) is not primarily intended for commercial purposes, including either e-commerce or advertising; 3) the website's home page and other menu pages are clearly labeled to distinguish the noncommercial from the commercial sections; and 4) the page of the website to which viewers are directed by the website address is not used for e-commerce, advertising, or other commercial purposes (e.g., contains no links labeled "store" and no links to another page with commercial material).

Public service announcements aired on behalf of independent non-profit or government organizations – or media companies in partnership with non-profits or government entities – that display websites not under the control of the licensee or cable company, are exempt from the website display rules. In addition, station identifications and emergency announcements are also exempt.

Host Selling. Separate from the commercial limits, since 1974 the Commission has also required that advertising in children's programs be clearly separated from program content. The goal of this policy is to help children distinguish between commercials and program content. There are three applications of this separation principle: 1) bumpers between program and advertising content (e.g., "and now for a commercial break"); 2) the host selling policy, which prohibits the use of program talent to deliver commercials; and 3) program-length commercials (PLC), which the Commission defines as "a program associated with a product in which commercials for that product are aired" (when a PLC occurs, then the entire program is considered a commercial).

The Commission has applied the host selling policy to the display of Internet website addresses as follows. Entities subject to commercial time limits under the CTA may not display a website address during or adjacent to a program if, at that time, on pages that are primarily devoted to free noncommercial content regarding that specific program or a character appearing in the program: 1) products are sold that feature a character appearing on that program; or 2) a character appearing in that program is used to actively sell products. This policy does not apply to: 1) third-party sites linked from the company's web pages; 2) on-air third-party advertisements with website references to third-party websites; or 3) pages that are primarily devoted to multiple characters from multiple programs.

Educational and Informational Programming. To implement the CTA's educational and informational programming mandate, the Commission has adopted a "core programming" processing guideline that applies to commercial and noncommercial educational television licensees. Under Category A of the processing guidelines, television licensees are eligible for routine staff-level approval of the children's television programming portion of their renewal applications if they air either (i) three hours per week (as averaged over a six month period) of Core Programming or (ii) 156 hours of Core Programming annually, including at least 26 hours per quarter of regularly scheduled weekly programming of at least 30 minutes in length and up to 52 hours annually of Core Programs of at least 30 minutes in length that are not aired on a regularly scheduled weekly basis, such as educational specials and regularly scheduled non-weekly programming. Under Category B of the processing guidelines, television licensees are eligible for routine staff-level approval of the children's television programming portion of their renewal applications if they air 156 hours of Core Programming annually, including at least 26 hours per quarter of regularly scheduled weekly programming of at least 30 minutes in length. The remaining Core Programming hours under Category B (up to 52 hours annually) may consist of Core Programs that are not aired on a regularly scheduled weekly basis, including educational specials, other non-regularly scheduled programming, and regularly scheduled non-weekly programming, and short-form programming, such as public service announcements and interstitials.

Core programming is defined as follows:

- Educational and Informational. The programming must further the educational and informational needs of children 16 years old and under (this includes their intellectual/cognitive or social/emotional needs).

- Specifically Designed to Serve These Needs. A program is considered "specifically designed to serve the educational and information needs of children" if:

1. that is its significant purpose;

2. it is aired between the hours of 6 a.m. and 10 p.m.;

3. it is a regularly scheduled weekly program, except that a licensee may air a limited amount of programming that is not regularly scheduled on a weekly basis, including educational specials and regularly scheduled non-weekly programming, and have that programming count as Core Programming, as described in the Core Programming guidelines.

4. it is at least 30 minutes in duration, except that a licensee may air a limited amount of short-form programming, including public service announcements and interstitials, and have that programming count as Core Programming, as described in the Core Programming processing guidelines.

To ensure that parents and other interested parties are informed of the educational and informational children's programming their area stations offer, commercial television licensees must identify each program specifically designed to "educate and inform" children by displaying the icon "E/I" throughout the program. In addition, commercial stations must provide information identifying these programs to the publishers of program guides.

Each commercial television licensee is required to prepare a Children's Television Programming Report (FCC Form 2100-H) identifying its Core Programming. These reports must be filed electronically with the FCC annually and placed in each station's online public inspection file, which can be viewed on the FCC's website at https://publicfiles.fcc.gov. More information about the Commission's children's television requirements can be viewed at https://www.fcc.gov/consumers/guides/childrens-educational-television, and https://www.fcc.gov/media/television/childrens-educational-television-reporting-form-2100-schedule-h.

Station-Conducted Contests. A station that broadcasts or advertises information about a contest that it conducts must fully and accurately disclose the material terms of the contest and must conduct the contest substantially as announced or advertised over-the-air or on the Internet. Contest descriptions may not be false, misleading, or deceptive with respect to any material term. Material terms, include those factors that define the operation of the contest and affect participation, such as entry deadlines, the prizes that can be won, and how winners will be selected. The station conducting the contest must disclose material terms either through periodic disclosures broadcast on the station, or written disclosures on the station's Internet website, the licensee's website, or if neither the individual station nor the licensee has its own website, any Internet website that is publicly accessible. Additional information about the contest rule can be found at https://www.fcc.gov/consumers/guides/broadcasting-contests-lotteries-and-solicitation-funds.

Lotteries. Federal law prohibits the broadcast of advertisements for a lottery or information concerning a lottery. A lottery is any game, contest, or promotion that contains the elements of prize, chance, and "consideration" (a legal term that means an act or promise that is made to induce someone into an agreement). For example, casino gambling is generally considered to be a "lottery" subject to the terms of the advertising restriction although, as discussed below, the prohibition is not applied to truthful advertisements for lawful casino gambling. Many types of contests, depending on their particulars, also are covered under this definition.

The statute and FCC rules list a number of exceptions to this prohibition, principally advertisements for:

- Lotteries conducted by a state acting under the authority of state law, when the advertisement or information is broadcast by a radio or TV station licensed to a location in that state or in any other state that conducts such a lottery;
- Gambling conducted by an Indian Tribe under the Indian Gaming Regulatory Act;
- Lotteries authorized or not otherwise prohibited by the state in which they are conducted, and that are conducted by a not-for-profit organization or a governmental organization; and
- Lotteries conducted as a promotional activity by commercial organizations that are clearly occasional and ancillary to the primary business of that organization, as long as the lotteries are authorized or not otherwise prohibited by the state in which they are conducted.

In 1999, the Supreme Court held that the prohibition on broadcasting advertisements for lawful casino gambling could not constitutionally be applied to truthful advertisements broadcast by radio or television stations licensed in states where gambling is legal. Relying upon the reasoning in that decision, the FCC and the United States Department of Justice later concluded that the lottery advertising prohibition may not constitutionally be applied to the broadcast of any truthful advertisements for lawful casino gambling, whether or not the state in which the broadcasting station is located permits casino gambling. For additional information about the rule concerning lotteries, see https://www.fcc.gov/consumers/guides/broadcasting-contests-lotteries-and-solicitation-funds.

Soliciting Funds. No federal law prohibits the broadcast by stations of requests for funds for legal purposes (including appeals by stations for contributions to meet their operating expenses), if the money or other contributions are used for the announced purposes. However, federal law prohibits fraud by wire, radio or television – including situations in which money solicited for one purpose is used for another – and doing so may lead to FCC sanctions, as well as to criminal prosecution by the U.S.

Department of Justice. Additional information about fund solicitation can be found at https://www.fcc.gov/consumers/guides/broadcasting-contests-lotteries-and-solicitation-funds.

Broadcast of Telephone Conversations. Before broadcasting a telephone conversation live or recording a telephone conversation for later broadcast, a station must inform any party to the call of its intention to broadcast the conversation. However, that notification is not necessary when the other party knows that the conversation will be broadcast or this knowledge can be reasonably presumed, such as when the party is associated with the station (for example, as an employee or part-time reporter) or originates the call during a program during which the station customarily broadcasts the calls. More information on the recording of telephone conversations can be found at https://www.fcc.gov/consumers/guides/recording-telephone-conversations.

Access to Broadcast Material By People With Disabilities

The Communications Act and the Commission's rules require television station licensees to broadcast certain information that makes viewing more accessible to people with disabilities.

Closed Captioning. Closed captioning is a technology designed to provide access to television programming by persons with hearing disabilities by displaying, in text form, the audio portion of a broadcast, as well as descriptions of background noise and sound effects. Closed captioning is hidden as encoded data transmitted within the television signal. A viewer wanting to see the captions must use a set-top decoder or a television with built-in decoder circuitry. All television sets with screens 13 inches or larger manufactured since mid-1993, including digital sets, have built-in decoder circuitry.

As directed by Congress in the Telecommunications Act of 1996, the FCC has adopted rules requiring closed captioning of most, but not all, television programming. Entities that distribute television programs directly to home viewers, including broadcast stations, must comply with these rules. The rules also provide certain exemptions from the captioning requirements. Additional information on the closed captioning requirements can be found on the FCC's website at https://www.fcc.gov/general/closed-captioning-video-programming-television.

Closed captioning is also required for video programming delivered via Internet Protocol (IP) that is published or exhibited on television with captions. Program owners must send program files to distributors and providers with all required captions and use an agreed upon mechanism to inform the distributors and providers of the programming that is subject to the requirements. Distributors and providers must enable the rendering or pass through of all required captions to the end user. These requirements also apply to video clips that a video programming provider or distributor posts on its website or application, if the provider or distributor showed the video clip on television with captions. For devices, the Commission adopted functional display standards to specify how covered apparatus must implement closed captioning, and it required apparatus to render or pass through closed captioning on each video output. Additional information on the IP closed captioning requirements can be found on the FCC's website, https://www.fcc.gov/general/closed-captioning-video-programming-delivered-using-internet-protocol-ip.

Audio Description. Audio description is audio-narrated descriptions of a television program's key visual elements. The descriptions are inserted into natural pauses in a program's dialogue and are designed to make TV programming more accessible to individuals who are blind or visually impaired. As required by the Twenty-First Century Communications and Video Accessibility Act of 2010, the FCC has adopted rules to require some, but not all, television programs to include audio description.

Audio description is provided through the TV or set-top box "secondary audio" feature, which some TV controls identify as "SAP" or "secondary audio program." Your TV user manual may provide information about activating the secondary audio feature. Information about how to activate the secondary audio is available from the customer service department of the TV manufacturer or from your subscription TV provider.

Networks, broadcasters, and subscription TV systems may provide information about the availability of programs with audio description through their websites and in program guides. Some program guides may use the symbol (D) to indicate that the program is audio described. Additional information about the audio description requirements can be found on our website at https://www.fcc.gov/consumers/guides/audio-description.

Access to Emergency Information. The FCC also requires television stations to make the local emergency information that they provide to viewers accessible to persons with disabilities. Thus, if emergency information is provided aurally, such information also must be provided in a visual format for persons who are deaf or hard of hearing. The emergency information may be closed captioned or presented through an alternative method of visual presentation. These methods include open captioning, crawls, or scrolls that appear on the screen. The information provided visually must include critical details regarding the emergency and how to respond. Critical details could include, among other things, specific information regarding the areas that will be affected by the emergency, evacuation orders, detailed descriptions of areas to be evacuated, specific evacuation routes, approved shelters or the way to take shelter in one's home, instructions on how to secure personal property, road closures, and how to obtain relief assistance.

Similarly, if the emergency information is presented visually, it must be made accessible for persons who are blind or visually impaired. If the emergency information is provided in the video portion of a regularly scheduled newscast or a newscast that interrupts regular programming, it must be made accessible through an aural description of the emergency information. If the emergency information is provided visually during regular programming, such as through a screen crawl or scroll, the visual information must be accompanied with an aural tone to alert persons with visual disabilities that the station is providing this information, and that they should tune to the secondary audio stream where such information must be provided aurally. Additional information concerning this requirement can be found on the FCC's website at Accessibility of Emergency Information on Television.

Apparatus Requirements for Emergency Information and Video Description. The FCC requires certain apparatus that receive, play back, or record video programming to make available a secondary audio stream for providing video description services and accessible emergency information. Manufacturers of apparatus must provide a simple and easy to use mechanism for activating the secondary audio stream, such as a button or icon. For additional information concerning this requirement, see https://www.fcc.gov/television-and-set-top-box-controls-menus-program-guides.

Accessible User Interfaces. Certain digital devices must make built-in functions that are used to receive, play back, or display programs accessible to people who are blind or visually impaired. These devices must include a simple and easy to use mechanism for accessing closed captioning and video description. Additionally, certain navigation devices must make on-screen text menus and guides used for the display or selection of video programming audibly accessible to people who are blind or visually impaired. These devices must include a simple and easy to use mechanism for accessing closed captioning. For additional information concerning this requirement, see https://www.fcc.gov/television-and-set-top-box-controls-menus-program-guides.

Business Practices and Advertising

Business Practices, Advertising Rates, and Profits. Except for the requirements concerning political advertisements, the limits on the number of commercials that can be aired during children's programming and the prohibition of advertisements over noncommercial educational stations, the Commission does not regulate a licensee's business practices, such as its advertising rates or its profits. Rates charged for broadcast time are matters for private negotiation between sponsors and stations. Except for certain classes of political advertisements, station licensees have full discretion to accept or reject any advertising.

Employment Discrimination and Equal Employment Opportunity ("EEO"). The FCC requires all licensees of radio and TV stations afford equal opportunity in employment. We also prohibit employment discrimination on the basis of race, color, religion, national origin, or sex. However, religious stations are permitted to require that some or all of their employees meet a religious qualification.

Our EEO recruitment rules have three prongs. They require all stations that employ five or more full-time employees (defined as those regularly working 30 hours a week or more) to:

- Widely distribute information concerning each full-time job vacancy, except for vacancies that need to be filled under demanding or other special circumstances;
- Send notices of openings to organizations in the community that are involved in employment if the organization requests such notices; and
- Engage in general outreach activities every two years, such as job fairs, internships, and other community events.

Each licensee with five or more full-time employees must maintain records of its recruitment efforts and create and place in its public file (https://publicfiles.fcc.gov) an annual public file report listing specified information about its recruitment efforts. (The requirements for the EEO portion of the public file are discussed further in this Manual.) The annual EEO public file report must also be posted on a station's website, if one exists.

Each licensee, regardless of size, must file an FCC Form 396 EEO Program Report with its license renewal application. Finally, a prospective station licensee expecting to employ five or more full-time employees must file an FCC Form 396-A Broadcast Model Program Report with its new station or assignment or transfer application. The FCC reviews EEO compliance at the time it considers the station renewal application, when it reviews public file reports at the mid-point of license terms, when it receives EEO complaints, and during random station audits. A full range of enforcement actions is available for EEO violations, including imposing reporting conditions, forfeitures, short -term license renewal, and license revocation.

(Licensees were formerly required to file an EEO mid-term report -- FCC Form 397 -- at the mid-point of the license term, but that requirement was eliminated in 2019. Stations that filed Form 397 during their current license terms should keep the form in their public file until grant of their next license renewal application.)

