

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)
)
2018 Quadrennial Review –) MB Docket No. 18-349
Review of the Commission’s Broadcast)
Ownership Rules and Other Rules Adopted)
Pursuant to Section 202 of the)
Telecommunications Act of 1996)
)

JOINT COMMENTS

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I. INTRODUCTION AND SUMMARY

Connoisseur Media, LLC (“Connoisseur”), Townsquare Media, Inc. (“Townsquare”), Mid-West Family Broadcasting (“Mid-West Family”), Midwest Communications, Inc. (“Midwest Communications”), the Frandsen family stations (“Frandsen”), Cherry Creek Media (“Cherry Creek”), Neuhoff Media (“Neuhoff”), Eagle Communications, Inc. (“Eagle Communications”), Patrick Communications, LLC (“Patrick Communications”), and Legend Communications, LLC (“Legend Communications” and, collectively, the “Joint Commenters”),¹

¹ Connoisseur is the licensee of approximately 30 radio stations in Connecticut, New York, Pennsylvania and Montana. Townsquare is a public company and the licensee of approximately 321 radio stations across the country. Mid-West Family is a group of independent companies with interlocking ownership holding licenses for over 40 radio stations in a number of Midwestern states. Midwest Communications is the licensee of approximately 75 stations in the Midwest and in south-central states. Entities controlled by Frandsen family members hold the licenses for over 20 stations in Utah, Idaho and Wyoming. Cherry Creek is the licensee of more than 50 radio stations that serve their local markets in the Rocky Mountain Region, Upper Midwest, Northwest and Southwest. Neuhoff has 20 radio stations, 16 locally focused digital music, information, and entertainment sites, and serves over a million consumers in Illinois and Indiana. Eagle Communications is an employee-owned licensee of 28 stations serving more than 300,000 people in Kansas and Missouri. Patrick Communications is a leading brokerage and investment banking firm offering many services, including media, tower and telecom brokerage whose controlling principals are also the controlling principals of Legend Communications, which owns 25 radio stations in Wyoming.

by their attorneys, hereby submit these comments to refresh the record in the above-referenced proceeding.²

In the Public Notice, the Media Bureau seeks to update the record in the pending 2018 Quadrennial Review proceeding in light of the passage of time, including “the broadcast industry’s evolution since early 2019 and its current trajectory”, “relevant trends . . . within the broadcast industry”, and “the impact of the COVID-19 pandemic” on broadcasters.³ As local radio broadcasters, the Joint Commenters are well-situated to provide information regarding their experiences over the past two years. As demonstrated herein, the media marketplace has continued to evolve since May 2019, and it has become even more apparent that the decades-old local radio ownership rules are counterproductive to the ability of local radio broadcasters to compete for audience and advertisers alike. This proceeding presents the Federal Communications Commission (“FCC” or “Commission”) with a crucial opportunity to enhance localism and to preserve it for the future. While broadcast radio today remains an important part of the media landscape, the current trends are not good. Global tech companies are eating into both radio’s advertising base and its audience share. Only by changing the competitive posture of the industry to allow local radio clusters to more effectively compete in their markets can radio stay strong into the future. It is crucial that the FCC act now to strengthen local radio, before the digital competition irretrievably undermines the ability of radio to compete in their markets.

In 2019, the Joint Commenters unequivocally demonstrated that, since the ownership rules were adopted a quarter century ago in 1996, the radio market has evolved to become far

² See *Media Bureau Seeks to Update the Record in the 2018 Quadrennial Regulatory Review*, Public Notice, DA 21-657 (rel. June 4, 2021) (“Public Notice”).

³ *Id.* at 4-5.

more competitive, encompassing much more than simply over-the-air radio. Over-the-air radio has lost both listeners and advertising dollars to satellite radio, online streaming services, and other new entrants to the media marketplace that simply did not exist in 1996.⁴ Indeed, the docket in this proceeding clearly demonstrates that competition for audience and advertising revenues has risen dramatically as new non-broadcast audio platforms have entered the market and continued to proliferate.⁵

It is abundantly clear that there is now a much broader market of media companies competing for the attention of the consumers who listen to, and the advertisers whose spending supports, local radio. This larger media marketplace includes online platforms owned by the biggest companies in the American economy which must be assessed in determining whether the local radio ownership rules continue to serve the public interest – an evaluation that the Commission must make in this Quadrennial Review. To ignore the profound changes in the media marketplace and leave in place rules established in 1996 – several decades before digital competitors even existed – is to ignore reality and condemn local radio operators to fighting these digital titans with one hand tied behind their back. Local radio simply cannot compete

⁴ See Joint Comments of Connoisseur, Townsquare, Mid-West Family, Midwest Communications, Frandsen, Cherry Creek, Neuhoff, Eagle Communications, Patrick Communications, and Legend Communications, MB Docket No. 18-349 (filed Apr. 29, 2019) (“Initial Joint Comments”); Joint Reply Comments of Connoisseur, Townsquare, Mid-West Family, Midwest Communications, Frandsen, Cherry Creek, Neuhoff, Eagle Communications, Patrick Communications, and Legend Communications, MB Docket No. 18-349 (filed May 29, 2019) (“Joint Reply Comments”).

⁵ See, e.g., Comments of Sinclair Telecable, Inc., MB Docket No. 18-349, at 1-2 (filed Apr. 26, 2019); Comments of Galaxy Communications LLC, MB Docket No. 18-349, at 3 (filed Apr. 29, 2019); Comments of West Virginia Radio Corporation, MB Docket No. 18-349, at 3-4 (filed Apr. 15, 2019); Comments of The National Association of Broadcasters, MB Docket Nos. 18-349 & 17-289, at 1-5 (filed Apr. 29, 2019) (explaining that combining “greater competition for ad dollars with a depressed ad market places significant stress on advertising-dependent broadcasters”). As the Joint Commenters previously observed, virtually all of the comments filed previously, even those of broadcasters opposed to a relaxation of the ownership rules, admit that the marketplace has changed, and that radio is facing significant new challenges from new competitors – principally from digital media companies. Joint Reply Comments at 5-6.

effectively in today's market without the ability to expand locally to offer a broader array of formats and services to audiences and advertisers.

The trends identified in 2019 by the Joint Commenters and others in this proceeding have not abated, but instead have continued along the same trajectories, as consumers increasingly view alternative media outlets as substitutes for radio. Statistical data available today clearly shows that the competition faced by over-the-air radio stations for retaining existing listeners and attracting new ones has not lessened – and, in fact, it has increased – since the formal pleading cycle in this proceeding closed in May 2019. The same is true of advertising dollars, as advertising continues to move from local media like radio to out-of-market platforms like those provided by the digital media giants. As these dollars flow out of the market, local media outlets, like broadcast radio, can no longer afford to provide critical local news and programming that is needed to fight disinformation and to outfit citizens with the information that they need to respond to local issues.

This pleading provides ample evidence of the ongoing evolution of audience and advertising from over-the-air radio to digital platforms, including updated statistical data from Edison Research's Share of Ear study on the growth of competition for radio's audience,⁶ and from Borrell Associates documenting the commanding position of digital advertising giants in today's local advertising marketplace.⁷ These changes are taking place in markets large and

⁶ In their Initial Joint Comments, the Joint Commenters supplied information from the Share of Ear 2019 study conducted by Edison Research ("Edison"). *See* Initial Joint Comments at Exhibit A. To facilitate and inform their response to the Public Notice, the Joint Commenters have obtained updated information from Edison's most recent study, the Share of Ear 2021. Edison has been conducting its Share of Ear study, which comprehensively examines audio listening trends, since 2014, and, as evidenced by the most recent Share of Ear survey, the results are consistent – radio still has a substantial share of audio listening, but it is declining each year as digital competition increases. The statistical data from Edison is included in Exhibit A to these comments ("Share of Ear 2021 Exhibit").

⁷ The statistical data from Borrell Associates is included in Exhibit B to these comments ("Borrell 2021 Exhibit"). Borrell, like Edison, has been conducting studies on the impact of digital entrants on

small, and clearly demonstrate that regulations adopted in the pre-digital media world of 1996 make no sense in today's much changed and far more competitive media marketplace. These are not transitory changes that can be arrested by broadcasters tweaking their current operations. Rather, these are permanent, structural changes in the marketplace that must be addressed by changes in the regulations governing that marketplace.

