## Before the <br> Federal Communications Commission Washington, D.C. 20554



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# Before the Federal Communications Commission <br> Washington, D.C. 20554 

In the Matter of )

GN Docket No. 20-60
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COMMENTS OF THE
NATIONAL ASSOCIATION OF BROADCASTERS

## I. INTRODUCTION AND SUMMARY

The Federal Communications Commission should declare the video and audio markets more competitive than ever. While at one point in time Americans may have had few audio and video options - listen to broadcast radio, watch broadcast television, buy recordings or visit the movie theater - but today, consumers' choices are virtually limitless. Digital technologies have dramatically improved providers' ability to create and distribute audio and video programming and have greatly expanded the number of participants in the media marketplace. Consumers now access content delivered via a range of devices and from multifarious sources, including over-the-air (OTA) radio and TV, satellite radio, cable, satellite and fiber optic pay-TV providers, podcasts and hundreds of online audio and video services.

Just as the digital revolution disrupted the previously "mass" media market, it has fundamentally altered the advertising market. Advertisers have shifted local and national ad expenditures toward online and mobile outlets, at the expense of traditional media. While digital advertising has flourished, growth in the overall advertising market has declined since the Great Recession, relative to U.S. economic growth. This combination of greater competition for ad dollars with a depressed ad market placed significant stress on
broadcasters, even before the current massive decline in the advertising market due to the coronavirus pandemic.

In response to the Public Notice seeking comment on the state of competition in the communications marketplace, ${ }^{1}$ the National Association of Broadcasters ${ }^{2}$ herein discusses the transformation of the media and advertising markets in the digital age and the growing pressures on broadcast stations in a radically altered competitive landscape. Even though broadcast radio still retains a wide reach, and millions still watch national and local broadcast TV programming, stations increasingly struggle to attract audiences in today's hyper-competitive and online-oriented media marketplace. An estimated 169 million persons ages 12 and older listen at least weekly to online audio, and digital options, including streaming services, podcasts and satellite radio, have become the leading audio sources for persons under the age of 55. ${ }^{3}$ Streaming music services have grown exponentially, with the number of listeners paying for music subscriptions nearly sextupling from 2015 to 2019 and on-demand music streaming volume surpassing 1.15 trillion streams in 2019.4 Due to the growth of these competitors, radio stations' average quarter hour audiences - the metric upon which advertising is sold - have notably declined since the early-to-mid 2000s.

[^0]Similarly, "video consumption has never been more fragmented." ${ }^{5}$ Basic cable's viewing shares surpassed broadcast's share by the early 2000s, and now both broadcast TV stations and traditional pay-TV providers are losing viewers at an accelerating rate to online options. The number of OTT video services available in the U.S. increased by 140 percent from 2014-2019, and, as of last summer, 74 percent of all U.S. households subscribed to Netflix, Amazon Prime and/or Hulu (and 51 percent subscribed to more than one). ${ }^{6}$ Previous analyses showed that linear TV viewing (broadcast+cable, live or time-shifted) has declined "in near-perfect correlation to Netflix's rising penetration." ${ }^{7}$ A record 532 original scripted series aired in 2019, up 153 percent since 2009 due to the explosion in streamed programs, leading some to observe that online services have become the dominant players in television. ${ }^{8}$

The near ubiquity of digital devices, moreover, has increased competition between all these audio and video services. Indeed, the weekly reach of apps/web on smartphones now exceeds the weekly reach of live + time-shifted (broadcast and cable) television. ${ }^{9}$ Given that most consumers own - and keep in their pockets and purses, briefcases and backpacks devices capable of accessing all types of content $24 / 7 / 365$, the long-assumed division between audio and video is now more perception than reality.

[^1]Digital platforms have likewise transformed the advertising market. Online and mobile ad vehicles take a greater share of local ad revenues every year, rising from niche players to dominance in a decade. Local businesses increasingly use a variety of digital ad options, and Facebook has become the most popular marketing channel for local advertisers. ${ }^{10}$ The annual local advertising revenues earned by Alphabet/Google - founded in 1998 - surpassed the total local ad revenue generated by all commercial radio stations in the U.S. just 20 years later. ${ }^{11}$

The coronavirus pandemic's massive shock to the advertising market, moreover, is directly harming local radio and TV stations. A March survey of media planners, buyers and brands reported that 74 percent thought the coronavirus would have a greater negative impact on U.S. ad spending than did the 2008-2009 financial crisis and recession ${ }^{12}$ - and it took nearly a decade for the ad market to fully recover from the Great Recession. And even though broadcasters and other traditional media are attracting significantly increased audiences during the current crisis, those gains have not translated into ad revenues. The continuing crisis thus reconfirms both the importance of radio and TV stations to local communities and the need to ensure they may form competitively viable ownership structures.

Given all these profound changes in the media and advertising markets, the FCC cannot maintain its woefully outdated view that broadcast radio stations compete only with other radio stations and that broadcast TV stations compete only against other TV stations.

[^2]Such definitions of the relevant markets lack empirical foundation and common sense.
Neither audiences nor advertisers believe that local broadcast stations are their only options for accessing audio and video content or for placing advertisements. In a media landscape marked not by scarcity but by unprecedented abundance of platforms and content, all outlets - whether traditional or digital, audio or video - fight for consumers' limited time and attention and for advertisers' limited dollars. For broadcasters and other participants in the modern digital marketplace, audiences' bandwidth is the truly scarce resources.

NAB urges the Commission to recognize the vast changes in the communications marketplace and to adopt appropriately broad definitions of the relevant competitive markets in its upcoming report. We also reiterate that the Commission needs to reform its local radio and TV ownership rules consistent with this altered competitive landscape and permit local stations to take advantage of economies of scale, as broadcasters' competitors - unencumbered by any similar restrictions - have done. ${ }^{13}$

## II. CHANGES IN TECHNOLOGY HAVE VASTLY EXPANDED THE NUMBER AND TYPE OF MEDIA MARKETPLACE PARTICIPANTS, SPLINTERING THE BROADER RADIO AUDIENCES OF THE ANALOG ERA

Question: "What is the main competition in your market?"
Answer by radio broadcaster: "It used to be a handful of radio stations . . . but now it's a long list: video games, Pandora, Spotify, TV stations and whatever app somebody just downloaded. . . . [A]nything people do with their time . . . has become our competition, because everything is readily available."14

[^3]Innovation in digital technologies and the exponential growth of the internet and online services make untenable any contention that radio broadcasters now compete for the public's attention and time only with other radio broadcasters. In contrast to the analog world where broadcast radio and recordings were the only ways to access audio content, today countless sources provide, and multiple devices deliver, both music and informational audio programming, as well as video content. The FCC's report must conclude that local radio stations compete for audiences in a market that includes, at the least, increased numbers of terrestrial radio broadcasters, ${ }^{15}$ satellite radio providers and providers of audio programming over the internet and to mobile devices. In fact, radio stations also compete with innumerable providers of video content for consumers' notice in the crowded digital marketplace.

## A. Millions of Consumers of All Ages Have Embraced Music and Other Content Delivered Via Satellite and Online from a Wide and Growing Array of Sources

Despite the continuing broad reach of broadcast radio, ${ }^{16}$ local stations face intense and increasing competition for audiences from an expanding universe of content providers, especially streaming services. According to Nielsen, streaming is "mainstream," and recent data confirm that statement. ${ }^{17}$

As of early 2020, 60 percent of the U.S. population ages 12+ (or 169 million people) listened weekly to online audio, up from only 17 percent a decade ago and just two percent

[^4]in 2000. ${ }^{18}$ Other estimates are even higher, with Nielsen reporting that nearly two-thirds (64 percent) of U.S. adults ages $18+$ stream audio on their smartphones weekly. ${ }^{19}$ Weekly online listeners spend an average of 15 hours and 12 minutes per week listening to online audio, up nine hours a week since $2008 .{ }^{20}$ While the trend is most significant among younger listeners, with 86 percent of those ages 12-34 listening to online audio at least monthly, over three-quarters (76 percent) of those ages 25-54, and 42 percent of those 55 and older, stream audio at least monthly. ${ }^{21}$

In the U.S., the number of on-demand streamed songs reached 745.7 billion in 2019, up nearly 24 percent in just one year. Including music videos, overall on-demand music streaming surpassed 1.15 trillion streams in 2019, an increase of more than 29 percent over the previous year. ${ }^{22}$ Online streaming's popularity as a means to access music

[^5]22 Radio \& Internet (RAIN) News, Nielsen Music 2019 report: More than 1 trillion on-demand streams in the U.S. (Jan. 10, 2020).
extends across demographic groups. ${ }^{23}$ Indeed, "multicultural listeners are digital trendsetters." ${ }^{24}$

While broadcast radio remains a very prominent source of music and other types of audio content, it now swims in a sea of competition, including myriad online audio and video music streaming services that vary based on content, price point and features. In 2019, YouTube, Pandora and Spotify had the highest annual usage rates among online music services, and YouTube also attracted the most daily users, followed by Spotify and Apple Music, 25 thereby reconfirming Nielsen's previous characterization of YouTube as the "go-to source for music." ${ }^{26}$ Unsurprisingly, YouTube is the top source for music discovery for teens and Hispanics, while the Web/apps is the leading music discovery source for millennials. ${ }^{27}$ YouTube's prominence as a source of music illustrates how audio and video content have converged in the digital world where the same devices access both types of content. ${ }^{28}$

Radio broadcasters have worked hard to grow their streaming audiences, but the dominance of the pure-play streaming services (e.g., Pandora, Spotify, etc.) has increased

[^6]over time. Pure-play streaming providers accounted for 79.8 percent of total streaming usage in January 2014, and their share rose to 90.6 percent by December 2018. ${ }^{29}$ Looking at Pandora over a longer time period, its monthly average active streaming sessions rose from 147,673 in September 2009, to over one million in December 2015 and two million in November 2017. After that date, its growth rate stagnated, mainly due to competition from Spotify, which has enjoyed exponential growth and surpassed Pandora in average active streams in 2018. ${ }^{30}$

While many consumers still stream for free, the number of those willing to pay for music and other audio content from streaming or satellite services has grown rapidly.