All EEO forms are electronically filed and are available for public review either in the FCC's online public file at https://publicfiles.fcc.gov, or in CDBS, the FCC's access database for radio at https://licensing.fcc.gov/prod/cdbs/pubacc/prod/eeo_search.htm or in LMS, the FCC's access database for television at https:/enterpriseefiling.fcc.gov/dataentry/public/tv/lmsDatabase.html. Eventually, LMS will replace CDBS for radio. EEO public file reports are not created on FCC forms and therefore are not filed in CDBS or LMS on forms of their own, but a station's two most recent public file reports are filed as attachments when a station files Form 396. As discussed previously, copies of all FCC EEO audit letters, licensee responses, and FCC rulings must also be included in the audited station's public file and are available for public review in a station's online public file. Additional information concerning the EEO rules is available at https://www.fcc.gov/consumers/guides/eeo-rules-and-policies-radio-and-broadcast-and-non-broadcast-tv.

Sponsorship Identification. The sponsorship identification requirements contained in the Communications Act and the Commission's rules generally require that, when money or other consideration for the airing of program material has been received by or promised to a station, its employees or others, the station must broadcast full disclosure of that fact at the time of the airing of the material, and identify who provided or promised to provide the consideration. This requirement is grounded in the principle that members of the public should know who is trying to persuade them with the programming being aired. This disclosure requirement also applies to the broadcast of musical selections for consideration (so-called "payola") and the airing of certain video news releases. In the case of advertisements for commercial products or services, it is sufficient for a station to announce the sponsor's corporate or trade name, or the name of the sponsor's product (where it is clear that the mention of the product constitutes a sponsorship identification). For additional information about the sponsorship identification and payola rules, see https://www.fcc.gov/consumers/guides/fccs-payola-rules.

Underwriting Announcements on Noncommercial Educational Stations. Noncommercial educational stations may acknowledge contributions over the air, but they may not broadcast commercials or otherwise promote the goods and services of for-profit donors or underwriters. Specifically, acknowledgements may not contain comparative or qualitative descriptions, price information, calls to action, or inducements to buy, sell, rent, or lease. Acceptable "enhanced underwriting" acknowledgements of for-profit donors or underwriters may include: (1) logograms and slogans that identify but do not promote; (2) location information; (3) value-neutral descriptions of a product line or service; and (4) brand names, trade names, and product service listings. However, these acknowledgements may not interrupt the station's regular programming. For additional information about the underwriting rules, see https://www.fcc.gov/eb/broadcast/enhund and https://www.fcc.gov/media/radio/nature-of-educational-broadcasting.

Loud Commercials. Television commercials must have the same average volume as the programs they accompany. In the Commercial Advertisement Loudness Mitigation (CALM) Act, Congress directed the FCC to establish rules that require broadcasters and pay TV providers ensure the commercials they transmit to viewers comply with an industry-developed technical standard, the Advanced Television Systems Committee's A/85 Recommended Practice. Broadcasters and pay TV providers that demonstrate a pattern or trend of failing to comply can be subject to Commission enforcement action. The FCC does not regulate the volume of radio programming, including commercials.

How to File a Loud Commercial Complaint. The Federal Trade Commission has primary responsibility for determining whether an advertisement is false or deceptive and for taking action against the sponsor. The Food and Drug Administration has primary responsibility for the safety of food and drug products. Depending on the nature of the advertisement, you should contact these agencies regarding advertisements that you believe may be false or misleading. Additional information about false or misleading advertising can be found at Complaints About Broadcast Advertising.

The fastest and easiest way to file a complaint containing this information is to use the FCC's electronic complaint form at https://esupport.fcc.gov/complaints.htm.

A complaint can also be filed with the FCC's Consumer Call Center at 1-888-CALL-FCC (1-888-225-5322, voice) or 1-888-TELL-FCC (1-888-835-5322, TTY). A complaint can additionally be faxed to 1-866-418-0232, or mailed to:

Federal Communications Commission, Consumer & Governmental, Affairs Bureau Consumer, Inquiries & Complaints Division, 45 L Street NE, Washington, DC 20554

Additional information about loud commercials can be found at https://www.fcc.gov/consumers/guides/loud-commercials-tv; and https://www.fcc.gov/media/policy/loud-commercials.

False or Misleading Advertising. The Federal Trade Commission has primary responsibility for determining whether an advertisement is false or deceptive and for taking action against the sponsor. The Food and Drug Administration has primary responsibility for the safety of food and drug products. Depending on the nature of the advertisement, you should contact these agencies regarding those you believe may be false or misleading. Additional information about false or misleading advertising can be found at https://www.fcc.gov/consumers/guides/complaints-about-broadcast-advertising.

Offensive Advertising. Unless a broadcast advertisement is found to be in violation of a specific law or rule, the government cannot take action against it. However, if you believe that an advertisement is offensive because of the nature of the item advertised, the scheduling of the announcement, or the way the message is presented, you should consider addressing your complaint directly to the station or network involved, providing the date and time of the broadcast and the product or advertiser in question. This will help those involved in the selection of advertising material to become better informed about audience opinion.

Tobacco and Alcohol Advertising. Federal law prohibits the airing of advertising for cigarettes, little cigars, smokeless tobacco, and chewing tobacco on radio, TV, or any other medium of electronic communication under the FCC's jurisdiction. However, the advertising of smoking accessories, cigars, pipes, pipe tobacco, or cigarette-making machines is not prohibited. Congress has not enacted any law prohibiting broadcast advertising of any kind of alcoholic beverage, and the FCC does not have a rule or policy regulating these advertisements.

Subliminal Programming. The Commission sometimes receives complaints regarding the alleged use of subliminal perception techniques in broadcast programming. Subliminal programming is designed to be perceived on a subconscious level only. Regardless of whether it is effective, the broadcast of subliminal material is inconsistent with a station's obligation to serve the public interest because it is designed to be deceptive.

Blanketing Interference

Rules. If your location is close to a radio station's transmitting antenna, then you may experience impaired reception of other stations. This is called "blanketing" interference. The Commission’s rules impose certain obligations on licensees to resolve these interference complaints. Complaints about interference involving radio stations are handled by the Media Bureau’s Audio Division. Blanketing interference is a less common occurrence with television stations than with radio stations due to the location and height of TV transmitting antennas. If this phenomenon does occur with a television station, the Media Bureau’s Video Division will handle complaints on a case-by-case basis, subject to the radio guidelines noted below.

At the outset, the policy is designed to provide protection from interference for individuals within a certain distance from a station (in an area known as the station's "blanketing contour") and only involving electronic devices that pick up an over-the-air signal from a broadcast radio or television station. The public can determine whether they are within a station's blanketing contour by consulting contour maps in the station's public inspection file to see if they reside in close proximity to the offending station's transmitter site.

Stations are not required to resolve interference complaints involving the following:

- A complaint from a party located outside of the station's blanketing contour (115dBu contour for FM stations, 1 V/m contour for AM stations);
- Improperly installed antenna systems;
- Use of high gain antennas or antenna booster amplifiers;
- Mobile receivers, including but not limited to car radios, portable stereos or cellular phones;
- Non-radio frequency ("RF") devices, including but not limited to, tape recorders, CD players, MP3 players or "land-line" telephones; and
- Cordless telephones.

For complaints from parties located within the station's blanketing contour involving non-mobile television or radio receivers, a station must resolve the interference complaint at no cost to the complaining party if the party notifies the station of the problem during the first year that the station operates its new or modified facilities. For similar complaints received after the first year of operation, although the station is not financially responsible for resolving the complaint, it must provide effective technical assistance to the complaining party. These efforts must include information and assistance sufficiently specific to enable the complaining party to eliminate all blanketing interference and not simply an attempt by the station to correct the problems. This assistance entails providing specific details about proper corrective measures to resolve the blanketing interference. For example, stations should provide the complaining party with diagrams and descriptions that explain how and where to use radio frequency chokes, ferrite cores, filters, and/or shielded cable. In addition, effective technical assistance also includes recommending replacement equipment that would work better in high radio frequency fields. Effective technical assistance does not mean referring the complainant to the equipment manufacturer.

How to Resolve Blanketing Interference Problems. If you believe you are receiving blanketing or any other type of interference to broadcast reception, we encourage you to first communicate directly, in writing, with the licensee of the station that you believe is causing the interference. If the licensee does not satisfactorily resolve the problem, you can mail or email a complaint to the Commission as follows:

For radio stations: Federal Communications Commission, Audio Division - Media Bureau, 45 L Street NE, Washington, D.C. 20554, email: radioinfo@fcc.gov

For TV stations: Federal Communications Commission, Video Division - Media Bureau, 45 L Street NE, Washington, D.C. 20554, email: tvinfo@fcc.gov

Your complaint should include: 1) your name, address, and phone number; 2) the call letters of each station involved; 3) each location at which the interference occurs; and 4) each specific device receiving the interference. The more specific your complaint is, the easier it is for us and any station involved to identify and resolve the interference problem. We expect that complainants will cooperate with the licensee's reasonable efforts to remedy the interference problem.

Other Interference Issues

In many cases where there is interference on your television set or radio, the source of the problem could be with your equipment, which may not be adequately designed with circuitry or filtering to reject the unwanted signals of nearby transmitters. We recommend that you contact the equipment manufacturer or the store where you purchased the equipment to attempt to resolve the interference problem. More information on broadcast interference is on the Commission's website at https://www.fcc.gov/consumers/guides/interference-radio-tv-and-telephone-signals.

The Local Public Inspection File

Requirement to Maintain a Public Inspection File. Virtually all licensees and permittees of TV and radio stations and applicants for new broadcast stations are required to maintain records that must be made available for public inspection. For many stations, these records are maintained in a public insprction file that must contain documents relevant to the station's operation and dealings with the community and the FCC. LPTV and LPFM stations do not have a public inspection file but are required to maintain a political file.

In 2012, the FCC modernized its public inspection file requirements by mandating that full power and Class A TV stations make their public inspection files available through a Commission-hosted online public file, https://publicfiles.fcc.gov. In 2016, the Commission continued its modernization effort by requiring that broadcast radio licensees also post their public file documents to the FCC-hosted online public file. The Commission took a number of steps to minimize the burden of the online file on broadcast stations. Broadcasters are required to upload only those items required to be in the public file but not otherwise filed with the Commission or available in a Commission database. The Commission will upload to the online file itself any document required to be retained in the file that also must be filed electronically with the Commission.

Purpose of the File. Most broadcast stations have an obligation to provide news, public affairs, and other programming that addresses important issues facing its community. Stations must also comply with the Communications Act, the Commission's rules, and the terms of the station's license. We encourage a continuing dialogue between broadcasters and the public to ensure stations meet their obligations and remain responsive to the needs of the local community. Because you watch and listen to the stations that we license, you can be a valuable and effective advocate.

Viewing the Public Inspection File. The public can access a station's public inspection file at https://publicfiles.fcc.gov.

Contents of the File. The items required to be in a station's public file, the rule section requiring the filing, and the retention period for each item are listed below. Also included is a brief description of each item, but the description should not be relied upon in place of the underlying rules' description of that item.

- **FCC Authorizations** (73.3526(e)(1), 73.3527(e)(1)) (retain until replaced). These are the instruments issued by the Commission to individuals or companies that authorize broadcasting or other use of radio transmissions in connection with broadcasting and include licenses and permits to construct or modify broadcast facilities.

- **Applications and Related Materials** (73.3526(e)(2), 73.3527(e)(2)) (retain until final action taken on the application). These are applications and supporting documents or exhibits submitted to the Commission seeking such things as broadcast licenses, construction permits, special operating authority, or consent to the sale of an existing broadcast facility.

- **Contour Maps** (73.3526(e)(4), 73.3527(e)(3)) (retain as long as they reflect current, accurate information regarding the station). These are graphical representations or "maps" of the area in which a broadcast station provides a particular level of signal strength over-the-air. These maps can be a useful indication of where service might be expected to be received from the station. However, they do not account for the availability of a station's signal carried by cable or satellite service providers, nor do they suggest that every point inside the contour will receive over-the-air service.

- **Ownership Reports and Related Materials** (73.3526(e)(5), 73.3527(e)(4)) (retain until a new, complete ownership report is filed with the FCC). These reports are filed every other year, as well as in connection with the sale of a broadcast station. They reflect the entities and individuals that hold "attributable" interests in the broadcast station (that is, interests the Commission deems convey some influence over the station).

- **Equal Employment Opportunity File** (73.3526(e)(7), 73.3527(e)(6)) (retain until final action taken on the station's next license renewal application). The Commission requires stations employing five or more full-time employees to maintain in their public inspection file the following reports regarding their EEO activities: an EEO public file report that is prepared annually; FCC Form 396 – an EEO Program Report that is filed with the FCC as part of the station's license renewal application; and, for buyers of a station or new licensees, FCC Form 396-A – a Model EEO Program Report that is filed with the FCC. Licensees were formerly required to file an EEO mid-term report (FCC Form 397) at the mid-point of the license term, but that requirement was eliminated in 2019. Stations that filed Form 397 during their current license terms should keep the form in their public file until grant of their next license renewal application.

- **The Public and Broadcasting Manual** (73.3526(e)(8), 73.3527(e)(7)) (retain most recent version indefinitely). This pamphlet, written by the Commission, is intended to explain in understandable terms the various aspects and purposes of broadcast service, the Commission's regulation of it, broadcasters' obligations, and how the public can participate in the Commission's licensing and other administrative processes involving their local broadcast stations.

- **Children's Television Programming Reports** (FCC Form 2100-H) (73.3526(e)(11)(iii)) (retain until final action taken on the station's next license renewal application). Commercial television stations must prepare and place in their public inspection files annually a report (Form 2100-H) that identifies the educational and informational programming for children that they aired.

- **Citizen Agreements** (73.3526(e)(3)) (retain for term of agreement). These are agreements between citizens' groups and broadcast stations that are entered into primarily for noncommercial purposes and that deal directly or indirectly with the stations' broadcast service to their communities. While not all stations will have these agreements, if they do they must be in their public file.

- **Political File** (73.3526(e)(6), 73.3527(e)(5)) (retain for two years). This file must contain all requests for specific schedules of advertising time by candidates and certain issue advertisers, as well as the final dispositions or "deals" agreed to by the broadcaster and the advertiser in response to any requests. It is not necessary to retain any of the materials relating to the negotiation between the parties to reach the disposition. The file must also include the reconciliation of the deal such as a description of when advertising actually aired, advertising preempted, and the timing of any make-goods of preempted time, as well as credits or rebates given to the advertiser. The request and disposition must be placed in the file as soon as possible, which the Commission has determined is immediately absent extraordinary circumstances. The reconciliation information need not be placed in the file, immediately, but the broadcaster must identify a person or persons at the station capable of informing an advertiser of the details of any reconciliation information.

- **Material Relating to FCC Investigations and Complaints** (73.3526(e)(10), 73.3527(e)(11)) (retain until notified in writing that the material may be discarded). This is material that has a substantial bearing on an FCC investigation or complaint to the FCC involving the station and of which the station is aware. Some or all of the material in this category may be excluded from the public file at the Commission's direction (for example, Letters of Inquiry from the Enforcement Bureau should be excluded in order to protect the investigation process).