And radio broadcasters are no longer competing just against other radio broadcasters. Instead, they are competing against global tech giants and multimedia conglomerates that dwarf the size of any radio company. In fact, each of these tech companies individually dwarf the size of the entire radio industry. To think that a radio company owning a sixth or seventh FM station in a big market, or even all the radio stations in a smaller market, will damage competition or harm the public interest is to ignore reality. In today's media marketplace, only broadcast radio and TV have growth opportunities limited by government regulation, and these media are receiving an ever-smaller percentage of the local advertising revenue and a decreasing audience share. The tech companies can provide an unlimited number of audio or video channels to consumers in any market, and companies owning satellite, cable, billboards, newspapers and online services can combine without any structural limits except those imposed by the antitrust laws. All compete against radio for audience and advertising dollars – and as our comments show, more and more have broad access to local audiences all across the country.

As shown in earlier filings in this proceeding by the Joint Commenters and the NAB, particularly outside the top markets, there simply is no reason to retain ownership caps given the inconsequential share of the media market that these stations enjoy. As an exhibit to this

traditional media companies. But its focus is on local advertising, where it has been tracking changes in the marketplace for 20 years. The Joint Commenters provided similar data from Borrell in 2019, and the Borrell 2021 Exhibit updates that data.

pleading, we include a declaration of media broker and station owner Lawrence Patrick, stating that there are many radio stations now for sale that cannot find a buyer. Especially in smaller markets, independent stations that cannot be sold to local operators because of ownership caps quite often turn into zombie operations – a computer and a transmitter – hardly serving the public interest. The competitive situation in these markets is not likely to change to give these stations more opportunities unless they can be combined with viable radio operators in their market who can provide them with the means to truly serve the public – and provide the viable operators greater scale to compete with the invaders from the Silicon Valley and elsewhere who are so drastically changing local media markets.

The evidence makes clear that the FCC must immediately take steps to relax local radio ownership rules to permit local broadcasters to effectively compete with their unregulated marketplace adversaries. The Joint Commenters request that the changes that they urged in 2019 be adopted to free local radio to compete with the digital media companies that are today's real marketplace competitors. Today is the time to act, to create a stronger local radio industry for the future. The trends are clear – the Commission cannot wait to make the necessary changes needed to allow radio to remain strong to provide local voices to the local populations that these stations serve.

II. COMPETITION FOR AUDIENCE HAS CONTINUED TO INTENSIFY SINCE 2019 DUE TO EVER-EVOLVING SERVICES AND TECHNOLOGIES

As has long been the case, consumers today continue to have a myriad of options as substitutes for over-the-air radio, including on-demand or interactive audio, non-interactive digital audio or internet radio, and satellite radio. As the Joint Commenters previously demonstrated, these options have led to a redistribution of listening time at the expense of

terrestrial radio.⁸ The explosion in growth of non-audio platforms has continued, with more Americans than ever before willing to pay for audio services.⁹ The fact that listeners have gravitated more and more towards online audio and paid audio platforms evidences that consumers view these sources as substitutes for local radio stations. Notably, many of these new audio platforms – and the technologies used to listen to them – are owned by the biggest companies in the American economy. These out-of-market Internet pureplay companies have access to resources far beyond any local radio station and have used these resources to attract listeners at the expense of over-the-air AM/FM radio. Yet, it is only local radio stations that are hampered by decades old media ownership rules designed in an era where over-the-air broadcast radio was the only show in town.

A. The Rapid Migration from Traditional Radio to Online Platforms Has Continued to Erode AM/FM Listenership

While it cannot be disputed that local radio reaches a large portion of the American population, this reach has fallen dramatically in the past ten years.¹⁰ And, a more focused review reveals that, in the past year alone, AM/FM radio’s weekly reach dropped a record six percentage points – the largest drop recorded in the past decade.¹¹ According to publicly available Nielsen data, in 2020, radio’s weekly reach was just over 80 percent, as compared to

⁸ See Initial Joint Comments at 8-10.

⁹ See Larry Rosin, *The Number of Americans Paying for Audio Subscriptions Has Doubled Since 2015*, Edison Research (June 16, 2021), <https://www.edisonresearch.com/the-number-of-americans-paying-for-audio-subscriptions-has-doubled-since-2015/> (predicting that more than half of Americans ages 13 and up will pay for audio services in the next year or two).

¹⁰ See Pew Research Center, *Audio and Podcasting Fact Sheet*, Weekly terrestrial radio listenership (June 29, 2021), <https://www.journalism.org/fact-sheet/audio-and-podcasting/> (reporting that weekly AM/FM radio reach dropped over 10 percentage points between 2010 and 2020).

¹¹ See *id.* (reporting that weekly AM/FM radio reach in 2020 was down from 89% in 2019 to 83% in 2020).

nearly 90 percent just one year earlier.¹² This trend is echoed in looking at daily reach – Edison’s Share of Ear 2021 study found that over 40 percent of survey respondents no longer listen to radio on a daily basis, up from 33.4 percent in 2019.¹³

But, reach alone does not tell the whole story. Rather, it is important to consider whether listening is meaningful, what the listening trends have been in recent years, and what these trends portend for the future. To this end, the ongoing erosion of over-the-air listenership that the Joint Commenters predicted in their pleadings in this docket has continued.¹⁴ Newly available statistical data clearly demonstrates that those who do listen to broadcast radio are doing so for increasingly less time than ever before. For example, Edison Research’s most recent Share of Ear study shows that more than half of survey respondents reported listening to terrestrial radio for less than 30 minutes (as compared to 44.2 percent in 2019).¹⁵ Even those that tend to listen longer are listening less frequently. Between 2019 and 2021, there was a seven-point drop in the number of listeners tuning into AM/FM radio for an hour or more each day.¹⁶

As has been the case over the past several years, these trends are exacerbated among younger generations. First, reach is significantly less among the 13 to 24 demographic, or Generation Z. In July 2020, for example, AM/FM radio enjoyed a daily reach of only 55 percent of Generation Z listeners – and this takes into account both over-the-air and digital listening.¹⁷ By contrast, the daily reach of AM/FM radio among Americans over the age of 25 during the

¹² *Id.* (reporting that weekly AM/FM radio reach in 2020 was down from 89% in 2019 to 83% in 2020).

¹³ Share of Ear 2021 Exhibit at A-20; Initial Joint Comments, Exhibit A at A-20.

¹⁴ *See* Initial Joint Comments at 7; Joint Reply Comments at 4.

¹⁵ Share of Ear 2021 Exhibit at A-20; Initial Joint Comments, Exhibit A at A-20.

¹⁶ Share of Ear 2021 Exhibit at A-20; Initial Joint Comments, Exhibit A at A-20.

¹⁷ Edison Research, Radio’s Roadmap to Gen Z Listenership, at 13 (2020), <http://www.edisonresearch.com/wp-content/uploads/2020/07/Radios-Roadmap-to-Gen-Z-Listening-July-2020.pdf> (“Gen Z Listening Study”).

same time period was 15 points higher.¹⁸ Second, there continues to be a rapid and dramatic shift away from traditional radio listening and towards digital listening, with digital audio sources being listened to *more than radio* by younger Americans. The Share of Ear study shows that the share of over-the-air radio listening time among 13 to 24 year-olds has decreased markedly since 2019, from 20.8 percent to just over 14 percent today.¹⁹ At the same time, Generation Z's share of listening time to non-broadcast Internet audio (excluding AM/FM digital streams) has increased from approximately from 47.4 percent to above 65 percent.²⁰ Third, younger listeners tune into AM/FM radio listen for much less time listening than older listeners, spending only about one-third the total daily listening time with broadcast radio as compared to the general population.²¹ Notably, the average amount of time young consumers spend listening to terrestrial radio has dropped by almost 20 minutes in the last two years.²² In the same time period, Generation Z's average daily minutes listening to online audio has increased by nearly 40 minutes.²³

The rise in online audio listenership is not unique to younger Americans, as more and more consumers of all ages are migrating to digital platforms. According to data from the Infinite Dial 2021, online audio's weekly reach among the total U.S. population is at an all-time high – up five percentage points since 2018.²⁴ And, nearly 70 percent of all TechSurvey 2021

¹⁸ *Id.*

¹⁹ Share of Ear 2021 Exhibit at A-15.

²⁰ *Id.*

²¹ Share of Ear 2021 Exhibit at A-15 (showing that Generation Z listens to over-the-air radio for an average of 34.9 minutes a day); *id.* at A-14 (showing that Americans above the age of 13 listen to over-the-radio for an average of 81.3 minutes a day).