According to RIAA, the total number of paid subscriptions to on-demand streaming services in the U.S. (excluding limited tier options) rose from 10.8 million in 2015 to 60.4 million in 2019. ${ }^{31}$ And subscriber numbers continue to grow very rapidly, with a 29 percent increase just from 2018. ${ }^{32}$

Looking at satellite radio, fewer than 600,000 people subscribed in 2003; by year's end 2019, SiriusXM had over 34.9 million subscribers. ${ }^{33}$ It competes with terrestrial radio

[^7]stations by delivering via satellite 150+ channels of diverse audio programming into local markets across the U.S., in addition to its streaming service, which offers more channels of music, news/talk/sports and on-demand shows, performances and interviews. Satellite radio is an especially strong competitor to terrestrial radio in automobiles. As consumers buy newer car models, satellite radio's share of listening time increases substantially. ${ }^{34}$

Following the completion of its merger with Pandora last year, the combined SiriusXM/Pandora has become a more formidable competitor across multiple platforms. Last summer, for example, SiriusXM expanded its streaming offerings by allowing all SiriusXM subscribers the option of taking their subscriptions with them outside their cars by giving them access to the company's mobile app and connected devices at home. Subscribers to certain SiriusXM service tiers also may create their own customized, ad-free music stations on the company's mobile app, an option called "Personalized Stations Powered by Pandora." ${ }^{35}$ As of early this year, SiriusXM and Pandora are investigating how to create a joint subscription covering both services. ${ }^{36}$

Online and satellite options have not only transformed music listening, but also have changed how consumers access informational programming. SiriusXM offers multiple news channels to listeners. As of early 2020, there were more than 900,000 podcast shows and

[^8]over 30 million podcast episodes available. ${ }^{37}$ Each week about 68 million people ( 24 percent of the 12+ U.S. population) listen to podcasts, up from only seven percent in 2013, and 104 million people (37 percent of the population) listen monthly. ${ }^{38}$ Listening rates have increased quickly and will continue to do so, as younger audiences embrace podcasts at higher rates. ${ }^{39}$ Podcasting is now growing at a faster rate than streaming audio, ${ }^{40}$ and Edison Research's "Share of Ear" reveals that consumers' time spent with podcasts has grown significantly. Among persons 18-34 and those 18-49, podcasts rank second behind AM/FM in share of ad-supported audio time spent (ahead of ad-supported Spotify, Pandora and SiriusXM). ${ }^{41}$ Podcasts also attract a diverse audience, as monthly podcast use by Blacks and Hispanics has doubled over the past five years. ${ }^{42}$

The explosion of the number and variety of audio services described above has greatly benefited consumers, who now enjoy unprecedented choices of platforms and programming. It also has vastly increased competition, which directly impacts AM/FM stations by splintering the previously "mass" audio market and diverting audiences to

[^9]38 See Infinite Dial 2020.
39 ld . Nearly half (49 percent) of people ages 12-34 listen to podcasts monthly and 40 percent of those ages 35-54 listen monthly.

40 Inside Radio, Podcasting Is Growing Faster But Streaming Audio Audience Is Bigger (Sept. 3, 2019) (citing Nielsen data that from 2015-2019, the number of monthly podcast listeners increased 123 percent while the streaming audience grew 54 percent),

41 Inside Radio, Edison: Podcasting’s Share Of Ear Is Now Second To AM/FM Among Some Demos (Dec. 10, 2019) (reporting Q3 2019 Share of Ear).
${ }^{42}$ Nielsen, Audio Today 2019: A Focus on Black and Hispanic Consumers, at 11 (Oct. 2019) (Audio Today 2019).
myriad other options, at the expense of traditional radio. ${ }^{43}$ This competition will only become fiercer, given that "radio is streaming's next frontier." 44

## B. Devices Affect Content Choices, and Consumers Today Use Multiple Devices to Access Content of All Types

In early 2020, 85 percent of the total U.S. population ages $12+$, or 240 million people, owned smartphones. ${ }^{45}$ Smartphone ownership is even higher among younger people; as of early 2019, 96 percent of adults ages 18-29 reported owning a smartphone, as did 92 percent of those ages 30-49. ${ }^{46}$ Fifty-three percent of those ages 12+, or 149 million people, own tablets, ${ }^{47}$ and smart speaker ownership is rapidly rising. As of early 2020, 27 percent of the 12+ U.S. population (76 million people) owned a smart speaker, up from only seven percent in 2017, and smart speaker owners now have an average of 2.2 smart speakers in their households. ${ }^{48}$ At year's end 2019, there were 157 million smart

[^10]speakers in U.S. households, a 135 percent increase in just two years. ${ }^{49}$ And according to Nielsen, both Blacks and Hispanics own smart speakers at higher rates than the national average. 50

In contrast to the growth in ownership of newer devices, AM/FM radio ownership continues to fall, particularly among 18-34-year-olds. From 2008-2020, the average number of radios in homes fell from 3.0 to 1.5, and the number of homes with no radios increased from four to 32 percent. Over half (52 percent) of the homes of those ages 18-34 lack radios. ${ }^{51}$

These changes in technology and ownership of technology have altered the public's media consumption habits. In the third quarter of 2019, Nielsen estimated that adults 18+ spent an average of six hours and 17 minutes per day with digital media, compared to an average of one hour and 41 minutes with radio. ${ }^{52}$ And adults under age 50 spent significantly more time (over seven hours per day) with digital media than older audiences. ${ }^{53}$ Unlike in the analog past, the average music listener now uses 4.1 devices each week for music (up from 3.4 devices in 2017), with teens and millennials using 4.6 and 4.5 devices,

[^11]respectively. ${ }^{54}$ The virtually ubiquitous smartphone tops the list of devices used for music listening. ${ }^{55}$ Indeed, 26 percent of all audio listening is done on a smartphone. ${ }^{56}$

Notably, digital devices are multi-purpose devices that permit consumers to access different types of audio content (including radio, streaming services, owned music and audiobooks), and also easily switch between audio and video content, thereby expanding the range of media against which terrestrial broadcast stations must compete. Audio and video services do compete against each other for audiences' time and attention, as streaming audio and podcast consumers spend significantly less time watching TV than the average consumer. ${ }^{57}$

Although newer than smartphones and tablets, smart speakers are already significantly influencing media consumption. Sixty-one percent of consumers who use a smart speaker weekly for music pay for a subscription service. ${ }^{58}$ Close to half ( 46 percent) of the time spent listening to audio sources via smart speakers goes to "pure play" streaming, with less than a quarter ( 24 percent) going to $A M / F M$ radio. ${ }^{59}$ And according to the Consumer Technology Association, on-demand music services have "room to grow as more and more consumers adopt smart speakers and wireless earbuds." ${ }^{60}$ Smart speakers also can influence consumers' choice of audio brands (e.g., Pandora, Spotify, iHeartRadio, etc.)

[^12]and even their sources of news. Owners of smart speakers use Amazon Music more frequently than those without smart speakers, which is perhaps unsurprising given that the Amazon Alexa is the leading brand of smart speaker. ${ }^{61}$ Smart speakers, moreover, set default news providers, ${ }^{62}$ often major outlets such as CNN, which consumers rarely change. ${ }^{63}$ Thus, radio stations can be at a disadvantage at the competitive starting gate against other providers of music and news.

Yet another technology presenting competitive challenges for broadcasters are voice assistants. Sixty-two percent of Americans (12+) use some form of voice assistant technology through devices including smartphones, computers/laptops, smart speakers and tablets. ${ }^{64}$ Google Assistant now includes a personalized news feature for listeners, a playlist of news stories called Your News Update. ${ }^{65}$ Improved voice controls, such as Amazon's Alexa Auto, also are being integrated into vehicles to help control various functions, including cars' infotainment systems, making it simpler for drivers and passengers to choose a variety of audio options other than traditional radio. ${ }^{66}$ Radio broadcasters will face even stiffer

[^13]competition in an era when music and informational content from innumerable sources may be easily retrieved through voice, whether at home, in the car or at the office. ${ }^{67}$

In the past, consumers seeking audio or video content were technologically limited to a relatively few geographically proximate terrestrial broadcast stations. That is no longer the case. The rapid adoption of digital devices allows consumers to access a wide array of audio and video content 24/7/365 from virtually any location, greatly enhancing competition for audiences and, ultimately, advertisers. The Commission must consider the profound competitive effects of technological change as it evaluates all the participants in the modern media marketplace in its upcoming report.

## III. EVEN BEFORE THE CURRENT CRISIS, RADIO STATIONS WERE COMPETING IN A SLOWER GROWING YET HIGHLY COMPETITIVE ADVERTISING MARKET

## Question: "What is the main competition in your market?"

Answer of radio broadcaster: "If you add all the radio money in the market, it's about 7 cents on the dollar. . . . In five years, Facebook and Google have taken more money out of the marketplace than all the radio companies combined. There has been a pivot point on who the competition is. No longer is it the radio guy across the street."68

As media outlets and digital devices proliferate, advertisers' options for reaching consumers have similarly expanded. As a result, traditional media like radio stations must compete against an ever-growing array of advertising platforms for vital revenues, while they struggle to retain the increasingly splintered audiences that they "sell" to advertisers. These profound changes, moreover, have occurred during a period of slower growth in the overall

[^14]U.S. advertising market that pre-dates the current collapse of local stations' ad revenues due to the coronavirus pandemic.

## A. The Advertising Market Has Fundamentally Changed, Placing Financial Stress on Free OTA Broadcast Services

Growth in the overall advertising market has notably declined relative to U.S. economic growth. Since the Great Recession, growth in the ad market has not maintained its historical trend of keeping pace with gross domestic product (GDP). Prior to the recession, the ad market equated to approximately 2.0 percent of GDP, but that fell to 1.6 percent in 2008 and to 1.4 percent in 2009 . This metric has never recovered, falling to 1.2 percent in 2017 and reaching only 1.3 percent in $2019 .{ }^{69}$ Due to this slow growth, the U.S. advertising market as a whole did not match its pre-Great Recession total until 2018, and the growth that has occurred is mostly due to increases in advertising on digital outlets, particularly platforms like Google Adwords. ${ }^{70}$ And, according to a recent survey, 74 percent of advertising buyers thought that the coronavirus would have a greater impact on U.S. ad spending than did the 2008-2009 financial crisis. ${ }^{71}$ Nearly one-quarter (24 percent) of the respondents to this survey reported pausing all advertising spend for the rest of Q1 and Q2, 2020, and another 46 percent said they were adjusting planned spending for this period. ${ }^{72}$

[^15]Slower growth - let alone negative growth - in the advertising market poses a particular challenge for broadcast radio because stations rely almost exclusively on ad dollars to support all their operations and services provided to the public. Radio broadcasters do not, and cannot, charge subscription fees to their OTA listeners. Even before the current advertising market plunge, increased competition for audiences and less favorable ad market conditions had taken their toll.