- **Issues/Programs Lists** (73.3526(e)(11)(i), 73.3526(e)(12), 73.3527(e)(8)) (retain until final action taken on the station's next license renewal application). These are quarterly lists prepared by stations describing the programs they aired during the preceding quarter that provided the stations' most significant treatment of community issues.

- **Donor Lists for Non-Commercial Educational Channels ("NCEs")** (as required by 73.3527(e)(9)) (retain for two years from the date of the broadcast of the specific program reported). These are lists of donors that have supported specific programs aired by the stations.

- **Records Concerning Children's Programming Commercial Limits** (73.3526(e)(11)(ii)) (retain until final action taken on the station's next license renewal application). These are records that substantiate commercial television stations' compliance with the Children's Television Act of 1990 and the FCC's rules that limit the type and amount of advertising during TV programming that is directed to children 12 and under.

- **Local Public Notice Announcements** (as required by 73.3526(e)(13), 73.3527(e)(10)) (retain for as long as the application to which it refers). These are certifications that the broadcast station has made the necessary public on-air announcements when it files an application with the FCC for renewal of its broadcast license.

- **Time Brokerage Agreements** (73.3526(e)(14)) (retain for as long as contract or agreement is in force). These are contracts or agreements that allow one or more parties other than the station's owner to provide programming, sell advertising time in the brokered programming and, in some cases, operate the station on a day-to-day basis. These agreements are sometimes referred to as Local Marketing Agreements or LMAs. Confidential or proprietary information may be redacted from these documents.

- **Must-Carry or Retransmission Consent Election Elections** (for commercial television stations) or must-carry requests (noncommercial television stations) 73.3526(e)(15), 73.3527(e)(12)) (retain for duration of election or request period). These are statements of a station's election to be carried on multichannel video program distributor (MVPD) systems, such as cable systems or direct broadcast satellite services, either by negotiated retransmission consent agreements or by mandatory carriage under the Commission's rules. Stations must also provide an up-to-date e-mail address and phone number for carriage-related questions in the online file and respond as soon as is reasonably possible to messages or calls from MVPDs.

There are two ways that a broadcast TV station can choose to be carried over a cable or satellite system: "must-carry" or "retransmission consent." Each is discussed below.

- **Must carry.** TV stations are generally entitled to be carried on cable television systems in their local markets. A station that chooses to exercise this right receives no compensation from the cable system. Satellite carriers may decide to offer local stations in a designated market area. If they choose to offer one station, then they must carry all the stations in that market that request carriage.

- **Retransmission Consent.** Instead of exercising their "must-carry" rights, commercial TV stations may choose to receive compensation from a cable system or satellite carrier in return for granting permission to the cable system or satellite carrier to carry the station. This option is available only to commercial TV stations. Because it is possible a station that elects this option may not reach an agreement with the cable system, it may ultimately not be carried by the system.

Every three years, commercial TV stations must decide whether their relationship with each local cable system and satellite carrier that offers local service will be governed by must-carry or by retransmission consent agreements. Each commercial full power and Class A station must keep a copy of its decision in the public file for the three-year period to which it pertains.

Noncommercial stations are not entitled to compensation in return for carriage on a cable or satellite system, but they may request mandatory carriage on the system. If an NCE asks for carriage, then a copy of the request must be kept in the public file for the duration of time the request covers.

- **Joint Sales Agreements** (73.3526(e)(16)) (retain for as long as contract or agreement is in force). These are contracts or agreements that allow one or more parties other than the station's owner to sell advertising time on the station. Confidential or proprietary information may be redacted from these documents.

- **Class A TV Continuing Eligibility Documentation** (73.3526(e)(17)) (retain indefinitely). These are documents that substantiate the continuing eligibility of a low-power television station for Class A status, which affords the station the same interference protection as a full power television station. To retain Class A status, the station must broadcast at least 18 hours per day and air at least three hours per week of locally produced programming.

- **Sponsorship Identification - Political Matter and Controversial Issues of Public Importance** (73.1212(e)) (retain for two years). This file contains a list of the chief executive officers or members of the executive committee or board of directors, as applicable, of any entity that has paid for or furnished broadcast programming that is "political matter or matter involving the discussion of a controversial issue of public importance." This additional sponsorship identification information must be kept by all broadcast stations in their public inspection file pursuant to Section 73.1212(e) of the FCC's rules. To the extent stations place this material in their political file, which is common industry practice and satisfies the rule's disclosure requirement, they are required to upload these files on the same schedule as their political files.

- **Shared Services Agreements** (73.3526(e)(18)) (retain as long as contract or agreement is in force). These are contracts or agreements that allow one station to provide station-related services to another station or for multiple stations to collaborate to provide such services. Station-related services include, but are not limited to, administrative, technical, sales, and/or programming support. Confidential or proprietary information may be redacted from these documents.

- **Information on Third-Party Fundraising by NCE stations** (73.3527(e)(14)) (retain for two years). NCE stations that interrupt regular programming to conduct fundraising on behalf of a third-party non-profit organization pursuant to 73.503(e) (FM stations) or 73.621(f) (TV stations) must place in the public inspection file information regarding the fundraiser, including the date, time and duration of the fundraiser and name of the non-profit organization that benefitted.

Complaints or Comments About a Station

Comments to Stations and Networks. If you feel the need to do so, we encourage you to write directly to station management or to network officials to comment on their broadcast service. These are the people responsible for creating and selecting the station's programs and announcements and determining station operation. Letters to station and network officials keep them informed about audience needs and interests, as well as on public opinion on specific material and practices. Individuals and groups can often resolve problems with stations at the local level

Comments/Complaints to the FCC. We give full consideration to the broadcast complaints, comments, and other inquiries that the Commission receives. As stated above, we encourage you to first contact the station or network directly about programming and operating issues. If your concerns are not resolved, with the exception of complaints about obscene, indecent, or profane programming, which should be submitted in the manner described previously -- and complaints about blanketing interference discussed earlier -- the best way to provide all the information the FCC needs to process your complaint about other broadcast matters is to fully complete an on-line complaint at https://consumercomplaints.fcc.gov/hc/en-us. You can also call in, e-mail or file your complaint in hard copy with the FCC’s Consumer Center in the following manner:

Federal Communications Commission
Consumer & Governmental Affairs Bureau
Consumer Inquiries and Complaints Division
45 L Street NE
Washington, D.C. 20554
Fax: (202) 418-0232
Telephone: (888) 225-5322 (voice); (888)835-5322 (TTY)
Email address: fccinfo@fcc.gov

If you are submitting an audio or video tape, DVD, CD or other type of media with your complaint, you should send it to the following address to avoid mail processing damage:

Federal Communications Commission
Consumer & Governmental Affairs Bureau
Consumer Inquiries and Complaints Division
9050 Junction Drive
Annapolis Junction, MD 20701

If you do not file an on-line complaint at https://consumercomplaints.fcc.gov/hc/en-us, at a minimum your complaint should indicate: (1) the call letters of the station; (2) the city and state in which the station is located; (3) the name, time, and date of the specific program or advertisement in question, if applicable; (4) the name of anyone contacted at the station, if applicable; and (5) a statement of the problem, as specific as possible, together with an audio or video tape, CD, DVD or other recording or transcript of the program or advertisement that is the subject of your complaint (if possible). Please include your name and address if you would like information on the final disposition of your complaint; you may request confidentiality. We prefer that you submit complaints in writing, although you may submit complaints that are time-sensitive by telephone, especially if they involve safety concerns. Please be aware that we can only act on allegations that a station has violated a provision of the Communications Act or the FCC's rules or policies.

In addition to (or instead of) filing a complaint, you can file a petition to deny or an informal objection to an application that a station licensee has filed, such as a license renewal application. This procedure is discussed earlier in this Manual. You may also want to consider reviewing our rules or contacting an attorney. You can find links to our rules on the Commission website at https://www.fcc.gov/wireless/bureau-divisions/technologies-systems-and-innovation-division/rules-regulations-title-47. As noted earlier, the rules governing broadcast stations are generally found in Part 73 of Title 47 of the Code of Federal Regulations.

Broadcast Information Specialist

We have created contact points at the Commission, accessible via toll-free telephone numbers or over the Internet, dedicated to providing information to members of the public regarding how they can become involved in the Commission’s processes. Should you have questions about how to do so, including inquiries about our complaint or petitioning procedures - or the filing and status of the license renewal, modification or assignment or transfer application for a particular station -- you can contact one of our Broadcast Information Specialists by calling or sending an e-mail as follows:

If your question relates to a radio station:

Phone: (202) 418-2700
Email: radioinfo@fcc.gov

If your question relates to a television station:

Phone: (202) 418-1600
Email: tvinfo@fcc.gov

If your question relates to both a radio and a television station or is general in nature, you can contact either specialist.

Source: "The Public and Broadcasting." Federal Communications Commission. Revised September 2021. Accessed November 2, 2021. https://www.fcc.gov/media/radio/public-and-broadcasting.

Glossary of Terms

AM—Amplitude modulation. Also referring to audio service broadcast over 535 khz-1705 khz.

Analog—AA continuous electrical signal that carries information in the form of variable physical values, such as amplitude or frequency modulation.

Basic cable service—Package of programming on cable systems eligible for regulation by local franchising authorities under 1992 Cable Act, including all local broadcast signals and PEG (public, educational and government) access channels.

Cable television—System that transmits original programming, and programming of broadcast television stations, to consumers over wired network.

CC—Closed captioning. Method of transmitting textual information over television channel's vertical blanking interval; transmissions are deciphered with decoders; decoded transmissions appear as text superimposed over television image.

Clear channel—AM radio station allowed to dominate its frequency with up to 50 kw of power; their signals are generally protected for distance of up to 750 miles at night.

Closed circuit—The method of transmission of programs or other material that limits its target audience to a specific group rather than the general public.

Coaxial cable—Cable with several common axis lines under protective sheath used for television signal transmissions.

Common carrier—Telecommunication company that provides communications transmission services to the public.

DAB—Digital audio broadcasting. Modulations for sending digital rather than analog audio signals by either terrestrial or satellite transmitter with audio response up to compact disc quality (20 khz).

DBS—Direct broadcast satellite. High powered satellite authorized to broadcast direct to homes.

Digital—A discontinuous electrical signal that carries information in binary fashion. Data is represented by a specific sequence of off-on electrical pulses.

Directional antenna—An antenna that directs most of its signal strength in a specific direction rather than at equal strength in all directions. Used chiefly in AM radio operation.

Downlink—Earth station used to receive signals from satellites.

Earth station—Equipment used for transmitting or receiving satellite communications.

EDTV—Enhanced-definition television. Proposed intermediate systems for evolution to full HDTV, usually including slightly improved resolution and sound, with a wider (16:9) aspect ratio.

Effective competition—Market status under which cable TV systems are exempt from regulation of basic tier rates by local franchising authorities, as defined in 1992 Cable Act. To claim effective competition, a cable system must compete with at least one other multichannel provider that is available to at least 50\% of an area's households and is subscribed to by more than 15\% of the households.

Encryption—System for scrambling signals to prevent unauthorized reception.

ENG—Electronic news gathering.

ETV—Educational television.

Fiber-optic cable—Wires made of glass fiber used to transmit video, audio, voice or data providing vastly wider bandwidth than standard coaxial cable.

Field—Half of the video information in the frame of a video picture. The NTSC system displays 59.94 fields per second.

FM—Frequency modulation. Also referring to audio service broadcast over 88 mhz-108 mhz.

Footprint—Area on earth within which a satellite's signal can be received.

Frame—A full video picture. The NTSC system displays 29.97 525-line frames per second.

Frequency—The number of cycles a signal is transmitted per second, measured in hertz.

Geostationary orbit—Orbit 22,300 miles above earth's equator where satellites circle earth at same rate earth rotates.

ghz—Gigahertz. One billion hertz (cycles) per second.

HDTV—High-definition television.

Headend—Facility in cable system from which all signals originate. (Local and distant television stations, and satellite programming, are picked up and amplified for retransmission through system.)

Hertz—A measurement of frequency. One cycle per second equals one hertz (hz).

Independent television—Television stations that are not affiliated with networks and that do not use the networks as a primary source of their programming.

Information services—Broad term used to describe full range of audio, video and data transmission services that can be transmitted over the air or by cable.

Interactive—Allowing two-way data flow.

Interlaced scanning—Television transmission technique in which each frame is divided into two fields. NTSC system interleaves odd-numbered lines with even-numbered lines at a transmission rate of 59.94 fields per second.

ITFS—Instructional Television Fixed Service.

khz—Kilohertz. One thousand hertz (cycles) per second.

LED—Light emitting diode. Type of semiconductor that lights up when activated by voltage.

LO—Local origination channel.

MDS—Multipoint distribution service.

mhz—Megahertz. One million hertz (cycles) per second.

Microwave—Frequencies above 1,000 mhz.

MSO—Multiple cable systems operator.

Must carry—Legal requirement that cable operators carry local broadcast signals. Cable systems with 12 or fewer channels must carry at least three broadcast signals; systems with 12 or more channels must carry up to one-third of their capacity; systems with 300 or fewer subscribers are exempt. The 1992 Cable Act requires broadcast station to waive must-carry rights if it chooses to negotiate retransmission compensation (see "Retransmission consent").

NTSC—National Television System Committee. Committee that recommended current American standard color television.

PCM—Pulse code modulation. Conversion of voice signals into digital code.

PPV—Pay-per-view.

Progressive scanning—TV system where video frames are transmitted sequentially, unlike interlaced scanning in which frames are divided into two fields.

PSA—Public service announcement.

PTV—Public television.

Public radio—Radio stations and networks that are operated on a noncommercial basis.

Public television—Television stations and networks that operate as noncommercial ventures.

RCC—Radio common carrier. Common carriers whose major businesses include radio paging and mobile telephone services.

Retransmission consent—Local TV broadcasters' right to negotiate a carriage fee with local cable operators, as provided in 1992 Cable Act.

SCA—Subsidiary communications authorizations. Authorizations granted to FM broadcasters for using subcarriers on their channels for other communications services.

Shortwave—Transmissions on frequencies of 6-25 mhz.

SHF—Super high frequency.

Signal-to-noise ratio—The ratio between the strength of an electronically produced signal to interfering noises in the same bandwidth.

SMATV—Satellite master antenna television.

Streaming—Multimedia content delivered by a provider and accessed by an end-user.

STV—Subscription television.

Superstation—Local television station whose signal is retransmitted via satellite to cable systems beyond reach of over-the-air signal.

Teletext—A one-way electronic publishing service that can be transmitted over the vertical blanking interval of a standard television signal or the full channel of a television station or cable television system. The major use today is for closed-captioning.

Translator—Broadcast station that rebroadcasts signals of other stations without originating its own programming.

Transponder—Satellite transmitter/receiver that picks up signals transmitted from earth, translates them into new frequencies and amplifies them before retransmitting them back to ground.

UHF—Ultra high frequency band (300 mhz-3,000 mhz), which includes TV channels 14-83.