²² Share of Ear 2021 Exhibit at A-15.

²³ Share of Ear 2021 Exhibit at A-15.

²⁴ Edison Research, The Infinite Dial 2021, at 34, 36 (Mar. 11, 2021), <http://www.edisonresearch.com/wp-content/uploads/2021/03/The-Infinite-Dial-2021.pdf> (“Infinite Dial

respondents listened to streaming audio on a weekly basis in the first two months of 2021.²⁵

This represents a 10 percent growth in weekly online listenership as compared to the same time period in 2019.²⁶ Even the oldest listeners are spending more time with online audio than they have previously. For example, in Q3 2020, adults in the 50-64 demographics listened to digital streams on smartphone or tablet for nearly a quarter of an hour longer than they did in the same quarter of the previous year.²⁷

B. Radio Broadcasters Compete Against Streaming Music and Podcasting More Than Ever Before

As explained above, over-the-air radio broadcasters face fierce competition for audience from online platforms. These platforms include streaming music and podcasting services, both of which have had banner years since the formal comment cycle in this docket closed. And, consumers are not deterred by the fact that these services often require a subscription, as Americans are increasingly paying for audio content in the same way as they now pay for television content that was once only available over-the-air.

2020 was a record year for streaming music services. 209 million Internet users above the age of 13 listened to streamed music last year – approximately 20 million more than was the

2021”) (reporting that, as of early 2021, 62% of the U.S. population ages 12 and over had listened to online audio in the last week, with an even higher percentage reporting listening via the Internet in the past month).

²⁵ Jacobs Media, TechSurvey 2021: Radio in the Year of COVID, at 20, <https://jacobsmedia.com/techsurvey-2021/> (“TechSurvey 2021”).

²⁶ *Id.*

²⁷ See The Nielsen Company (US), LLC, The Nielsen Total Audience Report – February 2020, at 21 (Feb. 11, 2020), <https://www.nielsen.com/us/en/insights/report/2020/the-nielsen-total-audience-report-february-2020/>; The Nielsen Company (US), LLC, The Nielsen Total Audience Report – March 2021, at 27 (Mar. 11, 2021), <https://www.nielsen.com/us/en/insights/report/2021/total-audience-advertising-across-todays-media/>.

case in 2018.²⁸ And, in the last quarter of 2020, streaming music’s audience share was more than double that of traditional radio.²⁹ This trend is expected to continue into 2021 and beyond, as streaming music services are now cited as the preferred listening platforms among Americans under the age of 55.³⁰

Companies like Spotify and Pandora that have been in the streaming music space for several years continue to retain their leadership positions as the most-recognized and most-used online audio brands.³¹ Since 2019, Spotify’s monthly listenership grew by 5 percent, and nearly one-third of Americans over the age of 12 listen to this service each month.³² And, Pandora has been working on expanding its portfolio, making a \$75 million investment in SoundCloud Ltd.,³³ an audio sharing platform listened to by 8 percent of Americans in the last month.³⁴

Not only have existing streaming music providers thrived in today’s audio market, newer entrants to the space have secured strong listenership in a very short amount of time. For

²⁸ Russ Crupnick, *US Sees Record 209 Million Music Streamers In 2020*, MusicWatch (Mar. 8, 2021), <https://www.musicwatchinc.com/blog/us-sees-record-209-million-music-streamers-in-2020/>.

²⁹ Geoff Mayfield, *As Streaming Dominates the Music World, Is Radio’s Signal Fading?*, Variety (Feb. 10, 2021), <https://variety.com/2021/music/news/radio-signal-fading-streaming-1234904387/> (reporting that in Q4 2020 “streaming led all sectors in the fourth quarter of 2020 with a 33.2% share, compared to traditional radio, which ranked second with a 15.9% share. In fact, MusicWatch market research shows streaming outperforming radio in each of the last five years.”).

³⁰ Fred Backus, *Streaming Surpasses Radio as the Top Way to Listen to Music*, CBS News (Apr. 9, 2021), <https://www.cbsnews.com/news/streaming-tops-radio-as-the-top-way-to-listen-to-music/>.

³¹ Infinite Dial 2021 at 39, 44.

³² Infinite Dial 2021 at 40; Edison Research, *The Infinite Dial 2020*, at 41 (Mar. 19, 2020), <http://www.edisonresearch.com/wp-content/uploads/2020/03/The-Infinite-Dial-2020-U.S.-Edison-Research.pdf> (“Infinite Dial 2020”). Spotify reports 356 million active monthly users. See Spotify, *Spotify Technology S.A. Announces Financial Results for Second Quarter 2021* (July 28, 2021), <https://investors.spotify.com/financials/press-release-details/2021/Spotify-Technology-S.A.-Announces-Financial-Results-for-Second-Quarter-2021/default.aspx>.

³³ Anne Steele, *SoundCloud Gets \$75 Million Investment From Sirius*, Wall Street Journal (Feb. 11, 2020), <https://www.wsj.com/articles/soundcloud-gets-75-million-investment-from-sirius-11581424202>.

³⁴ Infinite Dial 2021 at 40.

example, YouTube Music (formerly, Google Play) has nearly tripled its audience since 2019.³⁵ And, the use of online video services for new music discovery continues.³⁶ In July 2020, YouTube’s video service (for music and music videos only) had a daily reach nearing 50 percent among Generation Z consumers.³⁷ More than half of YouTube’s customers using the service for music tune in for more than 10 minutes daily, and 2 billion YouTube viewers watch at least one video each month.³⁸ As further evidence that YouTube is a direct competitor to audio services, the company announced in November 2020 that it was launching 15-second audio-only ads, designed to reach customers who listen to music or podcasts in the background via the service.³⁹ Thus, YouTube is the latest in a stream of non-broadcast outlets seeking to monetize their audio listenership via advertising,⁴⁰ highlighting their direct competition with local radio services.⁴¹

Podcasting also has grown significantly since 2019, with an estimated 222 million Americans familiar with podcasts – up from 197 million in 2019. Nearly one-third of Americans

³⁵ Infinite Dial 2021 at 40; Edison Research, *The Infinite Dial 2019*, at 36 (Mar. 6, 2019), <https://www.slideshare.net/webby2001/infinite-dial-2019> (“Infinite Dial 2019”).

³⁶ See Initial Joint Comments at 9 (observing that “online ‘video’ services, such as YouTube, are the largest source for new music discovery in younger demographics, and are significant among older listeners too”).

³⁷ Gen Z Listening Study at 13.

³⁸ Todd Spangler, *YouTube Launches Audio Ads and Ad-Targetable Music Lineups, Taking Aim at Spotify*, *Variety* (Nov. 17, 2020), <https://variety.com/2020/digital/news/youtube-music-audio-ads-music-lineups-advertising-1234833604/>.

³⁹ *Id.*

⁴⁰ Initial Joint Comments at 9 (“both Amazon Music and Google this week introduced new free, advertiser-supported music services”).

⁴¹ See Tripp Mickle, *Google Revenue Surges as Online Advertising Market Thrives*, *Wall Street Journal* (July 27, 2021), <https://www.wsj.com/articles/google-alphabet-googl-2q-earnings-report-2021-11627344309?mod=djemalertNEWS> (discussing YouTube’s \$7 billion in advertising revenues for the second quarter of 2021, up 84% from a year earlier).

over the age of 12 report that they have listened to a podcast in the past week.⁴² Notably, the increase in the number of monthly users in 2021 is up nearly 10 percent from 2019.⁴³ And, recent research shows that podcast listeners pay attention to advertisements, again demonstrating that radio faces staunch and increasing competition from podcasting.⁴⁴

Recent data also shows that more and more Americans are willing to pay for online audio services than was the case even a few years ago. Spotify, for example, reported 96 million subscribers to its premium, ad-free service in 2018.⁴⁵ By the end of 2020, the total number of Spotify's premium subscribers had grown by 61 percent, to 155 million,⁴⁶ and is now up to 165 million.⁴⁷ And, according to Edison's Share of Ear 2021 study, nearly half of Americans above the age of 13 report that they pay for subscription audio services,⁴⁸ a finding corroborated by

⁴² Pew Research Center, *Audio and Podcasting Fact Sheet*, Podcast listenership (June 29, 2021), <https://www.journalism.org/fact-sheet/audio-and-podcasting/>.