An analysis conducted by BIA last year showed that the radio industry did not, following the Great Recession, achieve the revenue levels it reached in the mid-2000s, pointing to a structural marketplace shift, rather than any temporary business cycle effects. BIA estimated that the radio industry's total OTA revenues fell from about 17.6 billion annually in the period 2004-2006 to only 13.2 billion in 2018 , a 25 percent decline even without accounting for the effects of inflation. ${ }^{73}$

As shown below, from 2003-2018, the ad revenues of FM stations specifically dropped by 23.4 percent on a nominal basis and by 43.8 percent in real terms (i.e., after accounting for inflation) in the 253 continuously surveyed Arbitron/Nielsen Audio markets. ${ }^{74}$ Following the pattern of the radio industry as a whole, FM station ad revenues reached their (nominal) peak from 2004-2006, fell markedly during the Great Recession and then facing both a slower growing advertising market and rapidly increasing competition - have not rebounded to (and are not projected to rebound to) their previous levels.

[^16]FM Radio Station Over-the-Air Advertising Revenues* (Source: BIA, 2018)

*examining 253 radio markets continuously surveyed by Arbitron/Nielsen Audio from 2003 to 2018
B. Digital Platforms Are Commanding an Increasingly Large Percentage of the Advertising Market, at the Expense of Radio Stations and Other Traditional Media

The challenges presented by a more slowly growing advertising market have been compounded by the simultaneously occurring digital disruption of that market. Advertisers are increasingly shifting their dollars toward online and mobile outlets, and radio stations face intense and growing competition from digital competitors, including in small markets. Innumerable radio broadcasters across the country - from New York to Michigan to Wyoming to New Mexico - previously described in detail the very significant advertising dollars they have lost to digital outlets in their specific local markets. ${ }^{75}$

[^17]These radio stations' experiences competing for vital ad dollars illustrate the profound competitive changes in the ad market that have been well-documented in recent years. ${ }^{76}$ According to Kagan's estimates of the entire U.S. advertising market, digital (online/mobile) ad revenues grew by a Compound Annual Growth Rate (CAGR) of 17.7 percent from 2010-2019, while radio stations' ad revenues declined by a negative 1.3 percent CAGR. Due to these disparate growth rates, digital's share of the total advertising market grew from 12.6 percent in 2010 to 42.2 percent in 2019, while radio stations' share fell from 6.8 percent to 4.7 percent. ${ }^{77}$ And Kagan predicts these trends to continue, with digital capturing 59.5 percent of overall U.S. advertising revenue by 2029, and radio's revenue share falling to 3.7 percent. ${ }^{78}$

Previous analyses by BIA of the local advertising shares earned by 16 competing ad platforms estimated that, for 2019, radio stations' OTA ad revenue would represent only 8.7 percent of total local advertising in markets across the U.S., having fallen from a 10.7 percent share in 2012.79 By 2023, BIA projected that while radio stations' OTA ad revenue would decline to 7.7 percent of total local ad revenues, the share of total local ad revenues

[^18]earned by "pure play" digital platforms would reach 38.2 percent. ${ }^{80}$ Other estimates as to the digital sector's share of local ad revenues are notably higher, with Kagan previously estimating that digital's share of local ad revenue would rise to 60 percent by 2023.81 Mobile advertising continues to grow especially quickly. ${ }^{82}$ And while starting from a much lower base, podcast advertising may now be growing at a faster rate than Internet advertising, with podcast ad revenues forecast to exceed $\$ 1$ billion by $2021 .{ }^{83}$

Surveys of advertisers asking about their use of advertising and marketing tools similarly confirms the expanding role of digital ad platforms. A recent BIA survey of advertisers of all sizes found that those who report using broadcast radio also utilize a wide range of other ad platforms - a total of 30 different advertising and marketing platforms in 2018. ${ }^{84}$ Digital platforms are among the most frequently utilized, as 79.1 percent of radio advertisers reported using targeted social ads, 63.9 percent reported using mobile location aware ads and 62.9 percent used email. Large numbers of radio advertisers utilized other traditional types of advertising too, including direct mail (used by 75.6 percent of radio advertisers), newspapers (used by 69 percent) and TV (used by 61.5 percent). ${ }^{85}$

[^19]Other surveys have shown that local businesses are increasingly utilizing digital ad platforms and that 90 percent of local advertisers buy both digital and non-digital advertising. ${ }^{86}$ From their research, Borrell Associates have concluded that "local advertisers see radio and digital advertising as substitutes - shifting dollars back and forth between these media for various reasons." 87 Notably, while 82 percent of local ad buyers surveyed by Borrell said they bought ads on Facebook, only 44.4 percent of local ad buyers reported buying radio, with 25 percent stating that they planned to reduce radio advertising. As Borrell explained, Facebook in particular "mimics the attributes of radio, giving advertisers access to affinity groups that were once chiefly the domain of radio's music genres (country music fans, sports talk fans, hip hop fans, oldies' fans, etc.)." ${ }^{88}$

An annual study of automobile advertising confirms these trends. By 2023, radio advertising spend by dealers on new cars is predicted to be 26 percent lower, in contrast to digital, which is expected to be 42 percent higher. ${ }^{89}$ And while automotive advertising spend is expected to increase slightly over the next several years, "virtually all" additional revenue is predicted to go to other media, especially digital, with "interactive" media predicted to increase its share from 63.8 percent of total spend in 2018 to 73.9 percent of all spend in

[^20]2023. ${ }^{90}$ In light of all these data, the FCC's report must conclude that radio broadcasters compete with a host of platforms, including digital, in the modern advertising market.

## C. The Coronavirus Pandemic's Shock to the Advertising Market Is Harming Local Radio Stations, Thereby Making Reform of the Ownership Rules More Urgent Than Ever

Overwhelming evidence demonstrates the pandemic's massive blow to the advertising marketplace, 91 with estimates that the local ad market in 2020 "could end up 20-25\% down." ${ }^{22}$ Advertising dollars that sustain many media outlets are often cut first as businesses contract during downturns. Radio broadcasters are already suffering financially. A poll of Inside Radio readers weeks ago (March 23-24) found that 69 percent were reporting "numerous [ad] cancellations." ${ }^{33} \mathrm{~A}$ number of radio companies have been forced to lay off or furlough employees and/or reduce salaries, ${ }^{94}$ and some stations have gone silent. ${ }^{95}$

[^21]91 See, e.g., IAB Ad Survey, Section III.A., supra.
92 Inside Radio, Local Media Companies Prepare for Coronavirus Impact on Ad Revenues (Mar. 24, 2020) (quoting Corey Elliott, VP of Research at Borrell Associates) (Coronavirus Impact).
93 Inside Radio, Reader Survey: Work From Home, Ad Cancellations The New Normal - For Now (Mar. 25, 2020); see also Inside Radio, Coronavirus Impact (less than two weeks after the World Health Organization declared a global pandemic on March 11, Urban One's radio division reported about $\$ 4.3$ million in cumulative cancellations).

94 See, e.g., Inside Radio, Coronavirus-Related Cuts At Saga, Alpha Media, Forever Media (Mar. 30, 2020); Radio and Music Pros, iHeart Cuts Exec Salaries, Furloughs Employees (Mar. 30, 2020); Lance Venta, Beasley Media Cuts 67 Staffers, Furloughs Others, radioINSIGHT (Mar. 31, 2020); Radio Ink, Entercom Announces Layoffs, Furloughs, Pay Cuts (Apr. 2, 2020); Radio Ink, Cumulus Furloughs, Pay Cuts Begin (Apr. 8, 2020); Inside Radio, Urban One Forced To Make 'Very Difficult' Cuts And Furloughs (Apr. 8, 2020); Inside Radio, Alpha Media Enacts Furloughs, Layoffs And Reduced Hours (Apr. 15, 2020); Inside Radio, Salaries Slashed By 15\% To 22\% For Entravision's Executive Officers (Apr. 20, 2020); Inside Radio, Univision Begins Layoffs, Furloughs And Pay Cuts (Apr. 22, 2020).
${ }^{95}$ See, e.g., Kathryn Skelton, WOXO says farewell to listeners; Gleason Radio Group to go silent after 45 years, Sun Journal (Mar. 25, 2020) (reporting that five stations in small towns

While communities across the country are relying more than ever on local stations, ${ }^{96}$ radio broadcasting's advertising revenues unfortunately are predicted to fall significantly this year. Comparing MAGNA's pre-epidemic FY 2020 ad forecasts to its revised forecast released in late March shows that radio's estimated ad revenue growth rates will drop from single-digit negative growth to double-digit negative growth. ${ }^{97}$ In the shorter term, IAB last month predicted a 45 percent decline in advertising on terrestrial radio for the months of March and April and a 35 percent decline in May and June. ${ }^{98}$ Projections like these reconfirm that traditional media outlets such as radio, which were already losing money to digital ad platforms, are fighting an uphill battle ${ }^{99}$ - especially given that the radio industry faces ownership restrictions its competitors do not.

The COVID-19 outbreak has weakened local radio stations' position vis-à-vis their marketplace competitors, even though many Americans (about three in ten) say they have been listening to more radio since then outbreak. ${ }^{100}$ Unlike many of their competitors for audiences (e.g., satellite radio, popular streaming services), radio broadcasters earn zero

[^22]subscription fees. Local radio stations are highly dependent on local businesses for their ad revenues. BIA has estimated that about 75-80 percent (or more) of total OTA radio ad revenue is attributable to local businesses ${ }^{101}$-- businesses that are now shuttered or restricted and cannot afford to advertise. Many radio companies - unlike their giant digital ad market competitors - are small or mid-sized enterprises without the financial resources to withstand sudden or significant losses of ad revenues. Indeed, even before the current crisis, many radio stations, especially those in mid-sized and small markets, were experiencing serious problems generating revenues sufficient to cover their substantial fixed costs, including engineering, programming, promotion and advertising, sales and general/administrative costs. ${ }^{102}$

Clearly, the coronavirus pandemic has and will continue to severely exacerbate local stations' competitive stresses, thereby making reform of the FCC's outdated radio ownership rules even more urgent. ${ }^{103}$ As NAB has shown through comments and studies, ${ }^{104}$ the FCC's ownership rules must be updated to reflect that local radio stations now compete for audiences in a market that includes, at the least, radio broadcasters, satellite radio operators and providers of audio programming over the internet and through mobile

[^23]devices, ${ }^{105}$ and for advertising dollars in a market that includes a variety of platforms, including traditional media and digital. Given the competitive transformation of the media and advertising markets since 1996, the Commission no longer has a valid basis for maintaining analog-era radio ownership caps, and NAB again requests the FCC to adopt our proposal to allow radio broadcasters to obtain greater economies of scale. ${ }^{106}$ NAB's proposal reflects the current levels of competition for audiences and advertisers, and numerous radio broadcasters of all sizes and from all-sized markets have supported it. ${ }^{107}$

As the Commission stated in its 2018 Communications Marketplace Report, "[t]o secure the highest [advertising] rates and to compete for advertising market share, [radio] stations strive to gain the largest audience of listeners possible to maximize the price of ad time sold by the station." 108 Owning more stations in local markets that air non-duplicative, diverse programming designed to attract the widest possible range of listeners will help stations grow their audiences and compete more effectively for ad market share, including by improving their digital ad products. ${ }^{109}$ At the same time, reforming the radio ownership

[^24] video content providers, including those that offer content online and via mobile devices. 106 We proposed that the FCC eliminate limits on AM ownership in all markets; remove restrictions on FM ownership in mid-sized and small markets (Nielsen Audio markets 76 and lower and unrated areas); and permit common ownership of up to eight FM stations in Nielsen markets 1-75 (with the opportunity to own up to ten FMs by participating in the FCC's incubator program). NAB 2018 Quadrennial Ownership Comments at 5.