Uplink—Earth station used for transmitting to satellite.

VHF—Very high frequencies (30 mhz-300 mhz), which include TV channels 2-13 and FM radio.

Videotext—Two-way interactive service that uses either two-way cable or telephone lines to connect a central computer to a television screen.

List of Abbreviations

***** . . . noncommercial
a . . . annual
actg . . . acting
admin . . . administrative
adv . . . advertising
affil . . . affiliate
affrs . . . affairs
AFRTS . . . Armed Forces Radio and TV Service
alt . . . alternate
ant . . . antenna
AOR . . . album-oriented rock
AP . . . Associated Press
assn . . . association
assoc . . . associate
asst . . . assistant
atty . . . attorney
aur . . . aural
aux . . . auxiliary
bcst . . . broadcast
bcstg . . . broadcasting
bcstr . . . broadcaster
bd . . . board
BET . . . Black Entertainment Television
bi-m . . . every two months
bk rev . . . book reviews
bldg . . . building
bor . . . borough
btfl . . . beautiful
C-SPAN . . . Cable Satellite Public Affairs Network
CATV . . . community antenna television
CBC . . . Canadian Broadcasting Corp.
CEO . . . chief executive officer
ch . . . channel
CH . . . critical hours
chg . . . charge
CHR . . . contemporary hit radio
chmn . . . chairman
circ . . . circulation
coml . . . commercial
contemp . . . contemporary
COO . . . chief operating officer
coord . . . coordinator
CP . . . construction permit
CRTC . . . Canadian Radio-television and Telecommunications Commission
C&W . . . country & western
D . . . day
d . . . daily
DA . . . directional antenna
dance rev . . . dance reviews
DBS . . . direct broadcast satellite
dev . . . development
dir . . . director
div . . . diverse
DMA . . . Designated Market Area
dups . . . duplicates
Eds . . . editors
Ed Bd . . . Editorial Board
educ . . . educational
engr . . . engineer
engrg . . . engineering
EPG . . . Electronic Program Guide
ERP . . . effective radiated power
ETV . . . educational television
exec . . . executive
FCC . . . Federal Communications Commission
film rev . . . film reviews
fortn . . . fortnightly
Fr . . . French
g . . . ground
gen . . . general
Ger . . . German
govt . . . government
HAAT . . . height above average terrain
HBO . . . Home Box Office
horiz . . . horizontal polarization
hqtrs . . . headquarters
ind . . . independent
info . . . information
instal . . . installation
ISBN . . . International Standard Book Number
ISSN . . . International Standard Serial Number
Illus . . . illustrations
Irreg . . . irregular
It . . . Italian
khz . . . kilohertz
kw . . . kilowatts
loc . . . local
LPTV . . . low power television
LS . . . local sunset
lstng . . . listening
lw . . . long wave
m . . . meters
MDS . . . Multipoint Distribution Service
mdse . . . merchandising
mfg . . . manufacturing
mgng . . . managing
mgr . . . manager
mgmt . . . management
mhz . . . megahertz
mi . . . miles
mktg . . . marketing
MMDS . . . Multichannel Multipoint Distribution Service
mo . . . month
mod . . . modification
MOR . . . middle of the road
MSO . . . multiple system operator
Mthy . . . monthly
mus . . . music
music rev . . . music reviews
mw . . . medium wave
N . . . night
na . . . not available
NAB . . . National Association of Broadcasters
natl . . . national
net . . . network
NPR . . . National Public Radio
nwspr . . . newspaper
off . . . officer
opns . . . operations
per . . . personnel
play rev . . . play reviews (theatre reviews)
Pol . . . Polish
pop . . . population
PR . . . public relations
pres . . . president
PRI . . . Public Radio International
progmg . . . programming
progsv . . . progressive
prom . . . promotion
PSA . . . presunrise authority, public service announcement
ptnr . . . partner
pub affrs . . . public affairs
publ . . . publicity

q . . . . . quarterly
quad . . . . . quadraphonic
record rev . . . . . record reviews
rel . . . . . relations
relg . . . . . religion
rep . . . . . representative
RFE . . . . . Radio Free Europe
rgn . . . . . region
rgnl . . . . . regional
RL . . . . . Radio Liberty
rsch . . . . . research
s-a . . . . . twice annually
s-m . . . . . twice monthly
s-w . . . . . twice weekly
sec . . . . . secretary
sep . . . . . separate
sh . . . . . shares
SH . . . . . specified hours
sls . . . . . sales
SMATV . . . . . satellite master antenna television
Sp . . . . . Spanish
sr . . . . . senior
ST . . . . . shares time
stn . . . . . station
sub . . . . . subscriber
supt . . . . . superintendent
supvr . . . . . supervisor
svcs . . . . . services
sw . . . . . short wave
t . . . . . terrain
tech . . . . . technical
tele rev . . . . . television reviews
3/m . . . . . three times a month
3/y . . . . . three times a year
traf . . . . . traffic
trans . . . . . translators
treas . . . . . treasurer
twp . . . . . township
TWX . . . . . Teletypewriter Exchange
U . . . . . unlimited
UHF . . . . . ultra high frequency
UPI . . . . . United Press International
var . . . . . variety
vert . . . . . vertical polarization
VHF . . . . . very high frequency
video rev . . . . . video reviews
vis . . . . . visual
VOA . . . . . Voice of America
vp . . . . . vice president
w . . . . . watts
wkly . . . . . weekly

TV Households

Every industry needs a measure of the size of its marketplace and the radio and television industries are no exceptions.

A major source of such media market data in the United States is Nielsen Media Research (NMR), and one of the measurements it takes annually is TV Households (TV HH). A home with one operable TV/monitor is a TV HH, and Nielsen is able to extrapolate its "National Universe Estimates" from Census Bureau population data combined with this expression of TV penetration.

With Us from Day One

The advent of broadcast advertising, in July 1941, was coincidental with the dawn of commercial television, and within ten years market research in the new medium was in full swing.

Since the Federal Communications Commission (FCC) allowed those first TV ads—for Sun Oil, Lever Bros., Procter & Gamble and the Bulova Watch Company—reliable audience measurement has been necessary for marketers to target their campaigns. The proliferation of devices for viewing TV content and the continual evolution of consumer behavior have made the task more important—and more challenging—than ever.

Nevertheless, while the reality of "TV Everywhere" has undeniably complicated the work of audience measurement, the use of one rudimentary gauge persists—the number of households with a set, TV HH.

Nielsen Media Research

In the United States, Nielsen Media Research (NMR) is the authoritative source for television audience measurement (TAM). Best-known for its ratings system, which has determined the fates of many television programs, NMR also tracks the number of households in a Designated Market Area (DMA) that own a TV.

Published annually before the start of the new TV season in September, these Universe Estimates, representing potential regional audiences, are used by advertisers to plan effective campaigns.

TV Ownership…

For more than 40 years, almost all households in the United States have owned at least one television. Nielsen estimates that number to be 121 million for the 2020-21 season, with 307.9 million persons aged 2 and older in those households, representing a 0.2% increase from last year.[1]

Nielsen also reports that the 96.2% of U.S. homes with televisions receive content through over-the-air, cable, DBS/Telco, or broadband Internet connection connected directly to a TV set, marking a 0.1% increase from last year.

…Is Where One Would Expect

Nielsen Media Research divides the United States into 210 Designated Market Areas (DMAs. See Figure 1). Each market area consists of a number of counties served by the same television and radio stations. Naturally, the largest DMAs are the most heavily populated metropolitan areas in the country.

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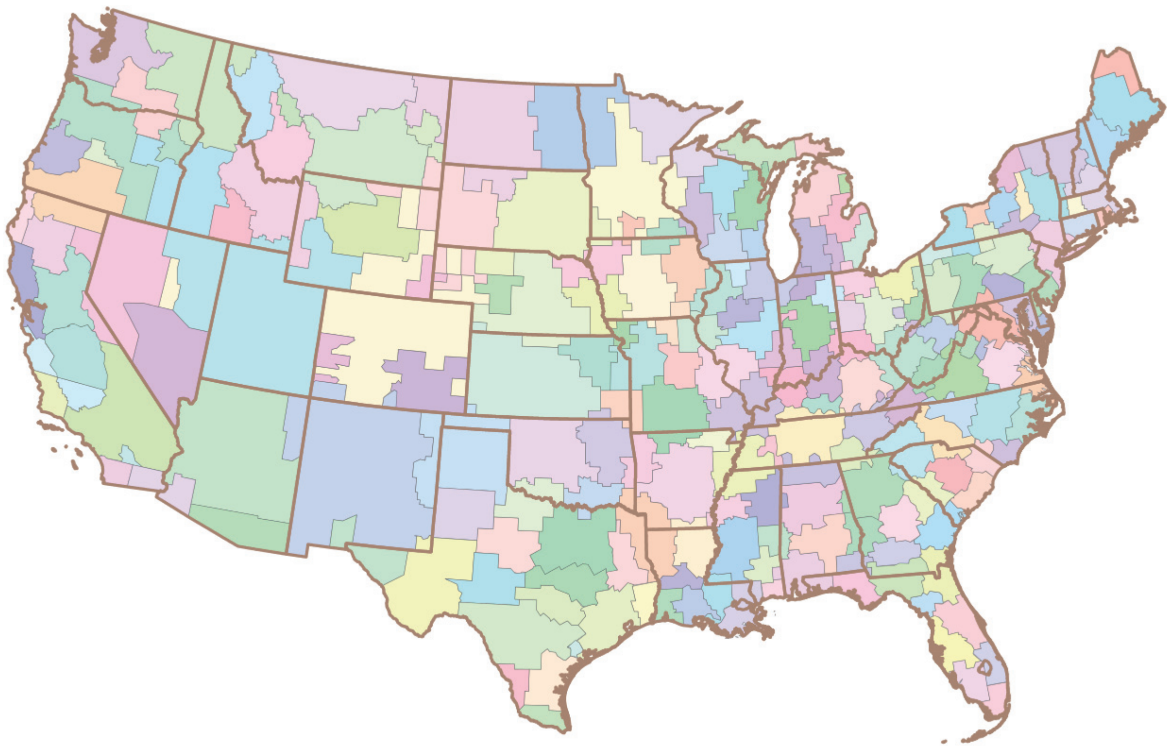
[1] Nielsen estimates 121 million TV homes in the U.S. for the 2020-2021 TV season (August 28, 2020). *Nielsen.com*. Retrieved October 13, 2021 from https://www.nielsen.com/us/en/insights/article/2020/nielsen-estimates-121-million-tv-homes-in-the-u-s-for-the-2020-2021-tv-season.

They are named for the largest city (e.g., New York) or cities (e.g., San Francisco-Oak-San Jose) in the region, and there is sometimes service overlap with nearby markets.

This year, the five top markets – New York, Los Angeles, Chicago, Philadelphia and Dallas-Ft. Worth – are unchanged. San Francisco-Oak-San Jose, Atlanta, Houston, Washington, D.C., and Boston round out the top ten.

Figure 1 Designated Market Areas



Source "Designated Market Areas, 2013" by 7.11brown licensed under CC BY-SA 3.0

Regional Top Fives[2]

The top 5 market areas in the Northeast (as defined by the Census Bureau) are New York (1), Philadelphia (4), Boston (10), Pittsburgh (26) and Baltimore (28).

In the South, the largest DMAs are Dallas-Ft. Worth (5), Washington, D.C. (9), Houston (8), Atlanta (7), and Tampa-St. Petersburg (13).

Chicago (3) leads the Midwest, followed by Detroit (15), Minneapolis-St. Paul (14), Cleveland-Akron (19) and St. Louis (23).

In the West, the second largest city in the country, Los Angeles, is the number 2 DMA. The other four in the region are San Francisco-Oak-San Jose (6), Phoenix (11), Seattle-Tacoma (12) and Denver (16).

[2] MediaTracks Communications. *Nielsen DMA Rankings 2021*. Retrieved October 18, 2021 from https://mediatracks.com/resources/nielsen-dma-rankings-2021.

65 Years of Station Transactions

YEAR	RADIO ONLY*	GROUPS*	TV ONLY	TOTAL
1954	$10,224,047 (187)	$26,213,323 (18)	$23,906,760 (27)	$60,344,130
1955	27,333,104 (242)	22,351,602 (11)	23,394,660 (29)	$73,079,366
1956	32,563,378 (316)	65,212,055 (24)	17,830,395 (21)	$115,605,828
1957	48,207,470 (357)	47,490,884 (28)	28,489,206 (38)	$124,187,560
1958	49,868,123 (407)	60,872,618 (17)	16,796,285 (23)	$127,537,026
1959	65,544,653 (436)	42,724,727 (15)	15,227,201 (21)	$123,496,581
1960	51,763,285 (345)	24,648,400 (10)	22,930,225 (21)	$99,341,910
1961	55,532,516 (282)	42,103,708 (13)	31,167,943 (24)	$128,804,167
1962	59,912,520 (306)	18,822,745 (8)	23,007,638 (16)	$101,742,903
1963	43,457,584 (305)	25,045,726 (3)	36,799,768 (16)	$105,303,078
1964	52,296,480 (430)	67,185,762 (20)	86,274,494 (36)	$205,756,736
1965	55,933,300 (389)	49,756,993 (15)	29,433,473 (32)	$135,123,766
1966	76,633,762 (367)	28,510,500 (11)	30,574,054 (31)	$135,718,316
1967	59,670,053 (316)	32,086,297 (9)	80,316,223 (30)	$172,072,573
1968	71,310,709 (316)	47,556,634 (9)	33,588,069 (20)	$152,455,412
1969	108,866,538 (343)	35,037,000 (5)	87,794,032 (32)	$231,697,570
1970	86,292,899 (268)	1,038,465 (3)	87,454,078 (19)	$174,785,442
1971	125,501,514 (270)	750,000 (2)	267,296,410 (27)	$393,547,924
1972	114,424,673 (239)	0 (0)	156,905,864 (37)	$271,330,537
1973	160,933,557 (352)	2,812,444 (4)	66,635,144 (25)	$230,381,145
1974	168,998,012 (369)	19,800,000 (5)	118,983,462 (24)	$307,781,474
1975	131,065,860 (363)	0 (0)	128,420,101 (22)	$259,485,961
1976	180,663,820 (413)	1,800,000 (3)	108,459,657 (32)	$290,923,477
1977	161,236,169 (344)	0 (0)	128,635,435 (25)	$289,871,604
1978	331,557,239 (586)	30,450,000 (5)	289,721,159 (51)	$651,728,398
1979	335,597,000 (546)	463,500,000 (52)	317,581,000 (47)	$1,116,678,000
1980	339,634,000 (424)	27,000,000 (3)	534,150,000 (35)	$900,784,000
1981	447,838,060 (625)	78,400,000 (6)	227,950,000 (24)	$754,188,060
1982	470,722,833 (597)	0 (0)	527,675,411 (30)	$998,398,244
1983	621,077,876 (669)	332,000,000 (10)	1,902,701,830 (61)	$2,855,779,706
1984	977,024,266 (782)	234,500,000 (2)	1,252,023,787 (82)	$2,463,548,053
1985	1,414,816,073 (1,558)	962,450,000 (218)	3,290,995,000 (99)	$5,668,261,073
1986	1,490,131,426 (959)	1,993,021,955 (192)	2,709,516,490 (128)	$6,192,669,871
1987	1,236,355,748 (775)	4,610,965,000 (132)	1,661,832,724 (59)	$7,509,153,472
1988	1,841,630,156 (845)	1,326,250,000 (106)	1,779,958,042 (70)	$4,947,838,198
1989	1,148,524,765 (663)	533,599,078 (40)	1,541,055,033 (84)	$3,223,178,876
1990	868,636,700 (1,045)	411,037,150 (60)	696,952,350 (75)	$1,976,626,200
1991	534,694,500 (793)	206,995,500 (61)	273,365,000 (38)	$1,015,055,000
1992	603,192,980 (667)	318,176,050 (24)	124,004,000 (41)	$1,045,373,030
1993	815,450,000 (633)	756,722,000 (NA)	1,728,711,000 (101)	$3,300,883,000
1994	970,400,000 (494)	1,800,000,000 (154)	2,200,000,000 (89)	$4,970,400,000
1995	792,440,000 (524)	2,790,000,000 (213)	4,740,000,000 (112)	$8,322,440,000
1996	2,840,820,000 (671)	12,034,000,000 (345)	10,488,000,000 (99)	$25,362,820,000
1997	2,461,570,000 (630)	14,580,000,000 (329)	6,400,000,000 (108)	$23,441,570,000