⁴³ *Id.* (reporting 22% in 2019 and 28% in 2021).

⁴⁴ InsideRadio, *Two-Thirds Of Podcast Listeners Say They Don't Skip The Ads* (Apr. 19, 2021), http://www.insideradio.com/podcastnewsdaily/two-thirds-of-podcast-listeners-say-they-don-t-skip-the-ads/article_3030be66-9ed0-11eb-8a39-7fefa5f6b85a.html. See also, Anne Steele, *Spotify Adds Fewer Total Users Than Expected*, Wall Street Journal (July 28, 2021), https://www.wsj.com/articles/spotify-adds-fewer-total-users-than-expected-11627466400?mod=tech_lead_pos3 (stating that Spotify's advertising revenue more than doubled in the most recent quarter due, in part, to growth in its podcast business).

⁴⁵ Spotify Technology S.A., Annual Report (Form 20-F) (Feb. 12, 2019), https://www.sec.gov/Archives/edgar/data/0001639920/000156459019002688/ck0001639920-20f_20181231.htm.

⁴⁶ Spotify Technology S.A., Annual Report (Form 20-F) (Feb. 5, 2021), <https://sec.report/Document/0001639920-21-000006/ck0001639920-20201231.htm>.

⁴⁷ Steele, *supra* note 44 (stating that, as of June 30, 2021, Spotify had 165 million paying subscribers, and 365 million monthly active users, representing 22% year-over-year growth (although less than forecast due to the pandemic)).

⁴⁸ Larry Rosin, *The Number of Americans Paying for Audio Subscriptions Has Doubled Since 2015*, Edison Research (June 16, 2021), <https://www.edisonresearch.com/the-number-of-americans-paying-for-audio-subscriptions-has-doubled-since-2015/>.

Jacobs Media’s TechSurvey 2021.⁴⁹ Research by Jacobs Media also shows that over 25 percent of survey respondents pay for two or more audio streaming subscriptions.⁵⁰

C. The Increasing Availability of Alternative Devices to Listen to Audio Content Continue to Drive Changes in Listening Habits

In their comments filed in 2019, the Joint Commenters explained that changes in technology were exacerbating the other changes in the marketplace, and predicted that these trends would continue.⁵¹ This has proven to be the case, as more and more Americans migrate from listening to radio using a “traditional” receiver to alternative means of technology, such as smartphones, smart speakers and other new devices in homes and vehicles. Indeed, the use of mobile devices for daily audio consumption is on track to exceed traditional radio receivers by the end of 2021.⁵²

Since 2018, the number of Americans listening to radio using an AM/FM receiver decreased by six percentage points, such that, at the end of 2020, only about one-third of the population relied on a traditional receiver.⁵³ Younger listeners are much more likely to have abandoned the AM/FM receiver in favor of a new listening technology. Nearly half of the daily audio consumption among the 13 to 34 demographic is on a mobile device, which is almost double the amount of audio consumed using a radio receiver.⁵⁴ Given these trends, it is not

⁴⁹ TechSurvey at 23 (reporting 60% pay for one or more audio streaming subscriptions).

⁵⁰ *Id.* (27%).

⁵¹ Initial Joint Comments at 12-15.

⁵² Edison Research, *Mobile device share of listening on track to surpass traditional radio receivers in the U.S.* (Mar. 4, 2021), <https://www.edisonresearch.com/mobile-device-share-of-listening-on-track-to-surpass-traditional-radio-receivers-in-the-u-s/>.

⁵³ *Id.* (stating that, in 2018, 41 percent of listening was with a radio receiver, down to 35 percent at the end of 2020).

⁵⁴ *Id.* (observing that only 20 percent of daily audio consumption by the 13 to 34 demographic is done using a traditional AM/FM receiver).

surprising that the number of radios in homes continues to decline. The number of Americans reporting that they no longer own a radio in their home crossed the 30 percent threshold in 2020, up three percentage points from just two years prior.⁵⁵ Over 50 percent of listeners between the ages of 18 and 34 do not own a radio in their home and, the mean number of radios owned by those that do dropped below one receiver in 2020.⁵⁶

Just as listening via a traditional receiver has fallen, mobile device listening has increased. Mobile devices now account for 30 percent of time spent listening to audio, up from 25 percent in 2018.⁵⁷ And, as noted above, nearly half of daily listening time among the 13 to 34 demographic is via mobile devices.⁵⁸ This is not surprising, given that an estimated 250 million – almost 90 percent (up from 84 percent in 2019) – of the U.S. population over the age of 12 owns a smartphone.⁵⁹

Ownership of voice-controlled devices also continues to grow. Since 2018, the percentage of Americans owning smart speakers has almost doubled, from 18 percent in 2018 to 33 percent, or an estimated 94 million people, in 2021.⁶⁰ In 2019, 24 percent of smart speaker owners had three or more speakers in their home.⁶¹ Today, this number has risen to 34 percent.⁶²

⁵⁵ Infinite Dial 2020 at 13; Edison, *The Infinite Dial 2018*, at 11 (Mar. 8, 2018), <https://www.slideshare.net/webby2001/infinite-dial-2018>.

⁵⁶ Infinite Dial 2020 at 14.

⁵⁷ Edison Research, *Mobile device share of listening on track to surpass traditional radio receivers in the U.S.* (Mar. 4, 2021), <https://www.edisonresearch.com/mobile-device-share-of-listening-on-track-to-surpass-traditional-radio-receivers-in-the-u-s/>.

⁵⁸ *Id.*

⁵⁹ Infinite Dial 2021 at 5.

⁶⁰ *Id.* at 8.

⁶¹ *Id.* at 12.

⁶² *Id.*

Listening to a streaming music service remains the most popular use for smart speaker owners, with 85 percent requesting speakers to play music each week, compared to only 45 percent listening to AM/FM radio using smart speakers.⁶³ While the COVID-19 pandemic accelerated the use of smart speakers for music consumption,⁶⁴ there is no indication that the increase in smart speaker listening is specific to the pandemic. Rather, the pandemic only served to fuel the already existing trend towards smart speakers and, based on trends over the past five years, there is no reason to expect that growth of smart speakers for audio consumption will slow.⁶⁵

Although the COVID-19 pandemic has had negative impact on the amount of time spent listening to audio while driving generally, in-car listening minutes throughout the pandemic have skewed in favor of non-broadcast audio sources. For example, Edison reports that, while consumers frequently listen to AM/FM radio in the car, the number of Americans 12 and over that report listening to broadcast radio in the car dropped six percentage points between 2019 and 2021. And, although over-the-air radio continues to have a strong share of in-car listening, the

⁶³ Edison Research and NPR, *The Smart Audio Report*, at 29 (Apr. 2020), https://www.nationalpublicmedia.com/uploads/2020/04/The-Smart-Audio-Report_Spring-2020.pdf (“Spring 2020 Smart Audio Report”). While AM/FM radio’s share of smart speaker listening to ad-supported services is strong, it is still only 35 percent of all ad-supported listening. See Inside Radio, *AM/FM Radio Is No. 1 in Ad-Supported Smart Speaker Listening Share* (Jan. 21, 2021), http://www.insideradio.com/free/am-fm-radio-is-no-1-in-ad-supported-smart-speaker-listening-share/article_6b040790-5bbf-11eb-b320-dbfd3a3597ff.html (reporting a 64 percent aggregate share of smart speaker listenership from the following ad-supported services: Pandora, Spotify, SiriusXM, Amazon Music, and podcasts).

⁶⁴ This is particularly the case among the 18-34 demographic which reported listening to music with a smart speaker over 50 percent more than in pre-pandemic times. Spring 2020 Smart Audio Report at 50.