107 See, e.g., Joint Replies of 25 Broadcast Licensees at 2; Joint Comments of 10 Radio Broadcasters at 26. See also NAB 2018 Quadrennial Ownership Reply Comments at 42-43 (identifying numerous small broadcasters that support reform of ownership rules).
108 Communications Marketplace Report, 33 FCC Rcd 12558, 12633 (2018).
109 Station owners and executives submitted declarations in the pending ownership proceeding stating that, with additional stations and resources, they could expand their digital advertising products and services into more markets, including specific small and mid-sized ones. See Joint Comments of 10 Radio Broadcasters at Exhibit C \& 21-22, 24-25; see also Joint Replies of 25 Broadcast Licensees at 19.
caps to allow broadcasters to achieve increased efficiencies and scale economies would improve the cash flow and overall financial wherewithal of local broadcasters. ${ }^{110}$ NAB therefore urges the Commission to recognize the breadth of the markets for audiences and advertising dollars in which radio broadcasters compete and to reform its local radio ownership rules accordingly.

## IV. LOCAL TELEVISION STATIONS COMPETE AGAINST AN EVER-INCREASING RANGE OF PLATFORMS AND SERVICES FOR BOTH AUDIENCES AND ADVERTISERS

The Notice (at Section V) seeks comment on issues and trends affecting competition for video programming services and whether laws, regulations or regulatory practices pose a barrier to competitive entry or "to the competitive expansion of existing providers." As NAB discussed at length in its most recent quadrennial ownership comments and its presentations and filings in connection with the Department of Justice (DOJ) Antitrust Division's Competition in Television and Digital Advertising Workshop,, ${ }^{111}$ digital technologies have transformed the delivery of video content and the sale of advertising.

Like radio stations, TV stations compete for audiences and advertising revenue with innumerable other outlets that consumers in local markets may access over-the-air, through

[^25]cable, satellite and fiber, and online via an array of devices. And like radio stations, local TV stations operate in a rapidly evolving and highly competitive market, where regulation has failed to keep pace with marketplace realities. For TV stations to remain meaningful competitors in the digital marketplace, broadcasters must achieve greater economies of scale, thereby enabling necessary investments in data-driven and automated sales operations, programming and physical plant. Accordingly, both FCC ownership restrictions and the DOJ merger review process must be significantly modernized to reflect competitive realities. Below, we discuss relevant marketplace data provided in the FCC's pending 2018 quadrennial review and the Workshop, as well as updated data and information.

## A. Broadcast TV Stations Compete for Audiences Against an Array of Other Outlets, Accessible Via a Range of Devices, in an Increasingly Fragmented Marketplace

Increasing audience fragmentation shows that consumers do not consider local television broadcast stations their only choices for video content. NAB previously documented that basic cable's viewing shares surpassed broadcast TV's viewing shares in the early 2000s. ${ }^{112}$ Today, online services not only have become strong competitors to all linear TV, they have transformed the entire media market. The number of outlets has exploded, and OTA broadcasters, cable and satellite TV operators, hundreds of online video (and audio) services and social media platforms aggressively compete for audiences' scarce time and attention. It is ludicrous for the government to continue to maintain the façade that television broadcasters compete only with themselves.

Facing more competition than ever before, TV stations are experiencing continuing audience fragmentation, declining viewership and resulting pressure on advertising

[^26]revenues. Like online audio services, over-the-top (OTT) video services have grown rapidly. Over 200 OTT services were available in the U.S. in 2018, with Netflix, Amazon Prime Video, and Hulu enjoying extremely rapid growth and reporting over 60.55 million, 50.2 million and 25 million subscribers, respectively, at the end of 2018. ${ }^{113}$ By August 2018, 69 percent of U.S. households subscribed to Netflix, Amazon Prime and/or Hulu, up from 52 percent in 2015,114 and the average American subscriber watched 3.4 different streaming services. ${ }^{115}$

By the 2019, all these subscriber numbers were on the rise, with Netflix reporting a slight increase for a total of 61 million subscribers, Amazon Prime Video at 53.9 million subscribers, and Hulu at 30.4 million subscribers. ${ }^{116}$ The percentage of U.S. households subscribing to one or more of the three services rose to 74 percent and over half of U.S. households subscribed to more than one service. ${ }^{117}$ OTT newcomers Disney and Apple are further increasing competition and fragmenting video audiences. Disney Plus launched in November 2019 and already boasts over 50 million subscribers globally, ${ }^{118}$ while Apple TV

[^27]has an estimated 33 million subscribers, ${ }^{119}$ and two other major video providers are slated to introduce OTT services this year (AT\&T’s HBO Max in May 2020 and NBC Universal's Peacock in July 2020). ${ }^{120}$ And virtual MVPD services such as Sling TV, DirecTV Now, Hulu + Live TV, PlayStation Vue and YouTube TV also are gaining subscribers. ${ }^{121}$ Indeed, across all platforms, YouTube reaches more U.S. consumers ages 18-49 in an average week than all cable TV networks combined, and among consumers ages $18-34$, YouTube is the secondmost preferred platform for video viewing on TV screens (behind only Netflix and ahead of both cable and broadcast networks). ${ }^{122}$

OTT providers are increasingly investing in original programming, fueling an explosion in the number of scripted series, which reached a record 532 in 2019 (up from the previous record of 495 series in 2018). ${ }^{123}$ In 2018, OTT providers offered more original series than

[^28]either broadcast or basic cable, and broadcast TV accounted for only 29.5 percent of total scripted series that year, compared to 74.2 percent in $2002 .{ }^{124}$ By 2019, the annual survey of scripted programs ceased measuring the volume of series by type of distributor, deeming that approach "antiquated" in light of the massive growth in scripted series originating on OTT services. ${ }^{125}$ Significantly, OTT providers' economies of scale enable them to produce these vast quantities of content - and attract viewers away from local TV stations - by spreading the costs of their programming investments over millions of subscribers. ${ }^{126}$

Given the array of available programming options financed by increasingly large competitors, TV stations face growing challenges in attracting audiences. According to Nielsen, broadcast TV's total share of prime time viewing (counting cable, DBS and broadcast) among the audience most coveted by advertisers (those ages 18-49) fell from 46 percent in 2003 to 31 percent in 2018, and dropped again to 26 percent in 2019. ${ }^{127}$ Stated differently, among the average 26.3 million people ages $18-49$ using TV ${ }^{128}$ during any given minute of prime time in 2019, an estimated 6.8 million were viewing broadcast stations and these 6.8 million people represent just 5.3 percent of the estimated total 128.9 million people ages 18-49 in U.S. TV households.

[^29]Competition from online sources has caused a notable decline in all linear TV viewership, both broadcast and cable, in recent years. A 2016 study found that Netflix alone had caused 50 percent of the overall decline in linear TV viewing reported by Nielsen for 2015. ${ }^{129}$ Similarly, Morgan Stanley has shown that, once Netflix reached 20 percent penetration, linear TV viewing in the U.S. "then decayed in near-perfect correlation to Netflix's rising penetration." ${ }^{130}$ BIA previously documented the decline in weekly time spent viewing live + time-shifted TV (broadcast and cable) from 2014-2018, which continued unabated in 2019. ${ }^{131}$

Other evidence confirms that consumption of video content is not dwindling but shifting to other platforms. For all adults 18+, weekly hours spent watching video on smartphones increased more than six-fold from 2014 to 2018, 132 and more than ten-fold from 2014-2019. ${ }^{133}$ According to Nielsen, the time adults 18+ spent per week using nonvoice applications on smartphones and tablets jumped from 22.5 hours to 33.8 hours, a 50 percent increase, in just one year. ${ }^{134}$

The expansion of online options has been accompanied by consumer acquisition of an increasing number of devices for accessing online content. By mid-2018, 74 percent of

[^30]U.S. TV households had at least one TV set connected to the internet via a smart TV or other device (e.g., Roku, Chromecast or Apple TV), a figure that held steady in 2019. ${ }^{135}$ A 2019 survey found that $31 \%$ of adults in U.S. TV households watch video on a TV via a connected device daily, up from to $25 \%$ in $2017,11 \%$ in 2014 , and $1 \%$ in 2010 , with younger adults (aged 18-34) significantly more likely to use connected TV devices daily (53 percent). ${ }^{136} \mathrm{~A}$ 2018 study found that devices (e.g., smartphones, computers, iPads, tablets or videocapable eReaders) that can be used for watching video (and listening to audio) are ubiquitous, with 98 percent of all households having at least one and with an average of about six per household. ${ }^{137}$ Over half (51 percent) of adults report watching video on a nonTV device daily, up from 14 percent in 2011. ${ }^{138}$ Remarkably, the weekly reach of apps/web on smartphones now exceeds the weekly reach of live + time-shifted (broadcast and cable) television. ${ }^{139}$

The view that broadcast TV stations are in a distinct product market with no other competitors-which dominates broadcast industry regulation at both the FCC and DOJ-cannot be squared with the explosion in non-broadcast media content, steep declines in broadcast TV viewing, significant increases in viewing via smartphones and tablets, and the millions of consumers subscribing to online services. Analysts have concluded correctly that
${ }^{135}$ Leichtman Research Group (LRG), Press Release, 74\% of U.S. TV Households Have at Least One Connected TV Device (June 8, 2018); LRG, Press Release, 31\% of Adults Watch Video via a Connected TV Device Daily (May 31, 2019).
136 LRG, Press Release, 31\% of Adults Watch Video via a Connected TV Device Daily (May 31, 2019).

137 LRG, Research Notes 3Q 2018 (citing LRG’s 2018 Emerging Video Services XII study). 138 LRG, Research Notes 4Q 2019, at 2 (2020).
1392020 Nielsen Total Audience Report at 15 (reporting Q3 2019 weekly reach of various platforms among U.S. population 18+).
"[s]ubscription and ad-supported OTT services are steadily replacing traditional content delivery." ${ }^{140}$ Federal agency regulation now must catch up to the reality of audiences' media consumption habits and accurately reflect competition from non-broadcast outlets.