YEAR	RADIO ONLY*	GROUPS*	TV ONLY	TOTAL
1998	1,596,210,000 (589)	14,080,000,000 (271)	7,120,000,000 (90)	$22,796,210,000
1999	1,718,000,000 (382)	26,880,000,000 (196)	4,720,000,000 (86)	$33,318,000,000
2000**	24,900,000,000 (1,794)	0 (0)	8,800,000,000 (154)	$33,700,000,000
2001**	3,800,000,000 (1,000)	0 (0)	4,900,000,000 (108)	$8,700,000,000
2002**	5,594,141,000 (836)	0 (0)	2,529,039,000 (249)	$8,123,180,000
2003**	2,400,000,000 (950)	0 (0)	520,000,000 (97)	$2,920,000,000
2004**	1,897,422,000 (901)	0 (0)	871,923,000 (66)	$2,769,345,000
2005**	2,791,531,000 (895)	0 (0)	2,842,439,000 (86)	$5,633,970,000
2006**	22,871,247,000 (2101)	0 (0)	18,127,686,000 (180)	$40,998,933,000
2007**	1,488,628,000 (1,187)	0 (0)	4,616,018,000 (295)	$6,104,646,000
2008**	642,344,000 (749)	0 (0)	745,511,000 (48)	$1,387,855,000
2009**	345,487,000 (638)		713,490,000 (80)	$1,058,977,000
2010**	339,317,000 (816)		199,288,000 (60)	$538,605,000
2011**	4,275,300,000 (1,067)		1,098,971,000 (49)	$5,374,271,000
2012**	1,082,137 (898)		1,891,012 (95)	$2,973,149
2013**	1,040,135 (887)		8,823,042(290)	$9,863,177
2014**	944,895 (924)		4,615,443 (168)	$5,560,338
2015**	712,000 (785)		669,950 (86)	$1,381,950
2016**	493,000 (556)		5,279,500 (97)	$5,773,000
2017**	3,321,000 (752)		5,000,000 (107)	$8,320,000
2018**	745,500,000 (609)		8,800,000,000 (88)	$9,545,500,000
2019**	980,601,000 (624)		6,556,393,000 (123)	$7,536,994,000

Note: Dollar volume figures represent total considerations reported for all transactions with exception of minority interest transfers in which control of stations did not change hands and stations sold as part of larger company transactions. Although all states have been approved by the FCC, they may not necessarily have reached final closing. Prior to 1978, combined AM-FM facilities were counted as one station in computing total number of stations traded. Now AM-FM combinations are counted as two stations.
*Starting in 1993, the Radio only column includes only stand-alone AM and FM deals and the Groups column contains AM-FM combos and all other multiple station deals. In previous years the AM-FM combos were included under Radio only.
**Figures for 2000 to 2019 courtesy of BIA/Kelsey.

Source: BIA Advisory Services (www.bia.com)

Sales of Television Receivers

Year	Product Category	Units (Thousands)	Dollars (Million)	Average Price
2012	4K Ultra HDTVs	1	$22	$22,000
2013	4K Ultra HDTVs	77	$310	$4,026
2014	4K Ultra HDTVs	1,431	$2,238	$1,564
2015	4K Ultra HDTVs	7,322	$7,673	$1,048
2016	4K Ultra HDTVs	10,488	$10,033	$957
2017	4K Ultra HDTVs	16,086	$13,324	$828
2018	4K Ultra HDTVs	16,296	$15,823	$971
2019	4K Ultra HDTVs	22,462	$17,229	$767
2020	4K Ultra HDTVs	34,154	$18,077	$529
2021	4K Ultra HDTVs	34,837	$16,410	$471
1954	Analog Color TV	5	$2	$400
1955	Analog Color TV	20	$10	$500
1956	Analog Color TV	100	$46	$460
1957	Analog Color TV	85	$37	$435
1958	Analog Color TV	80	$34	$425
1959	Analog Color TV	90	$37	$411
1960	Analog Color TV	120	$47	$392
1961	Analog Color TV	147	$56	$381
1962	Analog Color TV	438	$154	$352
1963	Analog Color TV	747	$258	$345
1964	Analog Color TV	1,404	$488	$348
1965	Analog Color TV	2,694	$959	$356
1966	Analog Color TV	5,012	$1,861	$371
1967	Analog Color TV	5,563	$2,015	$362
1968	Analog Color TV	6,215	$2,086	$336
1969	Analog Color TV	6,191	$2,031	$328
1970	Analog Color TV	4,821	$1,684	$349
1971	Analog Color TV	6,180	$2,355	$381
1972	Analog Color TV	7,555	$2,825	$374
1973	Analog Color TV	9,264	$3,097	$334
1974	Analog Color TV	7,830	$2,658	$339
1975	Analog Color TV	6,485	$2,212	$341
1976	Analog Color TV	7,700	$2,688	$349
1977	Analog Color TV	9,107	$3,187	$350
1978	Analog Color TV	10,236	$3,583	$350
1979	Analog Color TV	9,846	$3,545	$360
1980	Analog Color TV	10,897	$4,004	$367
1981	Analog Color TV	11,157	$4,123	$370
1982	Analog Color TV	11,366	$4,141	$364
1983	Analog Color TV	13,986	$4,728	$338
1984	Analog Color TV	16,083	$5,359	$333
1985	Analog Color TV	16,829	$5,522	$328
1986	Analog Color TV	18,204	$5,836	$321
1987	Analog Color TV	19,330	$6,148	$318
1988	Analog Color TV	20,216	$5,907	$292
1989	Analog Color TV	21,706	$6,490	$299
1990	Analog Color TV	20,384	$6,197	$304
1991	Analog Color TV	19,474	$5,979	$307
1992	Analog Color TV	21,056	$6,591	$313
1993	Analog Color TV	23,005	$7,316	$318
1994	Analog Color TV	24,715	$7,225	$292
1995	Analog Color TV	23,231	$6,798	$293
1996	Analog Color TV	22,384	$6,492	$290

1997	Analog Color TV	21,293	$6,036	$283
1998	Analog Color TV	22,204	$6,122	$276
1999	Analog Color TV	23,218	$6,199	$267
2000	Analog Color TV	24,175	$6,140	$254
2001	Analog Color TV	21,167	$5,130	$242
2002	Analog Color TV	22,469	$5,782	$257
2003	Analog Color TV	20,791	$4,756	$229
2004	Analog Color TV	19,934	$3,526	$177
2005	Analog Color TV	16,934	$2,790	$165
2006	Analog Color TV	8,761	$1,000	$114
2007	Analog Color TV	1,155	$115	$100
1998	Digital TV Sets and Displays	14	$43	$3,071
1999	Digital TV Sets and Displays	121	$295	$2,438
2000	Digital TV Sets and Displays	625	$1,422	$2,275
2001	Digital TV Sets and Displays	1,460	$2,648	$1,814
2002	Digital TV Sets and Displays	2,535	$4,280	$1,688
2003	Digital TV Sets and Displays	5,532	$8,692	$1,571
2004	Digital TV Sets and Displays	8,002	$12,300	$1,537
2005	Digital TV Sets and Displays	11,368	$15,563	$1,369
2006	Digital TV Sets and Displays	23,504	$23,380	$995
2007	Digital TV Sets and Displays	26,292	$25,185	$958
2008	Digital TV Sets and Displays	31,154	$25,930	$832
2009	Digital TV Sets and Displays	34,799	$22,032	$633
2010	Digital TV Sets and Displays	34,659	$20,137	$581
2011	Digital TV Sets and Displays	33,781	$18,151	$537
2012	Digital TV Sets and Displays	40,310	$19,866	$493
2013	Digital TV Sets and Displays	39,191	$19,385	$495
2014	Digital TV Sets and Displays	37,588	$19,388	$516
2015	Digital TV Sets and Displays	40,146	$19,438	$484
2016	Digital TV Sets and Displays	40,887	$19,090	$467
2017	Digital TV Sets and Displays	42,863	$21,062	$491
2018	Digital TV Sets and Displays	38,260	$25,260	$660
2019	Digital TV Sets and Displays	41,157	$24,556	$597
2020	Digital TV Sets and Displays	47,324	$22,835	$483
2021	Digital TV Sets and Displays	44,949	$23,974	$533
2006	Full HDTV (1080p)	1,786	$2,570	$1,439
2007	Full HDTV (1080p)	5,807	$8,946	$1,541
2008	Full HDTV (1080p)	11,268	$13,727	$1,218
2009	Full HDTV (1080p)	13,403	$13,117	$979
2010	Full HDTV (1080p)	14,702	$13,232	$900
2011	Full HDTV (1080p)	15,334	$12,494	$815
2012	Full HDTV (1080p)	18,441	$14,505	$787
2013	Full HDTV (1080p)	27,515	$16,978	$617
2014	Full HDTV (1080p)	27,450	$14,878	$542
2015	Full HDTV (1080p)	22,503	$9,463	$421
2016	Full HDTV (1080p)	23,186	$7,795	$336
2017	Full HDTV (1080p)	21,655	$6,904	$319
2018	Full HDTV (1080p)	11,582	$5,050	$436
2019	Full HDTV (1080p)	11,812	$4,957	$420
2020	Full HDTV (1080p)	9,522	$2,917	$306
2021	Full HDTV (1080p)	6,189	$1,593	$257

Source: Consumer Technology Association, U.S. Consumer Technology One-Year Industry Forecast, 2017-2022, July 2021 edition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Introduction

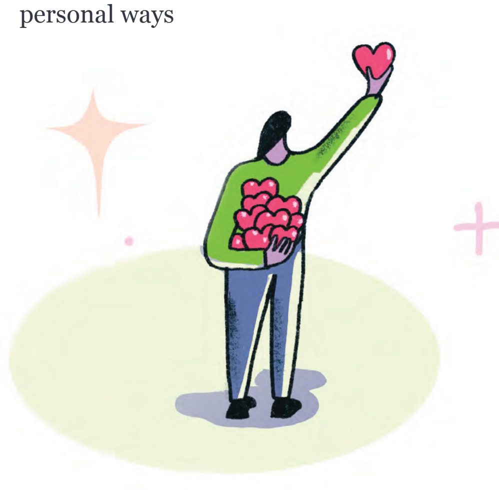
AFTER A HISTORIC and challenging year, US consumers have become more reliant than ever on media for entertainment, information, and social connection. The pandemic has accelerated preexisting industry trends and altered entertainment-related behaviors, leading many to wonder which will stick after the crisis and what the implications may be for media and entertainment (M&E) businesses.[1]

There is competition for audiences among a crowded field of streaming video providers, but also with other forms of entertainment. People are enjoying more paid and free options for streaming video and music services; video gaming is growing across generations; and more people are turning to social media for entertainment and news. But they only have so much time, attention, and money. As M&E companies vie for consumers, the next wave of disruption may lie with Generation Z—who prefers to play video games, stream music, and engage on social media, often simultaneously, rather than just watch TV or movies.

The next wave of disruption may lie with Generation Z—who prefers to play video games, stream music, and engage on social media, rather than just watch TV or movies.

Everyone is looking to court the consumer—streamers, video game companies, social media services, and advertisers. But courtship is likely only the first step toward building a lasting relationship. In this world of choice, where consumers are "the belle of the ball," we wanted to understand their behaviors, how they differ, and how M&E companies can best position themselves as long-term partners. We will explore:

- The state of the entertainment landscape—consumer preferences and how they engage with the many entertainment options vying for their time and money
- The similarities and differences between streaming video, streaming music, and gaming audiences
- The role of social media as an aggregator of news and entertainment, and what this means for advertising and trust
- How people relate to advertising and how advertisers are under greater pressure—and scrutiny—to connect with audiences in personal ways



ABOUT *DIGITAL MEDIA TRENDS*

The 15th edition of the *Digital media trends* survey was conducted by Deloitte's Technology, Media & Telecommunications practice and fielded by an independent research firm. The online survey of 2,009 US consumers was conducted in February 2021. All data is weighted back to the most recent census to give a representative view of what US consumers are doing. For meaningful changes, we look for differences in tracking and generations of at least five percentage points. We define the five generations represented in this survey below:

Gen Z

Born 1997–2007

Age range 14–24

Millennials

Born 1983–1996

Age range 25–38

Gen X

Born 1966–1982

Age range 39–55

Boomers

Born 1947–1965

Age range 56–74

Matures

Born 1946 and prior

Age range 75+

Everyone on the dance floor

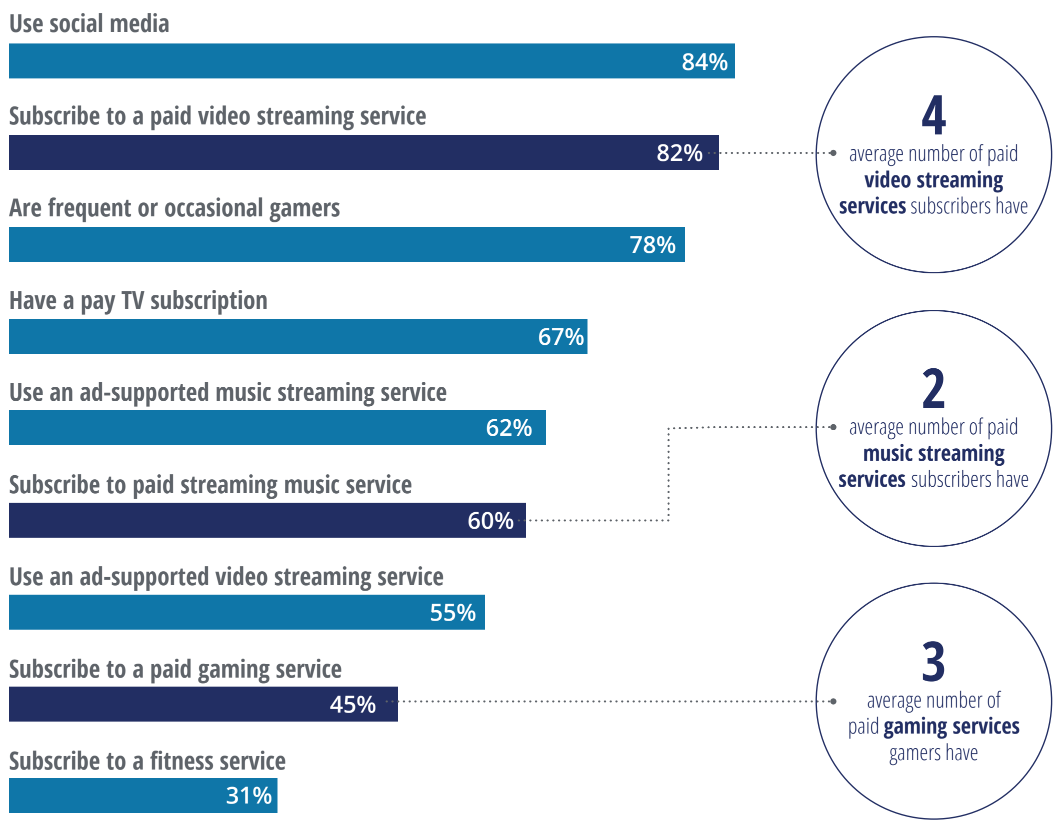
Choice for consumers, competition for providers

IN THIS WORLD of choice, US consumers have multiple free and paid entertainment options vying for their consideration. Most respondents said they use social media, have at least one paid streaming video service, and play video games frequently or occasionally.[2] Many also subscribe to music streaming services and have a traditional pay TV subscription (figure 1).