⁶⁵ See Infinite Dial 2021 at 8 (showing year-over-year growth in smart speaker ownership since 2017). According to the 2019 Smart Audio Report, for example, even before the pandemic, smart speakers were used in large part for music listening. See Edison Research and NPR, *The Smart Audio Report*, at 16 (Jan. 2019), <https://www.nationalpublicmedia.com/uploads/2020/01/The-Smart-Audio-Report-Winter-2019.pdf> (indicating a 77 percent listening share for music). And, pre-pandemic streaming audio, podcasts, and SiriusXM listening held a combined share of nearly 60 percent, more than double that of AM/FM radio. *Id.* at 13.

average share of time spent listening to AM/FM radio stations while driving has dropped from 65.4 percent in April 2019 to 58 percent today.⁶⁶ During that same time period, streaming audio services and podcasts each grew nearly double, from 4.2 percent to 8 percent, and from 1.8 percent to 3.2 percent, respectively.⁶⁷ And, in-car YouTube usage is now at over 2 percent.⁶⁸

The trend away from in-car consumption of over-the-air radio is even more apparent among younger generations, where the use of alternative media in vehicles is materially greater. In April 2019, the daily share of in-car AM/FM listenership among those between the ages of 13 and 34 was 56.9 percent.⁶⁹ Today, this share is less than 50 percent – almost 20 points lower than where it was in 2014.⁷⁰ At the same time, streaming audio’s share of in-car listenership among this demographic has skyrocketed from 8.5 percent in April 2019 to nearly 20 percent in 2021.⁷¹ In-car podcasting and YouTube usage also has increased, from 3.6 percent and 4.1 percent and 5.4 percent and 5.2 percent, respectively.⁷² In short, total digital usage in the car in the 13 to 34 demographic has increased by almost 15 percent since April 2019.⁷³

The move towards non-broadcast listening in cars has been, and will continue to be, driven by technology changes. Twenty percent of Americans over the age of 18 have driven or ridden in a vehicle with an in-dash information and entertainment system, up from 15 percent in

⁶⁶ Initial Joint Comments, Exhibit A at A-17; Share of Ear 2021 Exhibit at A-17.

⁶⁷ Initial Joint Comments, Exhibit A at A-17; Share of Ear 2021 Exhibit at A-17.

⁶⁸ Share of Ear 2021 Exhibit at A-17.

⁶⁹ Initial Joint Comments, Exhibit A at A-19.

⁷⁰ Share of Ear 2021 Exhibit at A-19.

⁷¹ Initial Joint Comments, Exhibit A at A-19; Share of Ear 2021 Exhibit at A-19.

⁷² Initial Joint Comments, Exhibit A at A-19; Share of Ear 2021 Exhibit at A-19.

⁷³ Initial Joint Comments, Exhibit A at A-19 (from initial comments – approximately 16% digital total); Share of Ear 2021 Exhibit at A-19 (approximately 29% digital total).

2018.⁷⁴ These include integrated mobile operating systems developed by Apple and Google (the same companies that offer interactive music services that compete with AM/FM radio), both of which operating systems are now in nearly twice as many cars as in 2018.⁷⁵ And, half of the U.S. population over the age of 12 now listens to online audio in a car using a smartphone – a nearly 10 percent increase from 2019.⁷⁶ Even during the early days of the pandemic, almost a quarter of U.S. adults reported using a voice-operated personal assistant in the car.⁷⁷ As demonstrated by TechSurvey 2021, once a car is connected to an alternative audio source, AM/FM radio listening decreases.⁷⁸ This is because, once in the car, there is little difference between accessing a radio station or a podcast or an online stream – all are accessible by just asking for that source.

D. Local Broadcasters Increasingly Compete with Non-Audio Outlets for Audience

More than ever before, radio competes with non-audio sources for audience. Streaming video services like Netflix and Hulu have prospered over the past few years and are expected to continue to grow. According to Jacobs Media, more than three in four of survey respondents watch streaming video on a weekly basis.⁷⁹ While viewing is greatest among younger demographics, nearly 70 percent of the Boomer generation and over half of the Greatest generation report watching streaming video at least weekly.⁸⁰

⁷⁴ Infinite Dial 2021 at 50.

⁷⁵ Infinite Dial 2021 at 51; Infinite Dial 2020 at 55. Apple CarPlay in 10% of primary vehicles (up from 6 % in 2018) and Android Auto (8%, up from 4% in 2018).

⁷⁶ Infinite Dial 2021 at 52.

⁷⁷ [Spring 2020 Smart Audio Report](#) at 14.

⁷⁸ TechSurvey 2021 at 43.

⁷⁹ *Id.* at 19.

⁸⁰ *Id.*

In addition to streaming video, other non-audio platforms have exploded over the past few years. For example:

- One in five Americans over the age of 12 watch streaming video games, up 5 percent from 2019.⁸¹ This number soars to nearly 40 percent among the 12 to 34 demographic.⁸²
- Social media consumption remains on the rise, with an estimated 233 million users above the age of 12, as compared to an estimated 223 million in 2019.⁸³
- TikTok experienced exponential growth between 2020 and 2021, jumping from 11 percent to 23 percent among users over the age of 12.⁸⁴ Usage of TikTok by 12 to 34 year-olds showed remarkable growth – nearly doubling in just one year.⁸⁵
- Clubhouse, an invitation-only audio social networking platform introduced in 2020, has already grown to 10 million weekly active users, and has captured substantial audience share among social media platforms.⁸⁶ Fifteen percent of adults report having ever used the service, and almost half of these individuals use the service at least once every day.⁸⁷ As further evidence of its popularity in the market, Clubhouse has been valued at \$4 billion.⁸⁸

The growth in consumption of these and other alternative media offerings, by necessity, cuts into the total amount of time an individual has available to listen to radio. These are all marketplace competitors for local radio stations' audiences.

⁸¹ Infinite Dial 2021 at 14.

⁸² *Id.* at 16.

⁸³ Infinite Dial 2019 at 5; Infinite Dial 2021 at 20.

⁸⁴ Infinite Dial 2021 at 24.

⁸⁵ *Id.* at 25.

⁸⁶ Elizabeth Culliford, *Clubhouse closes new round of funding that would value app at \$4 billion -source*, Reuters (Apr. 18, 2021), <https://www.reuters.com/technology/clubhouse-closes-new-round-funding-that-would-value-app-4-billion-source-2021-04-18>.

⁸⁷ Edison Research, *Clubhouse Users in America 2021* (May 18, 2021) at 4, 13, <http://www.edisonresearch.com/wp-content/uploads/2021/05/Clubhouse-Users-in-America.pdf>.

⁸⁸ Elizabeth Culliford, *Clubhouse closes new round of funding that would value app at \$4 billion -source*, Reuters (Apr. 18, 2021), <https://www.reuters.com/technology/clubhouse-closes-new-round-funding-that-would-value-app-4-billion-source-2021-04-18>.

E. Most of Radio’s Toughest Competition Comes from Out-of-Market Internet Pureplay Companies Owned by America’s Biggest Tech Companies

Perhaps the most significant development since the initial comment cycle in this proceeding closed relates to Big Tech’s increasing dominance in the audio space. The Joint Commenters previously pointed out that music and other audio entertainment services launched by companies like Apple, Amazon and Google – all of which have market capitalizations hundreds of times larger than the capitalization of the entire radio industry – were experiencing significant growth in audience, in part because these companies were well-positioned to offer audio services as loss leaders to promote other products and services.⁸⁹ These services have continued to grow and expand since 2019, further intensifying the competitive divide between digital services and traditional broadcast radio.

For example, since 2019, monthly listenership of Google Play (now YouTube Music) has grown by 10 percent, nearly tripling its audience in only three years.⁹⁰ Apple Music and Amazon Music also have experienced growth, with nearly 30 percent of Americans over the age of 12 reporting having listened to these services in the past month – a 7 percent combined increase as compared to 2018.⁹¹ And, in June 2021, Facebook jumped into the audio game, announcing that it was launching both podcasts and Live Audio Rooms, an audio social media networking platform designed to compete with Clubhouse, as part of its initiative to bring social

⁸⁹ Initial Joint Comments at 11 & n.43.

⁹⁰ Infinite Dial 2021 at 40 (reporting that 16 percent of the U.S. population over the age of 12 listened to YouTube Music in the last month); Infinite Dial 2020 at 42 (showing that, in 2019, 6 percent had listened to the service in the month previous to the studied period).

⁹¹ Edison, The Infinite Dial 2018, at 30 (Mar. 8, 2018), <https://www.slideshare.net/webby2001/infinite-dial-2018>; Infinite Dial 2021 at 40.

media audio experiences to its customers.⁹² And, of course, Facebook already has plans to monetize these opportunities, just as its competitors have done with their services.⁹³

Not only do the Big Tech companies own and control audio services that compete with local radio for audience (as well as advertising), these companies also own and control the technologies that are used to listen to Internet audio. For example, the number of Americans owning Amazon’s Alexa has increased from 16 percent in 2019 to 24 percent in 2021.⁹⁴ Similarly, 13 percent of the U.S. population now owns Google Home, up from 7 percent two years ago.⁹⁵ And, Apple has a stronghold on the market for integrated mobile operating systems, with over 80 percent of new cars supporting its CarPlay system.⁹⁶ According to Edison, 10 percent of Americans over 18 now have Apple CarPlay in their primary vehicles, and 8 percent have Android Auto.⁹⁷

The increasing control of media services and technologies since 2019 has garnered attention of policymakers at all levels. For example, in early 2021, The Journalism Competition

⁹² Fidji Simo, *Live Audio Rooms and Podcasts on Facebook*, Facebook: Newsroom (June 21, 2021), <https://about.fb.com/news/2021/06/live-audio-rooms-and-podcasts-on-facebook/>.