## B. Local TV Stations' Share of the Advertising Market Is Being Eroded by Digital Media Outlets

Just as the digital revolution disrupted the previously "mass" media market, it has fundamentally altered the advertising market. ${ }^{141}$ Advertisers have shifted dollars toward cable, online and mobile outlets, at the expense of traditional media, including broadcast spot advertising, a trend projected to continue. ${ }^{142}$

But while digital advertising has flourished, growth in the overall advertising market has declined since the Great Recession, relative to U.S. economic growth. ${ }^{143}$ This combination of increased competition for advertising dollars with a slower growing advertising market presents serious challenges for advertising-dependent TV broadcasters. In our 2018 quadrennial review comments, NAB documented the declining ad revenues of television broadcast stations and the rise of non-broadcast platforms:

[^31]- From 2000-2018, local TV stations' advertising revenue fell by 13.4 percent in nominal terms and by 40 percent, after accounting for inflation. ${ }^{144}$
- Local TV stations' share of local ad revenue fell from 14.2 percent in 2012 to 11.5 percent in $2019 .{ }^{145}$
- Local cable is a significant competitor to broadcast TV stations in local markets. In the Top 10 DMAs, for example, local cable ad revenues grew from an amount that was about 11.3 percent of local broadcast TV station ad revenues in these markets in 2000, to an amount that was about 32.6 percent of local broadcast TV station revenues in 2017. In total, local cable ad revenues in the Top 10 markets reached approximately $\$ 1.86$ billion in 2017-the equivalent of having an additional 4.6 broadcast TV stations in each market (based on average TV station ad revenues in these markets in 2017). ${ }^{146}$
- Pure-play digital advertising platforms are making significant year-over-year gains, rising from a mere 8.1 percent of the local advertising market in 2010 to 31.5 percent in 2019 and a projected 38.2 percent in 2023.147 Other estimates of the digital sector's share of local ad revenues are considerably higher. ${ }^{148}$
- The total estimated local ad revenues for a single digital advertising competitor-Google-roughly equals the total over-the-air ad revenues for all TV stations in the U.S. and will soon exceed total TV station ad revenues, ${ }^{149}$ while Facebook has become the most popular marketing vehicle for local advertisers. ${ }^{150}$
- A recent survey of advertisers conducted by BIA found that advertisers who report advertising on TV also utilize a wide range of other ad and marketing platforms. In fact, TV advertisers reported using 31 different ad platforms in 2018, including digital and traditional platforms. ${ }^{151}$ Nearly 78 percent of TV advertisers reported
${ }^{144}$ See BIA TV Study at 15-16 and Figure 10.
${ }^{145}$ See BIA TV Study at 10-12 and Figures 6-7.
146 NAB 2018 Quadrennial Ownership Comments at 53, n. 208 and Attachment F.
147 See BIA TV Study at 12-14 and Figure 8.
148 For example, Kagan predicted that digital's share of local ad revenues would be 51.9 percent in 2019, 60 percent by 2023 and 65.2 percent by 2028. NAB 2018 Quadrennial Ownership Comments at 24, 50 (citing Kagan estimates).

149 See BIA TV Study at 14.
150 Borrell Associates, 2019 Benchmarking Local Media's Digital Revenues, Executive Summary, at 4 (2019).
${ }^{151}$ See BIA TV Study at 18.
using targeted social media ads and almost 68 percent said they used mobile location aware ads. ${ }^{152}$

- Auto dealer advertising for new cars on broadcast television is expected to decrease by 54 percent by 2023, while cable advertising will increase by 14 percent and digital will be 42 percent higher. ${ }^{153}$

Other data discussed by commenters in the FCC's pending quadrennial review and DOJ Workshop panelists highlight the fluidity of competition across platforms. For example, Gray Television explained that in 2005, an auto dealer client who determined that football audiences were an essential demographic would divide its advertising buy between local broadcast stations (86 percent) and cable (14 percent). ${ }^{154}$ Today, the same dealer divides its purchase between digital advertising (28 percent), local broadcast stations (20 percent), the SEC network (17 percent), two cable entities (15 and 10 percent each), an OTT provider (5 percent), and the ABC network app (5 percent). ${ }^{155}$ As a result, this client's spending with Gray's station-the top-rated station in its market—has declined from \$528,000 in 2012 to just $\$ 178,000$ in 2018. ${ }^{156}$ Another TV broadcaster documented the following shifts in advertising spending from its customers (or former customers) across a variety of industries in different local markets:

- a large law firm shifted approximately \$500,000 away from TV advertising toward its own YouTube channel
- a local sandwich franchise moved almost half of its local advertising spend to digital

[^32]- a car dealer now spends 90 percent of its local advertising money on digital, including search, targeting, geofencing and automobile aggregator sites
- a paint company's entire quarterly local advertising budget was shifted to digital
- a local hospital moved all its local ad spend to digital platforms
- a telco's entire marketing budget is being moved to digital. ${ }^{157}$

As discussed at the DOJ Workshop, advertisers "have a fixed budget" which "doesn't expand whenever they want to try something new." Advertisers seek to optimize their use of a mix of platforms, such as "billboards, radio, digital, TV in its various different forms -- in order to try to achieve their objective." ${ }^{158}$ For some time, that "mix" has been leaning heavily in favor of digital and MVPD platforms and away from broadcast TV spot advertising, a trend expected to continue.

The reality is that no single broadcast station is being viewed by every household in an entire Nielsen DMA at a given time. Depending on when and where in the programming schedule an ad is placed, more people in a local market may be accessing the internet or viewing programming on a cable channel. Even if no single cable program achieves the same viewership as a local broadcast station's most popular programs, aggregate viewership across dozens of cable networks easily can equal or surpass broadcast viewing. As Marcien Jenckes of Comcast explained during the DOJ Workshop, MVPDs selling advertising "aggregate audiences across all the 60-plus or 100-plus networks" so even if individual cable programs or networks have lower ratings than certain programs aired on local broadcast stations, "it doesn't matter because you can stitch up ads that exist across
${ }^{157}$ Letter from Joshua N. Pila, General Counsel, Local Media Group, Meredith Corporation, to Marlene H. Dortch, Secretary, FCC, MB Docket No. 18-349, at 2 (Apr. 29, 2019).

158 Workshop panel presentation of Marcien Jenckes, President, Advertising, Comcast Cable, available at: https://www.justice.gov/atr/video/public-workshop-competition-television-and-digital-advertising-panel-3 (appears at approximately 18:59 minutes).
all different types of cable audiences to reach the folks that you're trying to reach."159 Sellers of MVPD advertising spots are well aware of their ability to compete head-to-head with broadcasters and have been promoting their products accordingly for many years. ${ }^{160}$ With the high rates of broadband internet access and device ownership today, ${ }^{161}$ digital platforms can also reach large audiences and be used to build brand awareness. As explained during the DOJ Workshop, Facebook competes "for advertising dollars at each stage of the funnel" and views itself as "a likely substitute or a swap for both television, for print, for cable advertising and for other types of media or billboards even that might compete for your attention." ${ }^{162}$ In other words, digital ads are not limited to serving a different purpose than broadcast advertising by only targeting niche audiences to generate

[^33]${ }^{161}$ By the end of 2019, 85 percent of U.S. households had internet service at home. Leichtman Research Group (LRG), Research Notes 4Q 2019, at 3 (2020). See also NAB 2018 Quadrennial Ownership Comments at 49 (citing LRG, which reported that 98 percent of U.S. households have at least one video-capable device, e.g., smartphone or tablet).

162 Workshop panel presentation of Ty Ahmad-Taylor, Vice President, Business Product Marketing, Facebook https://www.justice.gov/atr/video/public-workshop-competition-television-and-digital-advertising-panel-3 (appears at approximately 11:50 minutes).
an immediate response to the ad. ${ }^{163}$ Because MVPD and digital advertising platforms can reach equally large (or larger) percentages of the population in a DMA, they are competing head-to-head with broadcasters for "top of the funnel" or brand awareness advertising dollars. Indeed, to build brand awareness among younger consumers, many of which have virtually abandoned traditional TV, advertisers would need to utilize other platforms, especially digital and mobile.

## C. The COVID-19 Pandemic Presents Unique Challenges for Local TV Stations Striving to Compete with Larger, Less Regulated Digital Competitors

Local broadcast stations are currently engaged in an unprecedented effort to educate and inform local viewers and otherwise support their local communities during the global COVID-19 pandemic. Stations are hosting virtual town halls with public officials and medical experts, engaging in critical investigative journalism on how COVID-19 is affecting their local communities, replacing regularly scheduled programming with news and informational content, airing millions of dollars' worth of public service announcements to encourage social distancing and other practices that promote public health and safety, ${ }^{164}$ and retooling their own operations to ensure appropriate social distancing. Stations also are

[^34]fulfilling their longstanding roles of providing direct community support with unique efforts specific to the pandemic, including developing virtual job fairs and other resources to connect unemployed people with local employers, offering local businesses free or low-cost advertising to help them stay afloat, and partnering with local food pantries on fundraising efforts at a time when many are struggling to feed their families. ${ }^{165}$

With Americans seeking a trusted source of local news and information and spending more time at home during the COVID-19 crisis, local television stations are experiencing higher than usual viewership, even among young adults who have largely abandoned traditional TV. ${ }^{166}$ In the top 25 markets, for example, live local news viewership was up 52 percent in the first week of March among 18-34 year-olds compared to the same week in 2019, and up 83 percent during the second week of March. Weekday evening news viewing by young adults was up 68 percent in the first week of March, and 106 percent in the second week of March. ${ }^{167}$

Unfortunately, the larger audiences resulting from the pandemic have not translated into increased advertising revenue for broadcasters. Many of the businesses local stations depend upon for their advertising revenue are facing unprecedented financial challenges,

165 NAB has gathered a few of the countless examples of broadcasters' extensive coverage of the pandemic and direct service to their communities on its website. See NAB, Coronavirus: Broadcasters' Response, available at: https://www.nab.org/coronavirus/stories.asp.

166 See., e.g., Jon Lafayette, Virus Crisis Bringing Young Viewers to Local Broadcast, Broadcasting+Cable (Mar. 24, 2020); Lillian Rizzo, Local TV Sees Spike in Viewers, Drop in Ads in Coronavirus Crisis, The Wall Street Journal (Apr. 3, 2020) (reporting that Meredith Corp.'s afternoon and evening news viewership rose 30 percent in just the first half of March, and Nexstar Media Group, Inc., saw its ratings increase 35 percent during that time).