FIGURE 1

Consumers are faced with many entertainment demands

Percentage of respondents who:



Source: Digital media trends survey, 15th edition.

With so many entertainment options, asking consumers about their favorite activities can lead to valuable insights. For our respondents, *watching TV and movies at home* continued to be the overall favorite, with 57% ranking it in their top three (out of 16 entertainment activities). This was the top choice for Millennials, Generation X, and Boomers (figure 2). When we looked at Generation Z, however, there were distinct differences. *Playing video games* was their favorite activity (26%), followed by *listening to music* (14%), *browsing the internet* (12%), and *engaging on social platforms* (11%). Only 10% of Generation Z said that *watching TV or movies at home* was their favorite form of entertainment.

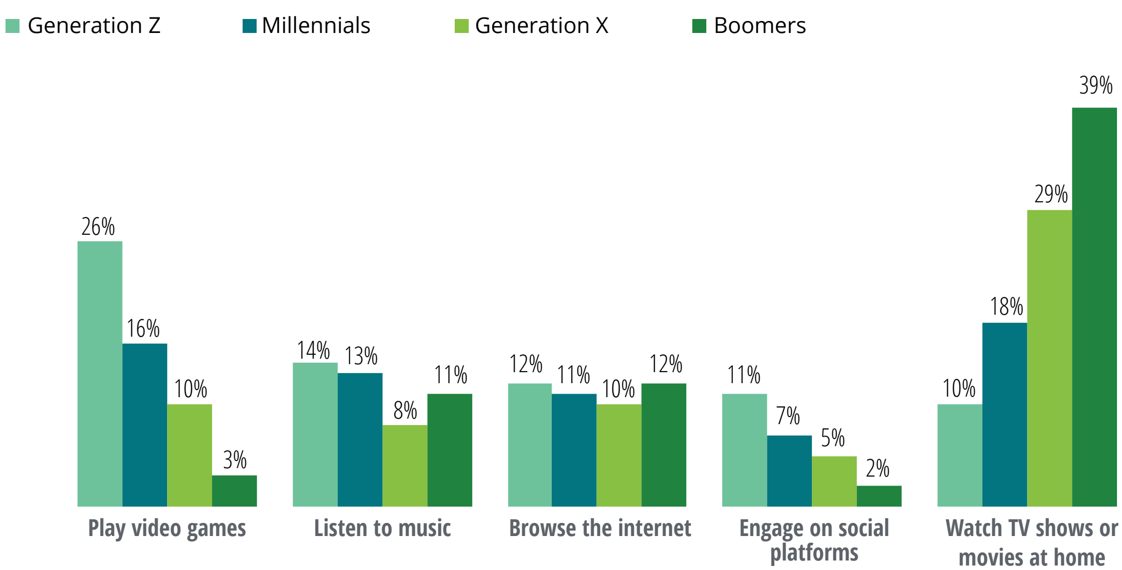
If the Generation Z preferences for gaming, music, and social media persist over time, the dominant position that video entertainment has held could be challenged. If this is the case, media companies should be prepared to evolve and take a diversified approach, starting with gaming. All of these options are dividing and fragmenting the market considerably. Providers should now understand the nuances among customer segments, generations, and differing kinds of media.

If the Generation Z preferences for gaming, music, and social media persist over time, the dominant position that video entertainment has held could be challenged.

FIGURE 2

Generation Z may not be "video first"

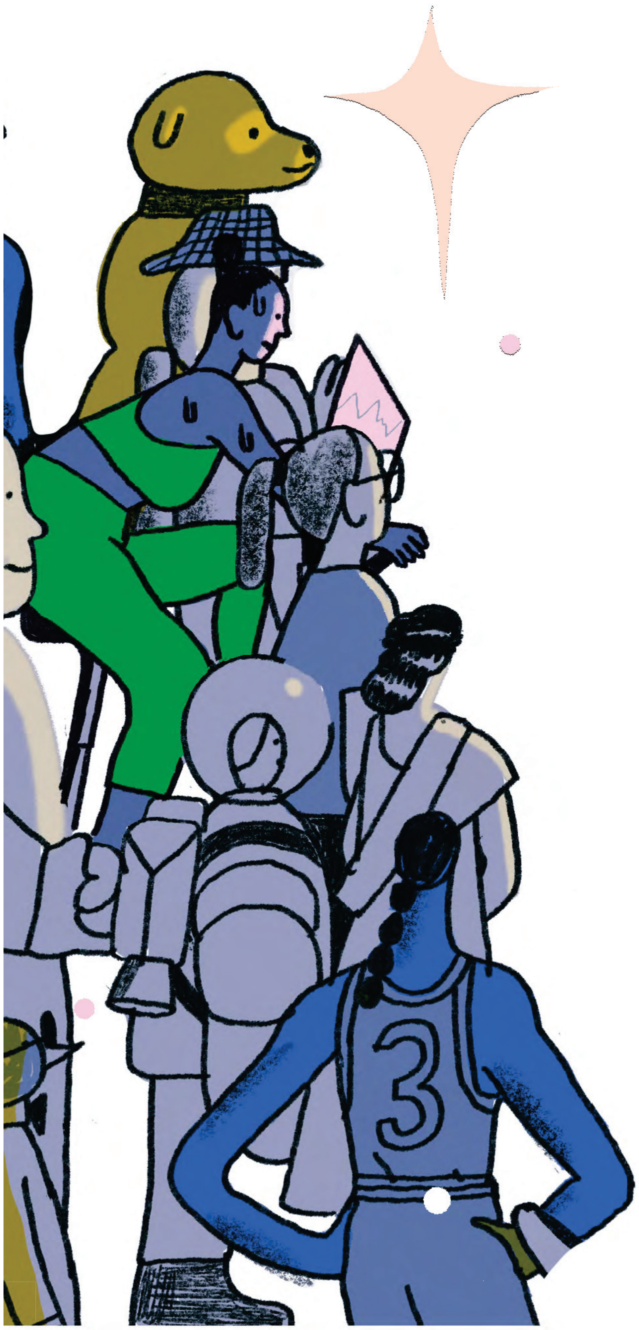
Respondents across generations ranked their favorite entertainment activity



Source: Digital media trends, 15th edition.

Entertainment services

Courting the customer with cost and content



CONSUMERS ARE FACING growing pressure to manage and pay for so many entertainment services. As they chase niche content and trending entertainment, people are showing strong interest in ad-supported options that subsidize or remove subscription costs. At the same time, subscription fatigue and sub-optimal user experiences are creating friction, which is causing some audiences to jump to competitors or other forms of entertainment. The COVID-19 pandemic has also impacted productions and the ability to deliver new video content. All of this is driving subscriber churn and posing challenges for media companies vying to retain audiences.

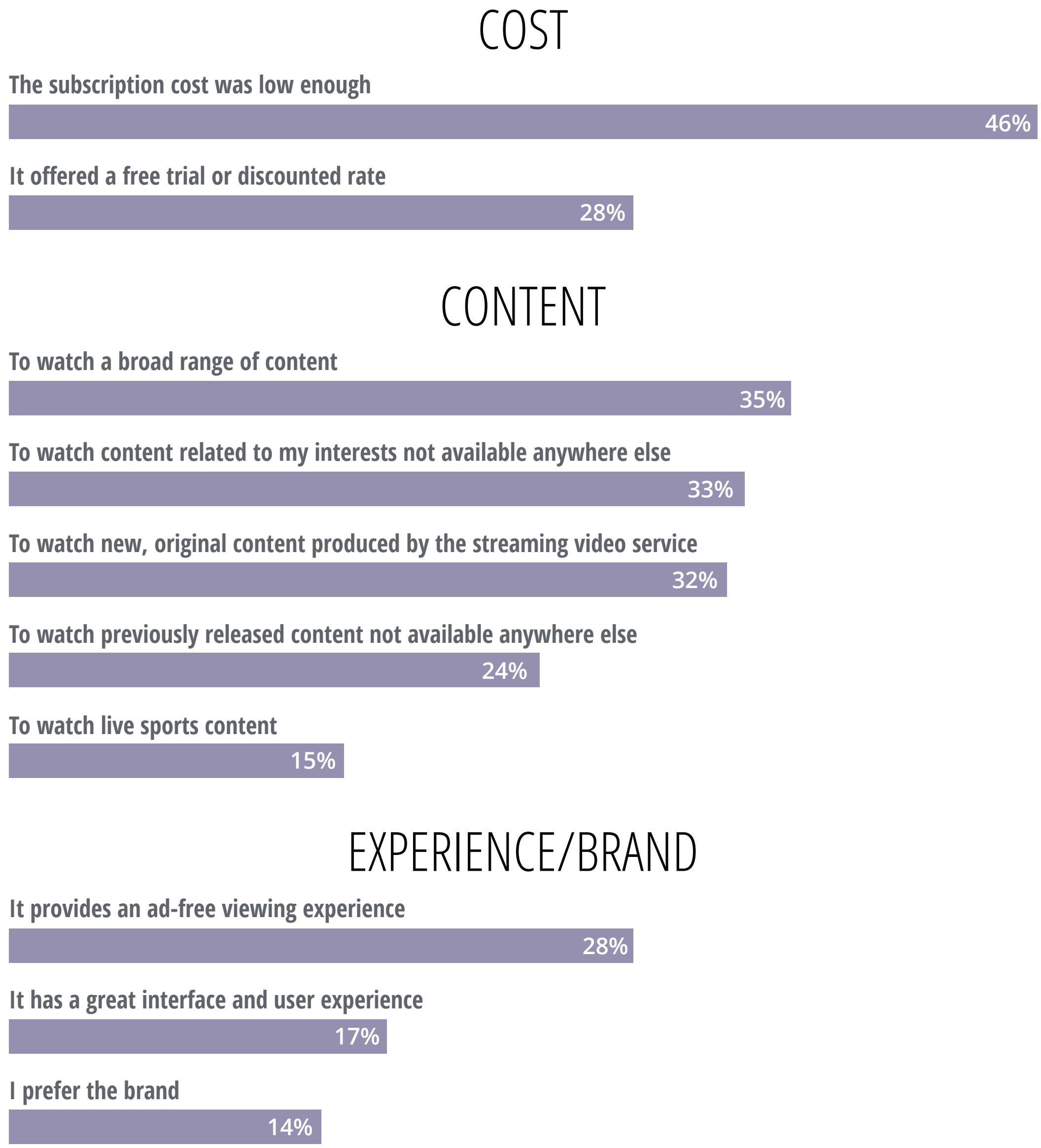
The costs of streaming video

As providers buy up content and spend billions to produce their own, consumers are increasingly aware of—and sensitive to—costs adding up.[3] Among our respondents, 46% said that a low enough price was the most important factor in deciding to subscribe to a new paid streaming video service. This represents a significantly greater number than those who listed content as their main consideration (figure 3). While some consumers lost income or employment due to the COVID-19 pandemic, many sought to balance costs across multiple paid entertainment services.

FIGURE 3

A dance between cost, content, and ad-tolerance

Top reasons consumers would subscribe to a brand new paid streaming video service



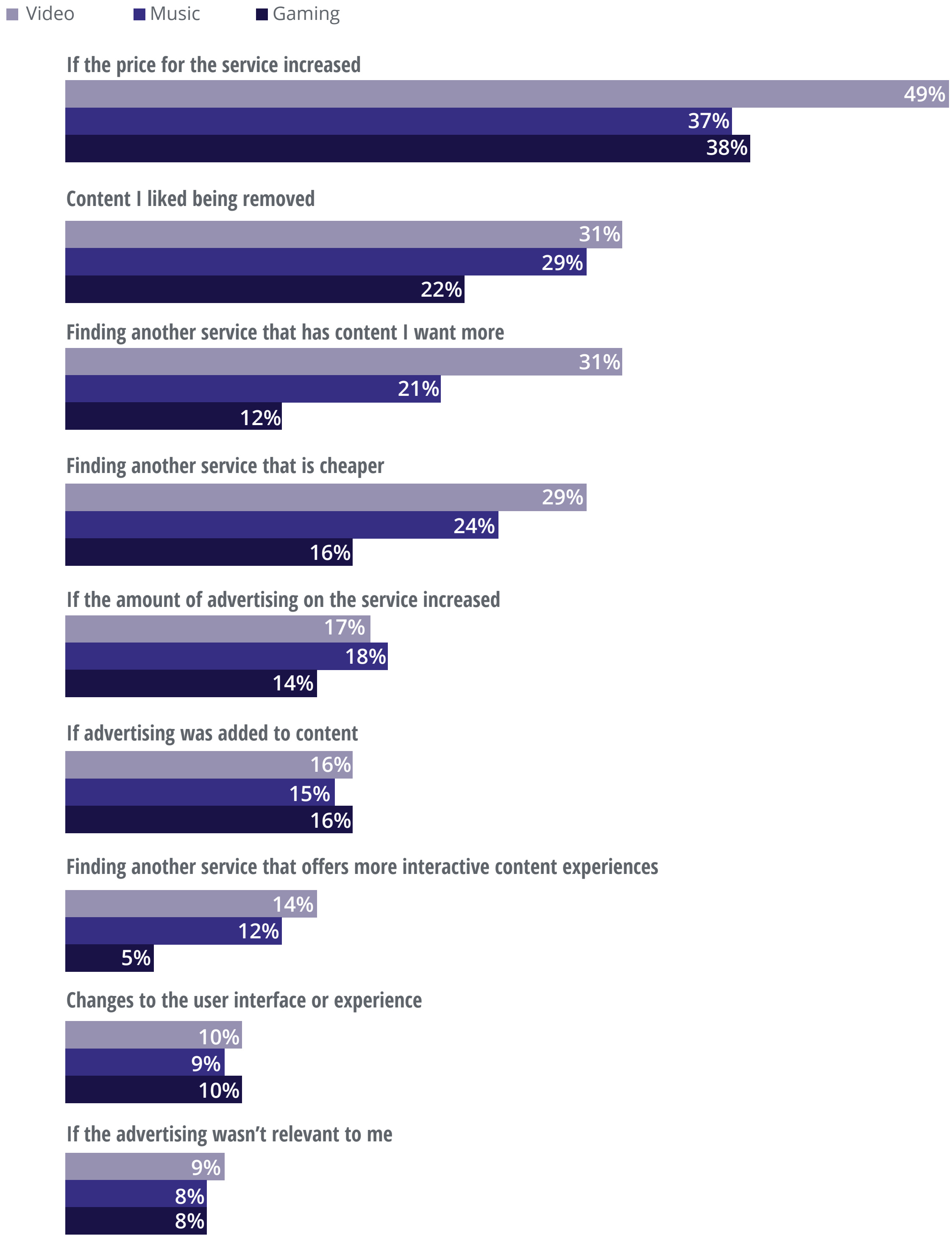
Source: Digital media trends, 15th edition.