⁹³ Fidji Simo, *Be Heard: Bringing Social Audio Experiences to Facebook*, Facebook: Newsroom (Apr. 19, 2021), <https://about.fb.com/news/2021/04/bringing-social-audio-experiences-to-facebook/> (explaining that it intends to offer the “ability to charge for access to a Live Audio Room through a single purchase or a subscription”); Melissa Hsieh Nikolic, *Audio ads on YouTube expand reach and grow brand awareness*, Google: Ads & Commerce Blog (Nov. 17, 2020), <https://blog.google/products/ads-commerce/youtube-music-audio-ads/>; Ben Fox Rubin, *Amazon launches free, ad-supported music service for Alexa devices*, CNET (Apr. 18, 2019), <https://www.cnet.com/home/smart-home/amazon-launches-ad-supported-music-service-for-alexa-devices/>.

⁹⁴ Infinite Dial 2019 at 20; Infinite Dial 2021 at 10.

⁹⁵ Infinite Dial 2019 at 20; Infinite Dial 2021 at 10.

⁹⁶ Kif Leswing, *Apple’s massive success with CarPlay paves the way for automotive ambitions*, CNBC (May 29, 2021), <https://www.cnbc.com/2021/05/29/apple-carplay-massive-success-paves-way-for-automotive-entry.html>.

⁹⁷ Infinite Dial 2021 at 51.

and Preservation Act of 2021 was introduced into Congress.⁹⁸ This bill permits local broadcasters to negotiate collectively with Big Tech companies that seek to attract audiences by featuring content created by traditional media sources.⁹⁹ The fact that policymakers are seeking a legislative solution to correct the competitive imbalance between large technology platforms and local radio and television broadcasters unequivocally demonstrates that “tech platforms have substantial market power in their provision of services, and they use that power for advancing their own growth and benefit to the detriment of local broadcast journalism.”¹⁰⁰

III. SINCE 2019, DIGITAL ADVERTISING REVENUES HAVE REACHED RECORD HIGHS, WHILE LOCAL RADIO BROADCASTERS ARE LIMITED BY REGULATION IN THEIR ABILITY TO COMPETE

There is no question that radio competes vigorously with other media sources for advertising dollars at the national and local level.¹⁰¹ Local radio broadcasters face ever-increasing competition from audio and non-audio sources alike, not only for audience as described above, but also for advertising revenues. This was the case in 2019, and continues to be the case today, with radio stations fighting against audio and other media platforms with access to significantly more resources and market power than even a few years ago.

There is no sugar-coating the fact that local radio stations revenues are down, while digital advertising revenues have soared. In 2020, for example, over-the-air station revenues were at \$9.7 billion, nearly 24 percent less than the \$12.8 billion in over-the-air revenues realized

⁹⁸ Journalism Competition and Preservation Act of 2021, S. 673, 117th Cong. (2021).

⁹⁹ *Id.* at § 2(b).

¹⁰⁰ BIA Advisory Services, *Economic Impact of Big Tech Platforms on the Viability of Local Broadcast News*, at ii (2021), https://www.nab.org/documents/newsRoom/pdfs/Economic_Impact_Tech_Platforms_Broadcast_News.pdf.) (cited in Comments of The National Association of Broadcasters, OMD Docket No. 21-190, at n.9 (filed June 3, 2021)).

¹⁰¹ Initial Joint Comments at 16-21.

in 2019.¹⁰² Although this decline was driven by COVID-19 cuts in advertising spending, the downward trend is not expected to change any time soon. Over-the-air revenues for 2021 are forecasted to reach \$11.7 billion, which is still \$1 billion less than before the pandemic hit.¹⁰³ And, the forecast for 2022 simply does not show robust growth even after the pandemic in contrast to the out-of-market media giants who are increasingly siphoning local advertising dollars to multi-national digital media platforms.¹⁰⁴

Even in the midst of a worldwide public health crisis, Internet advertising revenues increased by 12.2 percent in 2020 as compared to 2019.¹⁰⁵ Notably, the last quarter of 2020 saw the highest level of digital advertising revenues in more than 20 years.¹⁰⁶ Social media is by far the biggest beneficiary, accounting for approximately one-third of all digital advertising revenues last year.¹⁰⁷ By contrast, local radio stations' earned only \$1 billion in online revenues in that same time period – *forty times* less than the \$41.5 billion realized by social media. Indeed, social media's advertising share dwarfs the total projected 2021 advertising revenue for the entire radio industry, which is estimated at \$11.7 billion – *ten times* lower than social media's share in the height of the pandemic.¹⁰⁸

¹⁰² Press Release, BIA Advisory Services, Radio Revenues Fell to \$9.7B in 2020, As Pandemic's Toll on the Industry Affected Local Radio Stations (May 14, 2021), <http://www.biakelsey.com/radio-revenues-fell-9-7b-2020-pandemics-toll-industry-affected-local-radio-stations/> (estimating \$11.7 billion in local radio revenues for 2021, with \$1 billion coming from digital).

¹⁰³ *Id.*

¹⁰⁴ *Id.*

¹⁰⁵ Press Release, Interactive Advertising Bureau, IAB Releases Internet Advertising Revenue Report for 2020 (Apr. 7, 2021), <https://www.iab.com/news/iab-internet-advertising-revenue/>.

¹⁰⁶ *Id.*

¹⁰⁷ *Id.*

¹⁰⁸ Press Release, BIA Advisory Services, Radio Revenues Fell to \$9.7B in 2020, As Pandemic's Toll on the Industry Affected Local Radio Stations (May 14, 2021), <http://www.biakelsey.com/radio-revenues-fell-9-7b-2020-pandemics-toll-industry-affected-local-radio-stations/>; Press Release, Interactive

Although radio continues to rank as the second largest channel for traditional local media spending, businesses are spending less and less on traditional media advertising every year, and more on social media and other digital platforms.¹⁰⁹ Over 95 percent of local radio buyers reported buying social media advertising in the latter half of 2020, and 75 percent stated their intent to increase spending on social media in 2021.¹¹⁰ And, there was a dramatic decline in the number of local businesses buying radio advertising between 2018 and 2021, from 44.4 percent to 39.4 percent, respectively.¹¹¹ This five-point drop over this short timeframe is nearly the same as the decrease in local radio buying during the entire five years prior to 2018, thus demonstrating that the past few years have been particularly challenging for radio broadcasters in the current media marketplace.¹¹² Notably, unlike television, radio stations did not benefit significantly from political spending, which has not yet transitioned heavily to online platforms.¹¹³

While the trend away from classic forms of advertising towards digital media is not new, the past year has served as a “springboard” for digital advertising.¹¹⁴ Nearly two-thirds of the \$118.7 billion spent on local advertising in 2020 was allocated to digital, and this share is expected to grow to nearly three-quarters of all local advertising dollars by 2025.¹¹⁵ Borrell

Advertising Bureau, IAB Releases Internet Advertising Revenue Report for 2020 (Apr. 7, 2021), <https://www.iab.com/news/iab-internet-advertising-revenue/>.

¹⁰⁹ Borrell 2021 Exhibit at 3.

¹¹⁰ Borrell 2021 Exhibit at 3-4.

¹¹¹ Borrell 2021 Exhibit at 4; Initial Joint Comments, Exhibit B at B-4.

¹¹² Initial Joint Comments, Exhibit B at B-4 (“Since 2013, there was a 5.3-point drop in the percentage of local businesses who say they buy radio advertising.”).

¹¹³ Borrell 2021 Exhibit at 5 (concluding that radio accounted for less than 6 percent of the political spend in 2020, down from 7.7 percent in 2018).

¹¹⁴ Borrell 2021 Exhibit at 3.