167 Jon Lafayette, Virus Crisis Bringing Young Viewers to Local Broadcast, Broadcasting+Cable (Mar. 24, 2020). Primetime viewing also increased among 18-34 yearolds (up 24 percent during the first week of March, and 41 percent in the second week of March).
leading them to slash their advertising budgets. ${ }^{168}$ Although a "return to normal" after a major disruption can sometimes mean that pent-up demand will drive ad spending, ${ }^{169}$ the future is uncertain, with some foreseeing a downturn in the advertising market more severe than during the Great Recession. ${ }^{170}$

What is certain is that the pandemic will exacerbate existing challenges for local TV stations competing with much larger, better capitalized, and less regulated digital companies for advertising revenue, even as broadcast stations outperform other outlets in serving their local communities. For these reasons, NAB again stresses the urgent need for reforming the DOJ's merger policies and the FCC's rules so that local TV stations can take advantage of economies of scale by forming more competitively viable ownership structures, including combinations among the top-4 ranked TV stations in local markets. Maintaining a 20th century local TV rule does not serve the public interest but only serves to competitively inhibit local stations and endanger their vital services to the public, as local news outlets increasingly struggle for survival. ${ }^{171}$

168 Lillian Rizzo, Local TV Sees Spike in Viewers, Drop in Ads in Coronavirus Crisis, The Wall Street Journal (Apr. 3, 2020) ("'We have more viewers than ever, but advertisers are unfortunately stuck in the same economic boat as many of us,' said Patrick McCreery, president of the local media group of Meredith Corp., which owns 17 TV stations."; Gray Television observes that although some advertisers are taking advantage of the rising viewership, there is a net decline, with "more cancellations than new orders"). See also Al Tompkins, TEGNA furloughs local TV news staffs, managers take temporary pay cut, Poynter (Apr. 6, 2020)("[TEGNA CEO Dave] Lougee said while the TV stations have seen big gains in audiences on all platforms, 'many businesses have decreased or in some cases pulled their current advertising and marketing campaigns because of COVID-19.'").
169 Lillian Rizzo, Local TV Sees Spike in Viewers, Drop in Ads in Coronavirus Crisis, The Wall Street Journal (Apr. 3, 2020) (Perry Sook of Nexstar pointing to this historical trend).
170 See IAB Ad Survey; Section III.A., supra.
${ }^{171}$ See, e.g., Paul Farhi, Sarah Ellison and Elahe Izadi, The coronavirus crisis is devasting the news industry. Many newspapers won't survive it, Washington Post (Apr. 8, 2020) (explaining that the pandemic has struck at local businesses that had been the last pillar of

## V. CONCLUSION

Competition for audiences and advertisers in the communications marketplace is fierce and flourishing. Far from being limited to a few geographically proximate broadcast stations, consumers today enjoy an over-abundance of information and entertainment choices, accessible from virtually anywhere, at any time, via any device. Yet FCC ownership limits and DOJ merger reviews remain premised on the view that local TV and radio stations exist in markets hermetically sealed against the vast array of choices available to audiences and advertisers. NAB urges the Commission to carefully analyze non-broadcast sources of competition to local radio and TV stations in the contexts of this biennial report and its pending quadrennial review. As shown above and in numerous earlier NAB filings, agency regulation and oversight must be updated to reflect competitive marketplace realities.

Respectfully submitted,
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Terry Ottina
NAB Research
April 27, 2020

[^35]
## Attachment A

## Subscribers to OTT Video Services

United States Subscribers


- Netflix: Retrieved from Statista on April 1, 2020. Original source Netflix.com.
- Amazon Prime: Retrieved from Statista. Original source: Digital TV Research. Video subscriber estimates.
- Hulu: Retrieved from Statista. Original source: Walt Disney Company, The Walt Disney Company Reports First Quarter Earnings for Fiscal 2020.
- .


## Attachment B

Weekly Time Spent Watching Video on a Smartphone

*Starting in Q2 2018 Nielsen Total Audience Report does not breakout A18-24 and A25-34 age groups. Instead in lists A18-34 combined.
Sources: Nielsen Total Audience Reports: Q2 2014-Q2 2019.


[^0]:    ${ }^{1}$ FCC, Office of Economics and Analytics Seeks Comment on the State of Competition in the Communications Marketplace, Public Notice, GN Docket No. 20-60, DA 20-199 (Feb. 27, 2020) (Notice).

    2 NAB is a nonprofit trade association that advocates on behalf of local radio and television stations and broadcast networks before Congress, the Federal Communications Commission and other federal agencies, and the courts.
    ${ }^{3}$ See Edison Research and Triton Digital, The Infinite Dial 2020 (Mar. 19, 2020); Ron
    Rodrigues, Sr., Five Takeaways from The New Edison Research Audio Study (Nov. 4, 2019).
    ${ }^{4}$ See Year-End 2019 RIAA Music Revenues Report (Feb. 2020); RAIN News, Nielsen Music 2019 report: More than 1 trillion on-demand streams in the U.S. (Jan. 10, 2020).

[^1]:    ${ }^{5}$ PwC, A new video world order, at 2 (2019).
    ${ }^{6}$ Leichtman Research Group, Press Release, 74\% of U.S. Households Have an SVOD Service (Aug. 27, 2019); Parks Associates, Press Release, Percent of US broadband households that subscribe to two or more OTT services has increased by 130\% since 2014 (Oct. 2, 2019).
    ${ }^{7}$ GroupM, The State of Video, at 18 (Oct. 2018) (citing Morgan Stanley analysis).
    8 John Koblin, Peak TV Hits a New Peak With 532 Scripted Shows, The New York Times (Jan. 9, 2020).
    ${ }^{9}$ The Nielsen Total Audience Report: Special Streaming Wars Edition, at 15 (Feb. 2020) (reporting Q3 2019 weekly reach of various platforms among U.S. population ages 18+).

[^2]:    ${ }^{10}$ Borrell Associates, 2019 Benchmarking Local Media's Digital Revenues, Executive Summary, at 4 (2019).

    11 See BIA Advisory Services, Press Release, Google to Dominate Local Digital Advertising in 2018 (May 7, 2018).
    12 Interactive Advertising Bureau, Coronavirus Ad Spend Impact: Buy-side (Mar. 27, 2020).

[^3]:    ${ }^{13}$ See Comments of NAB, MB Docket No. 18-349 (Apr. 29, 2019) (NAB 2018 Quadrennial Ownership Comments); Reply Comments of NAB, MB Docket No. 18-349 (May 29, 2019) (NAB 2018 Quadrennial Ownership Reply Comments).

    14 David Menconi, Five Independent Radio Broadcasters Discuss Their Strategies For SmallMarket Success, Billboard (Sept. 17, 2019) (quoting Bruce Goldsen, co-owner of four radio stations in South Central Michigan).

[^4]:    ${ }^{15}$ As of March 31, 2020, there were 15,478 full-power AM and FM stations and an additional 8,188 FM translators and boosters, compared to 12,057 full-power stations and 2,527 translators and boosters in February 1996, when the Telecommunications Act became law. FCC, Broadcast Station Totals as of March 31, 2020, News Release (Apr. 6, 2020); FCC, Broadcast Station Totals as of Feb. 29, 1996, News Release (Mar. 7, 1996).
    ${ }^{16}$ See The Nielsen Total Audience Report: Special Streaming Wars Edition, at 15 (Feb. 2020) (2020 Nielsen Total Audience Report).
    ${ }^{17}$ Nielsen Music 3602019 U.S. Report, at 4 (Aug. 2019) (2019 Nielsen 360).

[^5]:    ${ }^{18}$ Edison Research and Triton Digital, The Infinite Dial 2020 (Mar. 19, 2020) (Infinite Dial 2020). Every month, 68 percent of those ages 12+ (or 192 million people) listen to online audio. Id.

    192020 Nielsen Total Audience Report at 9 (reporting Q3 2019 estimates). In addition, one quarter of adults 18+ stream audio on their tablets weekly.

    20 Infinite Dial 2020.
    ${ }^{21}$ Id. Edison Research's online audio listening numbers noted above combine the listening to streamed audio content available only on the internet and listening to AM/FM stations online. Other sources confirm that most streaming time is spent listening to online-only sources. According to Nielsen, 37 percent of total weekly time spent listening to all sources of music went to purely online streaming sources and only five percent went to streaming live broadcast radio. An additional 17 percent of total time spent listening to music went to over-the-air AM/FM radio; 12 percent to listeners' digital music libraries; 11 percent to CDs/vinyl; six percent to satellite radio; five percent to TV music channels; four percent to live streaming concerts/festivals; and five percent to still other sources. See 2019 Nielsen 360 at 11. Unsurprisingly, teens and millennials spend a much greater share of their weekly music listening time on streaming. Id. at 13 (finding that teens spend 28 percent, and millennials 24 percent, more time than the average music listener on streaming).

[^6]:    ${ }^{23}$ See 2019 Nielsen 360 at 26 (reporting that 76 percent of U.S. music listeners (ages 13+) stream music and that 86 percent of Hispanic music listeners stream music). Hispanic music listeners also spend more of their weekly listening time on streaming, and use more devices for music, than the average music listener. Id. at 13, 15.
    ${ }^{24}$ Ron Rodrigues, Sr., Five Takeaways From The New Edison Research Audio Study (Nov. 4, 2019) (citing Share of Ear study finding that "African-American listeners use 48 additional minutes of audio per day, and 34 percent greater share of streaming audio, than the general market").
    25 See 2019 Nielsen 360 at 29-30.
    26 Nielsen Music 3602017 U.S. Report, at 43.
    272019 Nielsen 360 at 54.
    28 In fact, YouTube Music launched in 2019 a feature that permits listeners on YouTube Premium and YouTube Music Premium to flip seamlessly and at will between the audio version of a song and its official music video. RAIN News, YouTube Music now lets listeners switch from audio to video (and back) (July 18, 2019).

[^7]:    29 See NAB 2018 Quadrennial Ownership Comments, at Attachment A, BIA Advisory Services, Local Radio Station Viability in the New Media Marketplace, at 7-9 (Apr. 19, 2019) (BIA Radio Study) (citing Triton Digital Monthly Rankers). During this time period, the monthly average active streaming sessions of the pure-play companies increased 153.2 percent compared to a 3.7 percent increase for radio stations. The pure-play providers' monthly total listening levels increased 152 percent compared to 3.5 percent for radio broadcasters. Id.
    ${ }^{30}$ RAIN News, December streaming, and flashback 10 years of RAIN tracking of Triton Digital Webcast Metrics (Feb. 17, 2020).
    ${ }^{31}$ RIAA, Year-End 2019 Music Revenues Report, at 2 (Feb. 2020).
    ${ }^{32}$ See id. Teens subscribe to paid music streaming services at increasingly high rates. See 2019 Nielsen 360 at 32 (reporting that teen subscriptions rose by 56 percent from 2018 to 2019).
    ${ }^{33}$ See News Release, SiriusXM Reports Fourth Quarter and Full-Year 2019 Results (Feb. 4, 2020).