This cost sensitivity is driving more consumer interest in ad-supported options that subsidize or remove subscription fees. Among our respondents, 55% said they now carry a free, ad-supported video service. Content and cost are the factors that drive paid streaming video subscriptions, while content, no cost, and ease of access are the selling points for ad-supported video services. When we asked people which factors would motivate them to cancel a paid video, music, or gaming service, an increase in price was most often cited, although interesting nuances emerged among different media types (figure 4).

FIGURE 4

Across entertainment services, price sensitivity is key

Most likely reason to cancel or stop using a paid service



Source: Digital media trends, 15th edition.

Persistent churn

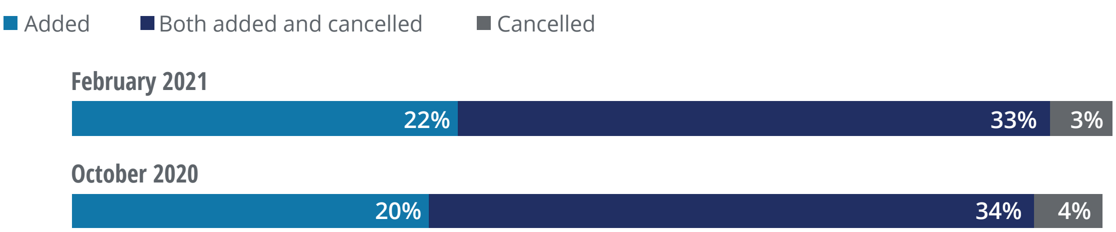
With more streaming video services, people are finding it increasingly difficult to manage subscriptions, find the entertainment they're looking for, and balance costs against their tolerance for advertising. We found that 66% of people were frustrated when content they wanted to watch was removed from a service, and 53% were frustrated by having to subscribe to multiple services to access the content they want. Consumers also face difficulties finding content—a challenge for providers spending billions on new productions. Among respondents, 52% found it difficult to access content across so many services, and 49% were frustrated if a service failed to provide them with good recommendations. These challenges reinforce subscriber churn. From October 2020 to February 2021, the churn rate for streaming video services held at around 37% (figure 5).

Providers understand that keeping audiences around after they've binged the latest hits may require more than just good content. And given what they spend on marketing, advertising, discounts, free trials, and new content to acquire subscribers, it may make more sense for providers to retain subscribers at a lower price than lose them, at least right now. Churn will erode ROI and customer value, making retention essential. With greater cost sensitivity, subscribers may want more pricing options based on their usage and ad tolerance, and an easy way to move between tiers to meet their needs and level of engagement. Providers can also develop stronger, more customized user experiences, which would make it easier for subscribers to find content that fits their interests. By improving this interface, streaming video services can personalize the experience and strengthen the relationship they have with audiences.

FIGURE 5

Customer retention is an unavoidable concern for video streaming providers

Changes in paid streaming video services among respondents since the start of the COVID-19 pandemic



Source: Digital media trends, 15th edition.

Here are some questions streaming media providers can ask themselves to determine next steps:

- How can we get closer to customers to deliver engaging content, pricing, and advertising?

- Can we predict churn better, and then use membership perks to entice hesitant subscribers to stay?

- If younger people are becoming less engaged with more traditional video formats, does this represent a potential sea change for our business?

- How can we best leverage our intellectual property to engage with audiences on other entertainment platforms and entice them to use our services?

Generation Z could reshape the entertainment landscape

WE SAW THAT Generation Z has strikingly different entertainment preferences, often seeking video games and music before watching TV and movies. They have grown up with social media, instant messaging, video games, and live-streaming influencers. In fact, Generation Z could be viewed as early adopters who are influencing the behaviors of Millennials and Generation X—and possibly younger generations that follow them. This begs the question: Are M&E companies prepared for a future that could be shaped by Generation Z?

Video games were already growing significantly before COVID-19 but have been amplified during the pandemic.[4] We found that 87% of Generation Z, 83% of Millennials, and 79% of Generation X said they play video games on devices such as smartphones, gaming consoles, or computers at least weekly. Many are playing daily to fill idle time, connect with friends, compete with opponents, and escape into stories. Most Generation Z, Millennials, and Generation X respondents said that during the pandemic, video games helped them stay connected to other people and get through difficult times. More than half of Millennials and Generation X said that video games have taken away time from other entertainment activities.[5]

When they aren't playing video games—and even when they are—Generation Z is streaming music. In 2019, streaming music services generated around 80% of total music revenues across ad-supported and premium paid services.[6] In 2020, streaming was one of the few bright spots for the music industry.[7] One study showed that half of young adults ages 18 to 29 are streaming music every day.[8]

Generation Z isn't alone in its love of music, however: Forty percent of respondents from all generations placed *listening to music* as a top-three favorite entertainment activity in our survey. Around 60% said they have a paid streaming music service, and the same amount use a free, ad-supported music service. For those who pay, *the library of music* was the primary reason, followed by *an ad-free and reasonably priced experience*. For those using a free, ad-supported music service, *zero cost* was the primary reason, followed by *ease of access* and access to *a broad range of content*. Most said they tune out ads, suggesting that advertisers on streaming music services face challenges for ROI.

Media companies and advertisers may still be video-first, but younger generations may not be. To understand this potential shift, providers can work through these questions:

- How can we better understand the nuances across different media?
- How can we leverage these channels to reach younger audiences, expand our brands, and bring more people onto our franchises?
- Does our strategy address the impacts of gaming, streaming music, and social media?

Social media

Everyone is at the party, but where is the trust?

BEYOND CONNECTION AND sharing, social media services have become common gateways for consuming music, video, games, and news. Empowering humanity to connect and broadcast globally, and the data economy that has risen around this milieu, has become so impactful that governments around the world are now wrestling to set limits on social media's reach.[9] At the same time, social media users are learning more about their role in the data economy. Now, there is tension between the value that consumers and businesses get from social media and the challenges of establishing trust, responsibility, and regulation.

Although social media reaches all generations, what they do on it varies by age. Among the emerging activities we asked about, Generation Z and Millennials both ranked *listening to music* as their top activity on social media. For Generation X, it was *consuming news*. The second most popular social media activity for Generation Z was *playing video games*, and for Millennials, *watching TV shows and movies*.

News at 11

Up next on social media

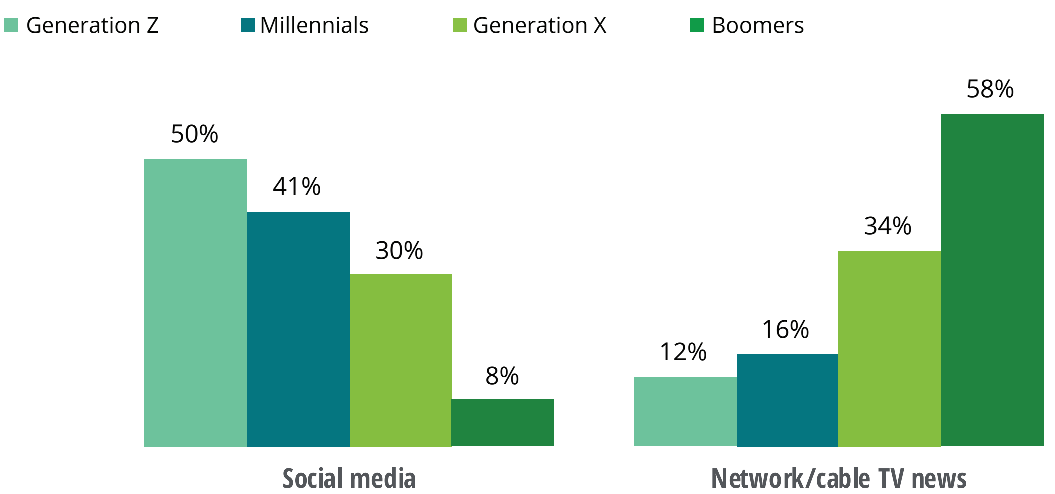
A RECENT SURVEY FROM the Pew Research Center showed that 34% of US adults regularly get their news from social media.[10] In our survey, one-half of Generation Z ranked social media as the No. 1 way they prefer to get news, and only 12% selected news from network or cable TV. Boomers are just the opposite: 58% said they prefer news on network or cable TV while only 8% said they go to social media first for news stories (figure 6).

This should concern TV providers whose audiences say that local and cable news is the No. 1 reason they pay for live TV.[11] It also underscores questions about the provenance and credibility of news on social media.

FIGURE 6

Different generations consume news in different ways

Most preferred way to stay updated on news and current events



Source: Digital media trends, 15th edition.

The tension between value and trust

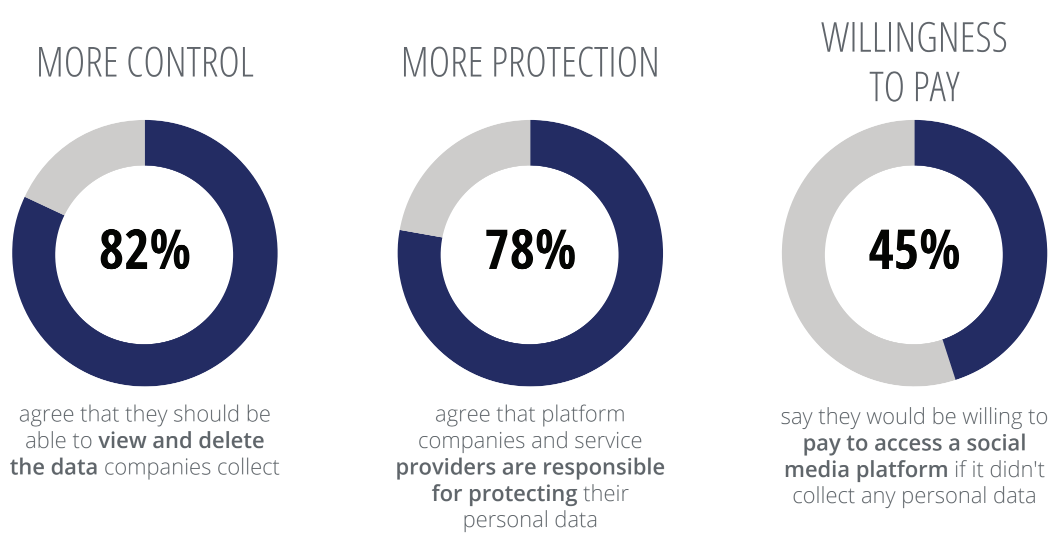
ENGAGEMENT, TARGETED CONTENT, personalized advertising, and churn prediction are demanding more data from consumers, who may be questioning how much value they get from the data economy. In our survey, 60% of respondents felt that social media companies are responsible for the content people post on their platforms. Consumers are divided around the 2020 U.S. Presidential election; 43% of respondents felt that social media companies did a good job managing misinformation, while 44% felt that they could have done more. And even though many people get their news from social media, 67% don't trust the news they see on those services. Each of these sentiments is driving the conversations about regulating social media.

Although consumers aren't really changing their behaviors, they do want more agency, protection, and oversight in the data economy. Among our respondents, 82% believed they should be able to view and delete the data that companies collect about them, and 78% said providers are responsible for protecting consumers' personal data (figure 7). Notably, 77% said the government must do more to regulate data collection and use.

Although consumers aren't really changing their behaviors, they do want more agency, protection, and oversight in the data economy.

FIGURE 7

Consumers across generations seek more control and protection around their personal data



Source: Digital media trends, 15th edition.

A potential bright side for providers: Forty-five percent said they are willing to pay for social media if it didn't collect their data. Easier said than done, for both providers and users. Streaming entertainment services should pay close attention to the sentiments and regulatory discussions concerning social media, data collection, and targeting. With more services planning to expand their data analytics and proprietary customer insights, they should look for ways to get ahead of consumer concerns. Done right, the M&E industry could differentiate by offering strong data protections that empower users, deliver greater value, and create better user experiences. Here are some questions M&E company leaders should consider:

- How should we best utilize social media? Should we move content onto those services, or build social affordances into our own offerings?

- How can we balance the value we provide with the data we collect? Can we create more engagement and better segmentation without personal information?

- If we believe data collection is essential, how can we make it more secure, transparent, and equitable?

Advertising

From tolerance to personalized engagement

ADVERTISING UNDERLIES AND supports all entertainment and social media, and advertisers are constantly striving to court consumers, capture their attention, and turn engagement into ROI. Although overall global advertising revenue was down in 2020, digital advertising experienced record profits and growth on top social media platforms.[12] In addition, the popularity of ad-supported streaming video has continued to grow with consumers during the pandemic.[13]

As advertising further expands into digital entertainment services, advertisers and providers should consider how ad-related preferences and expectations around personalization and privacy vary across consumer segments and media.