¹¹⁵ *Id.*

reports that 85 percent of digital advertising went to out-of-market companies, including Big Tech companies like Google, Facebook, and Amazon.¹¹⁶ Both Facebook and Google saw strong growth in advertising last year, with Facebook averaging 21 percent growth for the year and Google averaging 9 percent growth.¹¹⁷ For the second quarter of 2021, Google reported \$50.44 billion in advertising sales, a 69 percent increase from the year prior.¹¹⁸ The shift in advertising dollars towards pureplay Internet companies is expected to continue, such that, by the end of 2021, local media’s share of digital advertising is expected to be 14.1 percent, less than half of what it was in 2013.¹¹⁹ And, according to Borrell, in just two years – by 2023, out-of-market Internet companies will control nearly two-thirds of the local advertising market.¹²⁰ By contrast, the greatest share of any single local media outlet in 2023 will be less than 6 percent.¹²¹

It is inevitable Amazon, Google, and Facebook will take the lion’s share of local advertising dollars as they continue to grow their listenership, introduce new products, and expand local ad availabilities.¹²² For example, in April 2019, Amazon launched its ad-supported music service for Alexa users and, by the end of that same year, the company rolled this service out to all users.¹²³ At the end of last year, Google launched audio ads, which it “designed to

¹¹⁶ *Id.* at 2.

¹¹⁷ Borrell 2021 Exhibit at 4.

¹¹⁸ Tripp Mickle, *Google Revenue Surges as Online Advertising Market Thrives*, Wall Street Journal (July 27, 2021), <https://www.wsj.com/articles/google-alphabet-googl-2q-earnings-report-2021-11627344309?mod=djemalertNEWS>.

¹¹⁹ Borrell 2021 Exhibit at 6.

¹²⁰ *Id.* at 2.

¹²¹ *Id.*

¹²² *Id.* (reporting that these three companies will control nearly half of local advertising expenditures by 2023).

¹²³ Ben Fox Rubin, *Amazon launches free, ad-supported music service for Alexa devices*, CNET (Apr. 18, 2019), <https://www.cnet.com/home/smart-home/amazon-launches-ad-supported-music-service-for-alexa-devices/>.

connect [brands] with audiences in engaged and ambient listening on YouTube.”¹²⁴ As noted above, in April 2021, Facebook announced its intent to launch and monetize a wide variety of social audio experiences.¹²⁵ And, advertisers are responding to these opportunities.¹²⁶

Local radio has felt the impact of the shift in advertising towards out-of-market competitors. For example, Borrell reports that the radio industry has suffered a net loss of 194 stations in the past two years.¹²⁷ And, in 2020, sales of radio stations fell to the lowest level since 2011, with only 534 stations sold at total estimated value of \$139 million.¹²⁸ While it is possible that sales might rebound as the nation moves through the pandemic, it is unlikely that transaction volume will reach past levels.

This is particularly the case in medium and small markets, where financial hardships are even more prevalent than was the case just two years ago. While some financial troubles may be attributable to the pandemic, the primary reason that stations are losing money – and, in many cases, showing negative advertising growth – stems from out-of-market tech and large digital marketing companies targeting advertisers that previously relied on local stations to reach their

¹²⁴ Melissa Hsieh Nikolic, *Audio ads on YouTube expand reach and grow brand awareness*, Google: Ads & Commerce Blog (Nov. 17, 2020), <https://blog.google/products/ads-commerce/youtube-music-audio-ads/>.

¹²⁵ Fidji Simo, *Be Heard: Bringing Social Audio Experiences to Facebook*, Facebook: Newsroom (Apr. 19, 2021), <https://about.fb.com/news/2021/04/bringing-social-audio-experiences-to-facebook/>.

¹²⁶ Borrell 2021 Exhibit at 3 (showing that, by 2025, digital media will account for nearly three-quarters of all local advertising). *See also supra* note 117 (discussing surging online advertising revenues realized by tech companies in the second quarter of 2021); Melissa Hsieh Nikolic, *Audio ads on YouTube expand reach and grow brand awareness*, Google: Ads & Commerce Blog (Nov. 17, 2020), <https://blog.google/products/ads-commerce/youtube-music-audio-ads/> (reporting that “more than 75 percent of measured audio ad campaigns on YouTube drove a significant lift in brand awareness,” for example, Shutterfly’s audio ads saw an approximate 14 percent increase in ad recall and 2 percent favorability increase among its target audience).

¹²⁷ Borrell 2021 Exhibit at 9.

¹²⁸ Press Release, BIA Advisory Services, *Radio Revenues Fell to \$9.7B in 2020, As Pandemic’s Toll on the Industry Affected Local Radio Stations* (May 14, 2021), <http://www.biakelsey.com/radio-revenues-fell-9-7b-2020-pandemics-toll-industry-affected-local-radio-stations/>.

audiences.¹²⁹ At the same time as they are facing unprecedented competition for advertising, the current rules restrain local broadcasters from responding to the economic environment in which they operate. For example, W. Lawrence Patrick (the managing partner of a nationally prominent media brokerage and investment banking firm and the owner of 25 small market radio stations in Wyoming) observes that, for the first time in his nearly three decades of experience negotiating broadcast transactions, “there are stations where there simply are no buyers for the properties, other than a direct competitor who may not be allowed to purchase the troubled stations because of current regulations.”¹³⁰ The lack of ability to sell or buy same-market stations, coupled with the staggering amount of revenue lost to out-of-market competitors, has had – and will continue to have – a direct impact on localism.¹³¹

In short, fierce competition for local ad dollars has only grown since the formal comment cycle in this proceeding closed. While radio stations have made valiant efforts to capture their share of digital advertising revenues, they face an uphill battle against the Goliaths of the tech industry. Even today, radio’s collective share of the local advertising market is in the single digits, with individual stations experience less than 1 percent of total advertising share.¹³² To support robust local services, radio cannot exist on that 1 percent. In a market where government mandates in the form of the ownership rules limit the diversity of services that local radio broadcasters can offer to their customers by limiting the number of stations that any one owner can control, the scale necessary to financially support the more aggressive local news and

¹²⁹ See Exhibit C, Declaration of W. Lawrence Patrick, at para. 6 (“Patrick Declaration”).

¹³⁰ *Id.* at para. 5.

¹³¹ *Id.* at para. 7 (explaining that, as many stations show negative advertising revenue growth, they have had to “cut expenses drastically which translates into less news and information programming for the local community and fewer live and local personalities on the air.”).

¹³² Borrell 2021 Exhibit at 2.

information service that radio needs to compete against the digital media titans simply cannot be assembled.¹³³ Fighting to achieve a 1 percent share is not a means to local radio's survival.

They must be allowed to grow. Even though radio broadcasters are achieving some success with digital advertising, this success pales by comparison to the out-of-market Internet companies that dominate the local advertising market.

IV. CONGRESS RECOGNIZES THE NEED TO SUPPORT LOCAL MEDIA

The need for reliable local media has never been greater. Having strong local media to fight disinformation and to provide citizens the information that they need to respond to local issues must be preserved. Members of Congress on both sides of the aisle have recognized that Big Tech companies have amassed too much power over the information that flows to citizens, and efforts must be made to restore balance to the local media landscape.

As noted above, the Journalism Competition and Preservation Act of 2021 has been introduced in Congress to allow local media to negotiate jointly with tech companies for the use of their content.¹³⁴ The Local Journalism Sustainability Act of 2021 proposes tax credits to support the hiring of local journalists.¹³⁵ Proposals have even been advanced for Congress to

¹³³ See, e.g., Initial Comments at Exhibit C, Declaration of Michael Wright, Midwest Communications, Inc. (observing that, if the local radio ownership rule were relaxed, it could increase local news coverage in the Fargo-Moorhead, North Dakota market by acquiring stations in this market that do not currently produce their own news); Initial Comments at Exhibit C, Declaration of Thomas A. Walker, Mid-West Family (stating that, in La Crosse, Wisconsin, the majority of local competitors provide “news that is borrowed” and explaining that, if it were permitted to purchase additional stations in this market, it could provide its original local news and other content to more listeners in the community); Initial Comments at Exhibit C, Declaration of Jonathan Brewster, Cherry Creek Media (explaining that its competitors in Montrose, Colorado and Tri Cities, Washington are not very involved in the community and that, if permitted to acquire additional stations in these markets, it could expand its news coverage to stations that currently provide little or no news); Initial Comments at Exhibit C, Declaration of Jeffrey D. Warshaw, Connoisseur Media, LLC (stating that deregulation would enable it to create larger digital audiences, thereby driving revenues that could support larger news departments).