[^8]:    34 In pre-2006 car models, SiriusXM's share of time spent listening (among Americans 13+) is only four percent. In contrast, in car models 2015-2018, SiriusXM's share rises to 26 percent, at the expense of AM/FM's listening share. Edison Research, Miles Different: In-Car Audio (Sept. 2018).
    ${ }^{35}$ RAIN News, Sirius XM brings mobile app listening to all users, adds Pandora personalization for some plans (July 11, 2019).
    ${ }^{36}$ RAIN News, Sirius XM and Pandora are testing new bundle subscription options (Jan. 10, 2020).

[^9]:    ${ }^{37}$ See Ross Winn, 2020 Podcast Stats \& Facts, Podcast Insights (Mar. 7, 2020).

[^10]:    ${ }^{43}$ See, e.g., BIA Radio Study at 4-5 (documenting declines in radio listening over time due to competition); Ron Rodrigues, Sr., Five Takeaways From The New Edison Research Audio Study (Nov. 4, 2019) (discussing Share of Ear data from Q3 2019, explaining that digital platforms dominate listening for adults ages 18-54, and concluding that from 2014-2019, "time spent with streaming, podcasts and satellite radio have come at the expense of AM/FM listening time"); Laura Ivey, Edison Research, edison research's top ten findings from 2019 (so far) (Oct. 8, 2019) (Edison Top Ten) (finding that persons ages 13-34 spend 27 percent of their audio time with AM/FM and even those ages $35-54$ spend under half ( 47 percent) of their audio time with radio); Joint Comments of Connoisseur Media, LLC, et al., at Exhibit A, MB Docket No. 18-349 (Apr, 29, 2019) (explaining that as it became easier for consumers to listen to audio in a variety of different ways, the time that Americans spent listening to radio noticeably decreased, and providing Share of Ear data from 2014-2019).
    ${ }^{44}$ MIDiA, Spotify Takes Aim at Radio, Again (June 13, 2019) (reporting that Spotify launched a radio-like feature called "Your Daily Drive," which takes the essence of drive-time radio, including news content, and translates it into a playlist, thereby broadening the concept of a playlist to a "programmed delivery vehicle for any combination of content").
    45 Infinite Dial 2020.
    46 Pew Research Center, Mobile Fact Sheet (June 12, 2019).
    47 Infinite Dial 2020.
    48 ld.

[^11]:    ${ }^{49}$ NPR and Edison Research, The Smart Audio Report Winter 2019 (Jan. 8, 2020).
    ${ }^{50}$ Audio Today 2019 at 9.
    51 Infinite Dial 2020.
    52 See 2020 Nielsen Total Audience Report at 16 (comparing daily usage of radio with the combined daily usage of apps/web on smartphones/tablets, internet on a computer and TVconnected devices, including internet-connected devices, game consoles and DVDs/Blu-ray). ${ }^{53}$ See id.

[^12]:    54 See 2019 Nielsen 360 at 15.
    ${ }^{55} \mathrm{ld}$. at 17.
    56 Edison Top Ten.
    ${ }^{57}$ Inside Radio, Podcasting Is Growing Faster But Streaming Audio Audience Is Bigger (Sept. 3, 2019) (citing Nielsen data).

    582019 Nielsen 360 at 39.
    59 NPR and Edison Research, The Smart Audio Report Winter 2019 (Jan. 8, 2020).
    60 Danielle Cassagnol, Press Release, Consumer Tech U.S. Sales to Reach Record \$422 Billion in 2020; Streaming Services Spending Soars, Says CTA (Jan. 5, 2020).

[^13]:    ${ }^{61}$ See Edison Research and Triton Digital, The Infinite Dial 2019 (Mar. 2019); Infinite Dial 2020.

    62 See Rachel Withers, Is Getting Our News From Smart Speakers a Threat to Media Diversity?, Slate (Aug. 7, 2018).
    63 Nic Newman, Digital News Project: The Future of Voice and the Implications for News, Reuters Institute, at 24-25 (Nov. 2018) (finding that only 27 percent of U.S. consumers who use their smart speakers' "news briefing" feature had changed the default news provider and only 32 percent had added additional news brands).

    64 Infinite Dial 2020.
    ${ }^{65}$ RAIN News, Google Assistant launches personalized news stream (Nov. 19, 2019).
    ${ }^{66}$ Robert Maccini, RAIN News, Audio and Voice Control in the Vehicle (Feb. 21, 2020).

[^14]:    ${ }^{67}$ See Infinite Dial 2020 (among persons 18+ who had ridden in a car and used an audio source in the car in the last month, 50 percent reported using AM/FM most often, down from 57 percent in 2017).

    68 David Menconi, Five Independent Radio Broadcasters Discuss Their Strategies For SmallMarket Success, Billboard (Sept. 17, 2019) (quoting Ed Levine, President/CEO of Galaxy Media Partners, which owns 13 radio stations in central New York state).

[^15]:    ${ }^{69}$ Derek Baine, Advertising market growth unable to keep up with GDP, Kagan Market Intelligence (2019) (Kagan 2019 Ad Market Report); Derek Baine, Rapidly changing video world impacts advertising market, Kagan Market Intelligence (2020) (Kagan 2020 Ad Market Report).
    70 See Derek Baine, Digital to comprise 45\% of \$283B ad market by 2027, up from 32\% in 2017, Kagan (2018) (Kagan 2018 Ad Market Report); Kagan 2019 Ad Market Report; Kagan 2020 Ad Market Report.
    ${ }^{71}$ Interactive Advertising Bureau (IAB), Coronavirus Ad Spend Impact: Buy-side (Mar. 27, 2020) (IAB Ad Survey) (survey of media planners, buyers and brands conducted March 1824, 2020).

    72 ld.

[^16]:    ${ }^{73}$ See BIA Radio Study at 10-11 (discussing total OTA radio station ad revenues from 20032023). Unsurprisingly, as BIA also documented, stations' average quarter hour audiences the metric upon which radio advertising is sold -- declined from 2003-2018. Id. at 5.
    ${ }^{74}$ BIA estimates advertising revenue on a station-level basis only in those markets surveyed by Nielsen Audio (formerly Arbitron). It estimates the revenues of AM/FM stations in unrated areas only as a whole, not on a station-level or service-level basis.

[^17]:    ${ }^{75}$ See, e.g., Joint Comments of Connoisseur Media, LLC, et al., at Exh. C., MB Docket No. 18349 (Apr. 29, 2019) (declarations of ten radio broadcasters) (Joint Comments of 10 Radio Broadcasters); Joint Reply Comments of Broadcast Licensees, MB Docket No. 18-349, at 913 (May 29, 2019) (Joint Replies of 25 Broadcast Licensees).

[^18]:    76 See, e.g., Kagan 2018 Ad Market Report (observing that " 2017 continued to be another year of disruption in the ad market as dollars increasingly flee traditional media for online and mobile"); Derek Baine, Local ad revenue up 3.4\% in 2015 to \$74.97B; mobile, Internet ads rule, Kagan (2015) (Kagan 2015 Ad Market Report) (discussing the shift of advertising away from traditional media to digital platforms, and concluding that mobile and internet ads "rule"); Kagan 2019 Ad Market Report (citing "remarkable progress" in digital advertising, with a compound annual growth rate of 16.8 percent from 2009-2018, and noting traditional media's loss of dominance).

    77 Kagan 2020 Ad Market Report.
    78 ld.
    79 See BIA Radio Study at 11-12. Radio stations' much more limited online ad revenues do not compensate for the decline in OTA ad revenues.

[^19]:    80 See BIA Radio Study at 12; NAB 2018 Quadrennial Ownership Comments, at Attach. B, BIA Advisory Services, The Economic Irrationality of the Top-4 Restriction, at 13 (Mar. 15, 2019) (counting pure-play online and mobile, email and internet yellow pages).
    ${ }^{81}$ See Kagan 2019 Ad Market Report.
    82 See, e.g., Seth Shafer, US digital ad revenues steam ahead in 10-year projections, Kagan Market Intelligence (Dec. 23, 2019) (stating that mobile could account for nearly 70 percent of total U.S. digital ad revenues in 2019).

    83 Interactive Advertising Bureau and PricewaterhouseCoopers, IAB FY 2018 Podcast Ad Revenue Study (June 2019); RAIN News, Podcast advertising might be growing at faster rate than internet advertising (Jan. 7, 2020).

    84 See BIA Radio Study at 12-13.
    85 BIA Radio Study at 13. This survey reconfirms previous empirical studies showing that TV, radio and newspapers compete for advertising and that digital advertising is substitutable

[^20]:    for advertising on traditional media, including radio. See, e.g., R.B. Ekelund, Jr., G.S. Ford and J.D. Jackson, Are Local TV Markets Separate Markets?, 7 Int'I J. Econ. Bus. 79, 91-92 (2000); Mercedes Esteban-Bravo, et al., Historical impact of technological change on the US mass media advertising expenditure, 100 Technological Forecasting \& Social Change 306, 312 (2015); A. Goldfarb and C. Tucker, Substitution Between Offline and Online Advertising Markets, 7 J. Comp. L. \& Econ. 37 (2011).

    86 Gordon Borrell, What Radio Buyers Are Doing, radiomatters.org (Feb. 18, 2019).
    87 Joint Comments of 10 Radio Broadcasters at Exh. B-4.
    88 ld.
    89 Borrell Associates, Automotive Advertising Takes a Sharp Turn, 2018 Outlook, at 11 (Borrell Car Ad Study).

[^21]:    90 ld . at 13.

[^22]:    in Maine are going off the air); Inside Radio, Coronavirus Poses New Risk To AM Radio (Apr. 14, 2020) (reporting AM and FM stations going off the air in North Carolina, Oregon, Hawaii and Idaho).
    96 See, e.g., Terri Wright, A Message From Craig Fugate, COVID-19: Who You Can Rely On, wfit.org (Apr. 6, 2020) (former FEMA Administrator stating that local broadcasters are the "most reliable source for information in times like these").
    ${ }^{97}$ MAGNA, Press Release, MAGNA Forecasts V-Shaped Recovery for the US Advertising Market (Mar. 26, 2020). In contrast, the digital sector's estimated ad revenue growth will drop from double-digit to single-digit positive growth for FY 2020.
    98 IAB Ad Survey.
    99 See, e.g., Peter Kafka, The pandemic is driving media consumption way up. But ad sales are falling apart, vox.com (Mar. 24, 2020).
    100 Glenn Peoples, How Radio Can Survive the Looming Coronavirus Recession: ‘People Turn to Radio in Times Like This,' Billboard (Apr, 2, 2020).