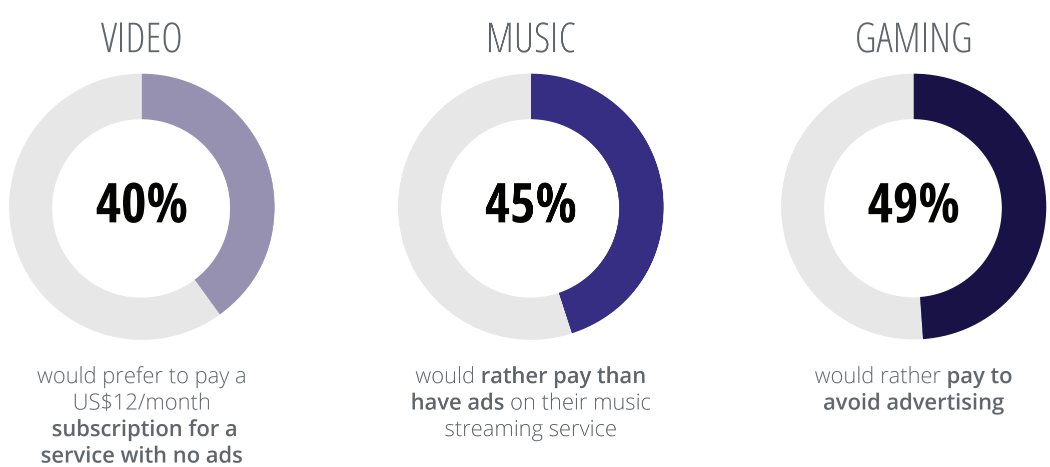
Distinctions in ad-tolerance and engagement

For advertisers to get ROI, consumers need to first agree to accept advertising through their entertainment services, and then they need to be sufficiently influenced by those ads. Across different entertainment types and generations, how much people tolerate ads and where they are willing to pay to avoid them varied widely (figure 8).

For streaming video, we found that 40% of respondents would prefer to pay US$12 a month for a service with no ads vs. 39% preferring a free service with 12 minutes of ads per hour. The desire for no ads was even higher for younger generations: Forty-eight percent of Generation Z and 46% of

FIGURE 8

Advertisers should consider differences in consumer ad-tolerance across entertainment types



Source: Digital media trends, 15th edition.

Millennials would rather pay to avoid ads on streaming video services.

For music services, there is less tolerance. Overall, 45% of respondents would rather pay than have ads on their music streaming service. For Millennials, 67% said they would rather pay. Additionally, 61% of all consumers said they tune out during the ads on free music streaming services, making engagement more challenging.

For video games, 49% of respondents who play video games would rather pay to avoid advertising. Among those who subscribe to a gaming service, adding advertising or increasing the amount of advertising were top reasons they would most likely cancel or stop using that service.[14]

However, younger generations said that social media influencers and ads on social media are the two most persuasive channels influencing their buying decisions: Fifty-five percent of Generation Z and 66% of Millennials said that ads on social media are influential. They also typically liked ads on social media more than ads in streaming video content and other channels. For ads on social media services, Generation Z and Millennials had a net positive "likeability" score—the difference between whether they found ads on a channel memorable or annoying (figure 9).

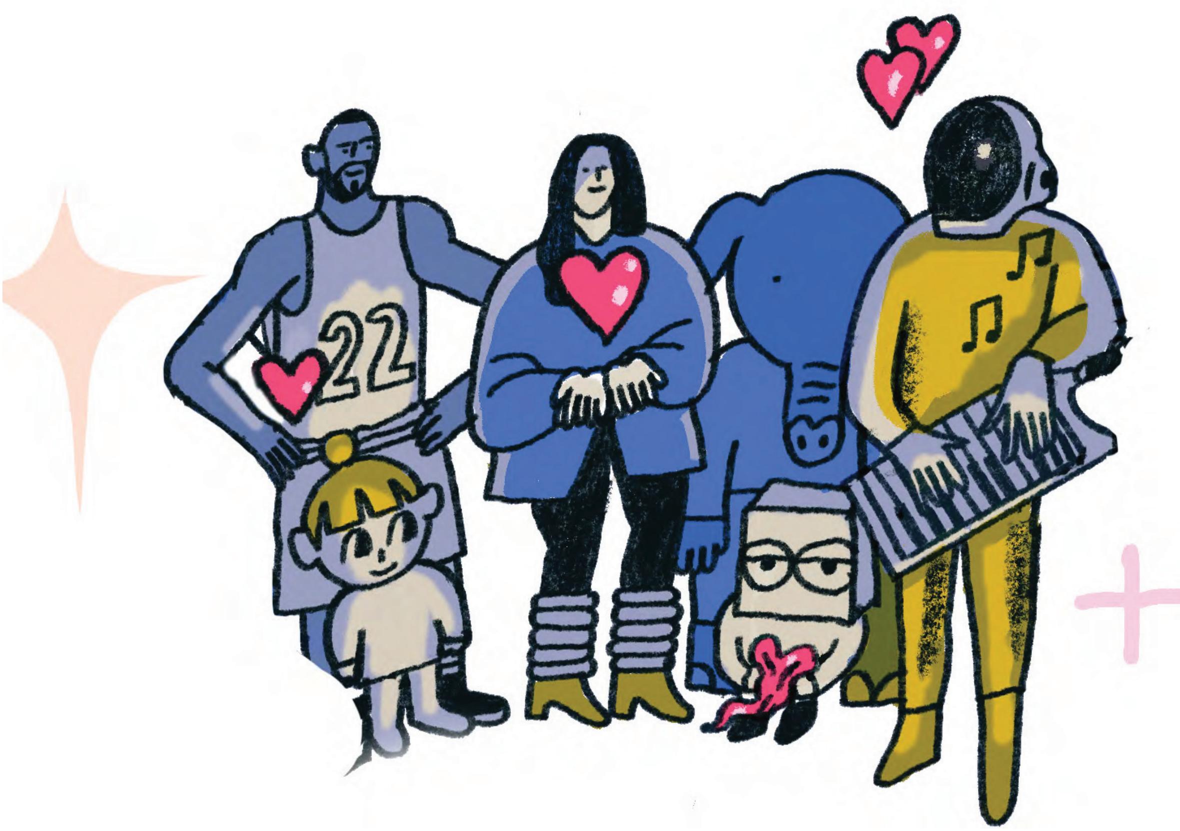
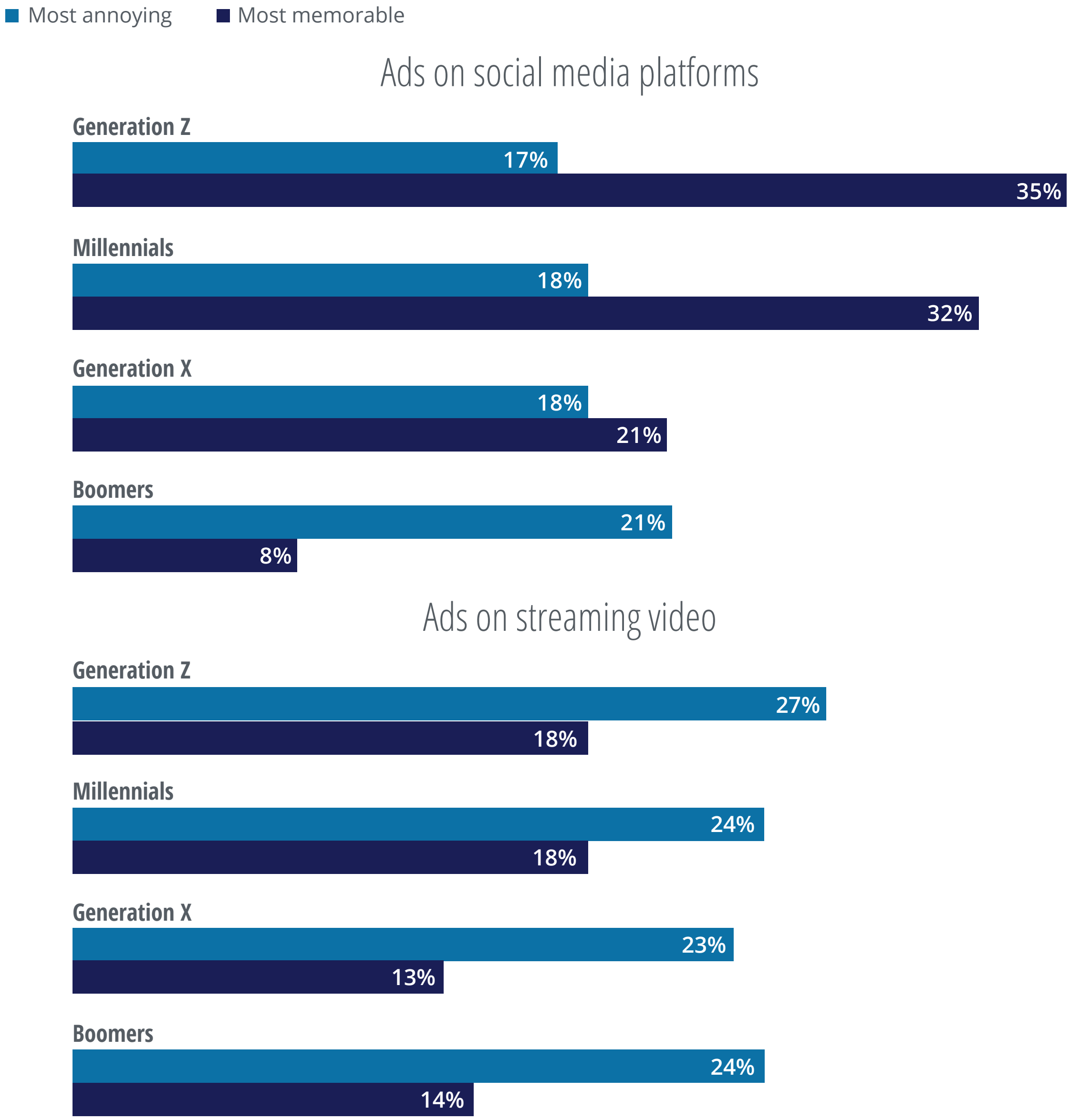


FIGURE 9

From tolerance to engagement

Differences in ad "likeability"



Source: Digital media trends, 15th edition.

Difficulties around personalization and control

DIGITAL PLATFORM COMPANIES see the ability to personalize as a key differentiator to meet the needs of advertisers. But our survey uncovered two challenges: How to balance personalized ads with the use of personal information, and how to protect brands when ads placed next to hateful content could lead to negative consumer sentiment.

On social media platforms, 62% of Generation Z and 72% of Millennials would rather see ads personalized to their likes and activity than generic ones. However, only 40% of consumers overall said they would be willing to provide more personal information to receive advertising targeted to their interests. Sixty percent of the more digitally savvy Millennials would make the trade-off. This may be due to an overall lack of trust or a lack of knowledge of how their personal information is ultimately leveraged.

Another issue is around how—and *where*—advertising is placed on social media platforms. In the summer of 2020, brands that were positioned near posts containing unacceptable content, including hate speech, received substantial consumer backlash.[15] We found that 43% of consumers (39% of Generation Z and 54% of Millennials) agreed that they would associate nearby ads with a post that included hate speech. Although progress is being made, avoiding these adjacencies will be an ongoing issue for advertisers and social media companies.[16]

Some consumers will always be willing to accept ads to access free services; others will do whatever they can to avoid ads. A key is for entertainment providers, digital platforms, and advertisers to understand the nuances between consumer segments and how sentiments vary across media types and generations. Here are some strategic questions M&E leaders can explore:

- How can content providers and advertisers look at advertising holistically across entertainment platforms and segments, while addressing unique consumer tolerances and preferences?

- Which data capabilities do M&E companies need to help drive increased ad engagement and ROI? How much can be done without personally identifiable information?

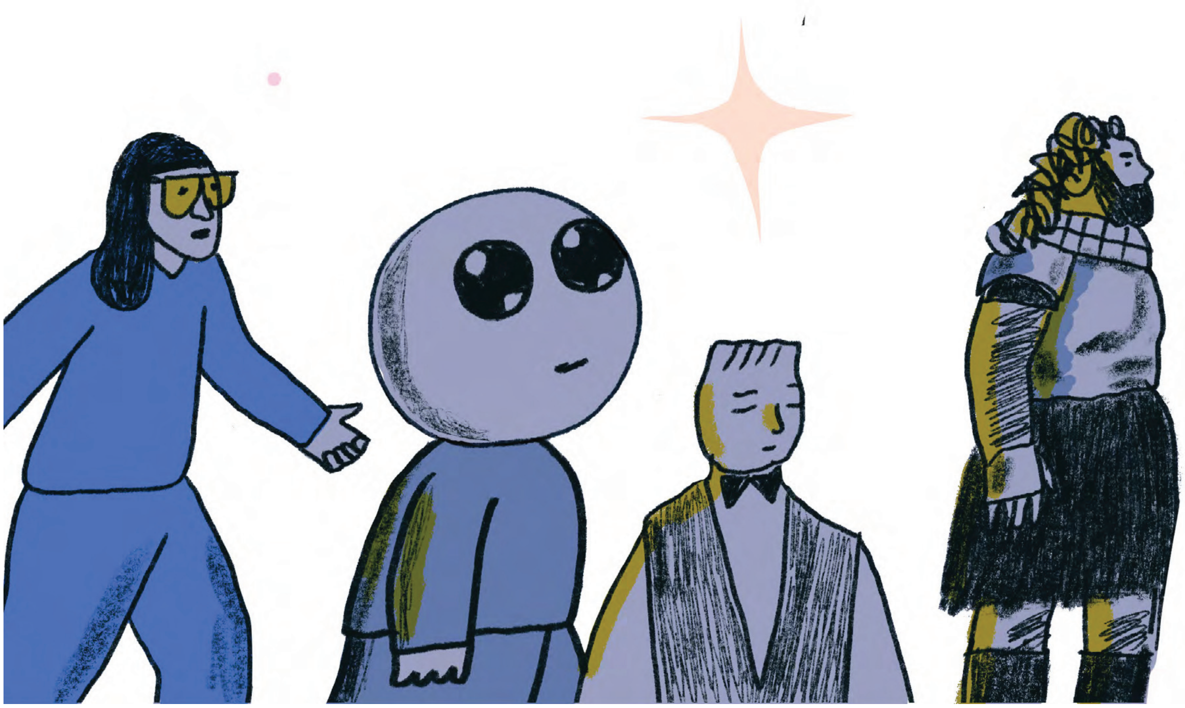
- How can entertainment providers, advertisers, and digital platforms best manage consumer and government concerns around privacy and data protection, while providing more personalized ad and content experiences?

- As advertising increasingly migrates onto streaming media, will streaming media providers inherit the problems with ad exchanges that have challenged social media?[17]

Navigating the future of media and entertainment

From courtship to relationship

FACING A FUTURE of limitless alternatives and competition, M&E companies should focus on critical areas that can help them gain a deeper understanding of their customers. By learning the right moves in the dance between content, cost, and ad-tolerance—and across video, music, and gaming services—M&E companies can move beyond fleeting courtships to cultivate enduring relationships. They may need to get closer to their users while being flexible in how they predict and manage customer churn across services. They should spend time and resources getting to know the fluid and multifaceted entertainment habits of Generation Z and designing experiences to attract them. And they should invest in the right data and analytics capabilities to create personalized entertainment and advertising options across channels while respecting the role of the consumer in the data economy. This may require building trusted and equitable relationships that address the need for more transparency, agency, privacy, and security. Developing these pathways can help M&E companies get closer to customers today while being more prepared for what they might do tomorrow.



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