[^23]:    101 See BIA Advisory Services, Market Assessment and Opportunities for Local Radio: 20182022, at 18 (Apr. 2018). See also Steve Knopper, Back To The Future: Townsquare Media’s 'Local First' Approach To Radio May Be An Antidote To Streaming, Billboard (Sept. 17, 2019) (reporting that 90 percent of Townsquare radio stations' advertising comes from local companies).
    102 See BIA Radio Study at 31-34.
    ${ }^{103}$ See Notice at Section VI (seeking comment on whether regulations pose a barrier to "competitive expansion of existing providers").

    104 NAB 2018 Quadrennial Ownership Comments at 6-40 \& Attachment A; NAB 2018 Quadrennial Ownership Reply Comments at 30-55.

[^24]:    ${ }^{105}$ As discussed in NAB's previous filings and herein, radio stations today also compete with

[^25]:    110 See BIA Radio Study at 26-31 and Attachment A (showing that efficiencies and cost savings from greater scale economies would increase stations' cash flow and that greater common ownership also would likely increase revenues earned per station); see also, e.g., Joint Replies of 25 Broadcast Licensees at 16.
    ${ }^{111}$ See DOJ Antitrust Division, Public Workshop on Competition in Television and Digital Advertising, May 2-3, 2019, https://www.justice.gov/atr/public-workshop-competition-television-and-digital-advertising. See also Presentation of NAB General Counsel and Executive Vice President Rick Kaplan, DOJ Public Workshop on Competition in Television and Digital Advertising, Panel 3: Executive Suite: Competitive Dynamics in Advertising: Does Local Broadcast Compete with Cable Spot and Online Advertising? (May 3, 2019), available at: https://www.nab.org/documents/newsroom/pressRelease.asp?id=5009; NAB Comments on DOJ Public Workshop on Competition in Television and Digital Advertising (June 17, 2019), available at: https://www.justice.gov/atr/page/file/1201401/download .

[^26]:    112 See NAB Comments, MB Docket No. 17-318, at 14 and Attachment A (Mar. 19, 2018) (showing decline in broadcast TV's viewing share over time as cable's viewing share rose).

[^27]:    113 See C. O'Dell, Over 200 OTT services now available in U.S. market alone, Parks Associates (Aug. 13, 2018); Attachment A, U.S. Subscribers to OTT Video Services (documenting OTT subscriber increases over time).
    114 Leichtman Research Group, Press Release, 69\% of U.S. Households Have an SVOD Service (Aug. 27, 2018). Younger consumers subscribe to streaming video services at even higher rates. See Deloitte Insights, Digital media trends survey, at 3 (13th ed. 2019) (reporting that 80 percent of Gen Z, 88 percent of Millennials and 77 percent of Gen X subscribe to streaming video services).
    115 Toni Fitzgerald, How Many Streaming Video Services Does The Average Person Subscribe To?, Forbes (Mar. 29, 2019).

    116 Attachment A.
    117 Leichtman Research Group, Press Release, 74\% of U.S. Households Have an SVOD Service (Aug. 27, 2019). https://www.leichtmanresearch.com/74-of-u-s-households-have-an-svod-service/
    118 Julia Alexander, Disney Plus surpasses 50 million subscribers, The Verge (Apr. 8, 2020).

[^28]:    119 Todd Spangler, Apple TV Plus May Have More Than 33 Million Users But 'Vast Majority' Aren't Paying for It, Researcher Says, Variety (Jan. 24, 2020).

    120 Julia Alexander, HBO Max launches in May 2020 for $\$ 14.99$ a month: AT\&T's major foray into the streaming wars, The Verge (Oct. 29, 2019); Julia Alexander, Here's what NBC's Peacock streaming service will look like when it launches this July, The Verge (Jan. 16, 2020).

    121 See NAB 2018 Quadrennial Ownership Comments at Attachment B, BIA Advisory Services, The Economic Irrationality of the Top-4 Restriction, at 4-5 (Mar. 15, 2019) (BIA TV Study). In 2018, Sling TV had 2.4 million subscribers, YouTube TV was newly available in all 210 markets and had one million subscribers, and Hulu + Live TV had nearly two million subscribers. See Chaim Gartenberg, YouTube TV is now available in every TV market in the US, The Verge (Mar. 28, 2019); James Loke, YouTube TV Crosses 1 Million Subscriber Mark, Hulu With Live TV Nears 2 Million, Tubefilter (Mar. 1, 2019). YouTube TV doubled its subscribership in 2019, and Hulu + Live TV had 3.2 million subscribers by the end of 2019. See Todd Spangler, YouTube Tops 20 Million Paying Subscribers, YouTube TV Has Over 2 Million Customers, Variety (Feb. 3, 2020); Travis Clark, Disney Plus has gained 28.6 million subscribers since launching in November, Business Insider (Feb. 4, 2020).

    122 Todd Spangler, YouTube Now Has 2 Billion Monthly Users, Who Watch 250 Million Hours on TV Screens Daily, Variety (May 3, 2019).

    123 Lesley Goldberg, Peak TV Update: Scripted Series Top 500 in 2019, FX Says, The Hollywood Reporter (Jan. 9, 2020).

[^29]:    124 NAB 2018 Quadrennial Ownership Comments at Attachment D, FX Research, Estimated Number of Original Scripted Series, 2018.

    125 Lesley Goldberg, Peak TV Update: Scripted Series Top 500 in 2019, FX Says, The Hollywood Reporter (Jan. 9, 2020).
    126 See BIA TV Study at 5; accord GroupM, The State of Video, at 13 (Oct. 2018).
    127 Nielsen, U.S. Live + Same Day 2003, 2018, 2019. Broadcast TV's share of total day viewing among those ages 18-49 was only 26 percent in 2018 and 25 percent in 2019, down from 40 percent in 2003. Id.

    128 Counting broadcast, cable and DBS, but not streaming or subscription video on demand (SVOD). These figures overstate TV stations' share of all video viewing, because if streaming video and SVOD were included in the total, then broadcast's share would be smaller still.

[^30]:    129 Todd Spangler, Netflix Caused 50\% of U.S. TV Viewing Drop in 2015 (Study), Variety (Mar. 3, 2016) (discussing study by MoffettNathanson).
    ${ }^{130}$ GroupM, The State of Video, at 18 (Oct. 2018) (discussing a Morgan Stanley report).
    ${ }^{131}$ BIA TV Study at 5-6 and Figure 1 (examining viewing time from Q2 2014 to Q2 2018); The Nielsen Total Audience Report, at 10 (Sept. 2019) (reporting Q2 2019 weekly time spent on live + time shifted TV).

    132 BIA TV Study at 8 and Figure 3 (comparing Q2 2014-2018).
    ${ }^{133}$ Attachment B, Weekly Time Spent Watching Video on a Smartphone.
    134 See 2020 Nielsen Total Audience Report at 20 (reporting Q3 2019 data); The Nielsen Total Audience Report, Q3 2018, at 20 (2019) (Nielsen Total Audience Q3 2018 Data).

[^31]:    140 Ooyala, State of the Broadcast Industry 2019, at 4 (Jan. 2019). Accord GroupM, The State of Video, at 18 (Oct. 2018) (stating that the U.S. has "witnessed pronounced, persistent replacement behavior with Netflix versus traditional TV").

    141 See, e.g., Kagan 2020 Ad Market Report (stating that the "dominance of digital" in the ad market is "obvious"); Kagan 2019 Ad Market Report) (observing that the ad market reflects loss of dominance by broadcast and cable in the viewing world, as "more eyeballs migrate to online and mobile viewing"); Kagan 2018 Ad Market Report (documenting continued "disruption in the ad market as dollars increasingly flee traditional media for online and mobile"); Kagan 2015 Ad Market Report (concluding that mobile and internet ads "rule").
    ${ }^{142}$ See Seth Shafer, US digital ad revenues steam ahead in 10-year projections, Kagan Market Intelligence (Dec. 23, 2019); Section III.B., supra (discussing Kagan's estimates for U.S. advertising market, including the digital sector's remarkable past and projected future growth).
    ${ }^{143}$ See Section III.A., supra.

[^32]:    152 See BIA TV Study at 17-18 and Figure 12.
    153 Borrell Associates, 2018 Outlook: Automotive Advertising Takes A Sharp Turn (Oct. 2018).

    154 Gray Television, "Department of Justice Local Advertising Workshop" (May 2, 2019), Slide 6, available at:
    https://www.justice.gov/atr/page/file/1160676/download\#Pat\%20LaPlatney.
    155 Id. at Slide 9.
    156 Id. at Slide 11.

[^33]:    159 Workshop panel presentation of Marcien Jenckes, President, Advertising, Comcast Cable, available at: https://www.justice.gov/atr/video/public-workshop-competition-television-and-digital-advertising-panel-3 (appears at approximately 52 minutes). For example, an advertiser might come to Comcast stating that a local broadcast station ad buy will allow them to reach 218,474 people in the market. Comcast will tell its potential client that it can "put that advertiser across 20 cable networks and allow them to reach 237,031 people. And we do this every day. And the same applies . . . in the digital environment." Id. (appears at approximately 53 minutes).

    160 Even in 2011, MVPD advertising seller NCC Media was telling prospective customers that: "[d]ouble-digit rated shows are a thing of the past. Buying to the tenths and hundredths of rating points is now essential to reach your target audience." NCC's marketing materials also stated that the top 100 cable programs deliver more gross ratings points than the top 100 broadcast programs, which, of course, are not all aired on the same stations. NCC Media, The Essential Guide: Planning and Buying Local Market Cable Television and Digital Media, available at:
    http://www.nab.org/documents/newsRoom/pdfs/Cable Ad Buying Guide.pdf (2011).

[^34]:    163 Traditionally, DOJ has considered digital ads and broadcast spot ads to be in separate product markets because of these supposed distinctions. States of America v. Gray Television, Inc. and Raycom Media, Inc., Case 1:18-cv-02951 (Dec. 14, 2018) at 11, पा 42.
    164 NAB launched a public service announcement (PSA) campaign on March 12, 2020. See NAB, NAB Announces New TV/Radio PSA Campaign to Address COVID-19 Education, Press Release, available at:
    https://www.nab.org/documents/newsRoom/pressRelease.asp?id=5513. From March 12 to April 24 alone, local television and radio stations aired NAB's PSAs 354,338 times for an estimated ad value of $\$ 78,161,208$. This does not include countless other PSAs that many stations are running from other sources such as the Ad Council or locally-produced PSAs. On its Coronavirus Toolkit page, NAB makes available Radio, Television, Podcast and scripted versions of its PSAs in English and in Spanish. See NAB Coronavirus Toolkit, available at: https://www.nab.org/coronavirus/. We also connect stations to the Ad Council's
    "\#AloneTogether" PSA campaign and other coronavirus-related PSAs. Id.

[^35]:    support for many news organizations, and that even local TV stations, which in the past have been more resilient than newspapers, are hurting from the disappearance of advertisers).