¹³⁴ See *supra* at note 98 and accompanying text.

¹³⁵ See Press Release, Cantwell, Kelly, Wyden Introduce Legislation to Revive, Sustain Trusted Local News (July 22, 2021), <https://www.cantwell.senate.gov/news/press-releases/cantwell-kelly-wyden->

create a Future of Local News Committee to study the potential for additional government funding of local media.¹³⁶ Regulatory proposals to limit the power of Big Tech have been advanced by representatives of both political parties.

But these efforts can only be successful if local media, like over-the-air radio stations, have the scale to compete with the out-of-town tech giants. While radio remains an important part of many citizens' media diet, the parallels to the newspaper industry are striking as digital media erodes the audience and revenues of local radio, just as it battered the local newspaper industry over the past several years. Indeed, those local papers that still exist are generally only a shadow of their former selves as local advertising support and readership disappeared to online sources. If the trends identified herein and in the Joint Commenter's previous comments continue, local radio stations will similarly be unable to maintain their current level of service, leaving the public to be served not by media outlets with a community focus, but instead by big tech platforms and those stations that are nothing but a transmitter and a computer – neither of which provide real service to the public.¹³⁷ By contrast, as the Joint Commenters demonstrated in 2019, local radio stations could readily contribute to the public interest by providing diverse and local programming if they were owned by existing broadcasters who are forbidden by

[introduce-legislation-to-revive-sustain-trusted-local-news](https://www.congress.gov/117/bills/hr3940/BILLS-117hr3940ih.pdf). A similar bipartisan bill was introduced in the House in June. *See* Local Journalism Sustainability Act, H.R. 3940, 117th Cong. (2021), <https://www.congress.gov/117/bills/hr3940/BILLS-117hr3940ih.pdf>.

¹³⁶ *See, e.g.*, Future of Local News Act, H.R. 3169, 117th Cong. (2021), <https://www.congress.gov/117/bills/hr3169/BILLS-117hr3169ih.pdf>.

¹³⁷ *See* Patrick Declaration at para. 11 (discussing a local station that is “simply [a] dumb jukebox[] with no local connection”). *See also*, Adam Jacobson, *Carr Talk: FCC’s Third Circuit Response*, Radio + Television Business Report (Oct. 31, 2019), <https://www.rbr.com/brendan-carr-wiley-mmtc/?event=login> (discussing his visit to a Wyoming station that was just a “Dell laptop set up” to “[pipe] music in from another community”); *see also, e.g.*, Initial Joint Comments at Exhibit C, Declaration of Susan K. Patrick, Legend Communications of WY, LLC (explaining that Legend Communications’ ability to promote localism has been diminished by digital competitors located far from Wyoming).

current rules from operating them.¹³⁸ But, outside the very largest markets, existing on 1 percent of the local advertising spending simply does not allow for any meaningful contribution to local discourse on matters important to local communities.

The time is now for the FCC to act to stem the tide – to allow broadcasters to build strong local brands that can compete against the tech giants. The rules that restrict the assembling of local scale by local radio – adopted 25 years ago in an entirely different media marketplace – must be eliminated so that radio can effectively compete in today’s media marketplace. The Joint Commenters respectfully request that their proposal advanced in 2019 for the elimination of the local radio ownership rules be adopted.

V. CONCLUSION

The record in this proceeding is already replete with evidence that the local radio industry cannot effectively compete in today’s media marketplace with rules that were adopted 25 years ago when today’s tech giants did not even exist. Competition for audience and advertising has only increased since May 2019, and trends will only continue as non-broadcast media outlets – many of which are owned and controlled by the biggest companies in America – continue to explode. Absent relief from outdated ownership restrictions, over-the-air radio stations will simply be unable to maintain the current level of service, a result that is clearly contrary to the public interest. The FCC must act now to remove the archaic regulatory burdens that restrict radio's ability to compete in the modern marketplace. The trends are clear and unmistakable. The FCC cannot wait to act – changes must be made now to preserve radio as an important local voice in the media marketplace. The Joint Commenters respectfully request that the Commission recognize the reality of today’s marketplace, and relax those regulatory burdens now.

¹³⁸ See generally Initial Comments at Exhibit C.

Respectfully submitted,

Connoisseur Media, LLC

/s/ Jeffrey D. Warshaw

Founder and Chief Executive Officer

Mid-West Family Broadcasting

/s/ Thomas A. Walker

President

Frandsen Family Stations

/s/ M. Kent Frandsen

President

Neuhoff Communications

/s/ Beth Neuhoff

Chief Executive Officer and President

Patrick Communications, LLC

/s/ W. Lawrence Patrick

Managing Partner

Townsquare Media, Inc.

/s/ Allison Zolot

Senior Vice President and General Counsel

Midwest Communications, Inc.

/s/ Michael Wright

Chief Operating Officer

Cherry Creek Media

/s/ Jonathan Brewster

Chief Executive Officer

Eagle Communications, Inc.

/s/ Gary Shorman

Chairman

Legend Communications, LLC

/s/ Susan K. Patrick

Managing Partner

September 1, 2021

Exhibit A



Edison Research has conducted the Share of Ear® survey since 2014 and has currently conducted twenty-six waves of the survey. It utilizes both online and offline sampling to ensure that all Americans' listening behavior is represented. Respondents are asked to fill out a 24-hour diary listing all of their audio listening. A full description of our methodology is attached hereto. We believe our survey data to be the most comprehensive and accurate long-term study of audio listening for US consumers. The full data set from which the attached materials come is used by many media companies for business planning and forecasting purposes. Data from this research has been presented at many industry conferences and has been validated by many users.

During the time we have conducted this research series, we have detected some significant changes in listening patterns. This is the case even in just the two years since we provided data for the initial comments in this radio ownership proceeding. As the changes in the two years since 2019 are consistent with the trend of the changes in prior years, we do not believe that they are pandemic related, but instead that they are likely to persist into the future absent some significant change in the audio marketplace.

As it has become easier for consumers to listen to audio in a variety of different ways, there has been a noticeable decrease in the amount of time that Americans have spent listening to AM/FM over-the-air broadcasts. For all Americans, in 2019 the average amount of listening to AM/FM over-the-air broadcasts was 95 minutes per day and in our most recent study in 2021 that has fallen to 81 minutes, a decrease of 15% in two years, and a decrease of nearly 40% since 2014, when Americans averaged 130 minutes per day listening to AM/FM over-the-air broadcasts. These drops have been consistent; AM/FM over-the-air broadcast listening has decreased every year that we have conducted the Share of Ear® survey. This trend is even more pronounced among younger Americans, with the minutes that people age 13-24 listened to AM over-the-air broadcasts 34% lower than in 2021 as compared to 2019. Indeed, younger Americans listen to AM/FM over-the-air broadcasts only 35 minutes each day, down nearly 60% from 2014. We see no indication in the data that, as this demographic ages, they will return in significant numbers to radio listening.

Attached are PowerPoint slides providing the key findings from our research – showing the decrease in time spent listening to radio among those 13 and above over the 7 year period of our study, and the corresponding increase in listening to audio streaming services. These slides also show the more pronounced effects of this listening shift among younger demographics, as well as the continuing downward trend in AM/FM over-the-air listening since 2019.

Following the slides are tables breaking down the time spent listening to audio services each year over the last seven years, showing both the number of minutes spent listening, and the percentage of total listening attributable to particular sources of audio programming. These, too provide information for the total survey population 13 and above, and for the 13-24 and 13-34 year old demographic groups. Information is provided both for overall listening, and for listening in the automobile.

Finally, there is a table presenting the amount of time spent listening to over-the-air radio by our respondents on the day on which their listening was surveyed.

A handwritten signature in blue ink, appearing to read 'L. Rosin', is written above a horizontal line.

Larry Rosin

President
Edison Research

Share of Ear[®]

Americans' Share of Time Spent
Listening to Audio Sources

AM/FM Radio vs All Audio Streaming Sources



Share of Ear

Survey Methodology:

- 4,000+ respondents each wave
- National sample 13+
- Online and offline
 - Tracked since 2014
- Offered in English and Spanish
- Updated through Q2 2021

How to Read your Data

Over the Air AM/FM Radio

Over the air AM/FM radio broadcasts

All Audio Streaming Sources

Pure plays such as Pandora, Spotify and others

YouTube for music and music videos only

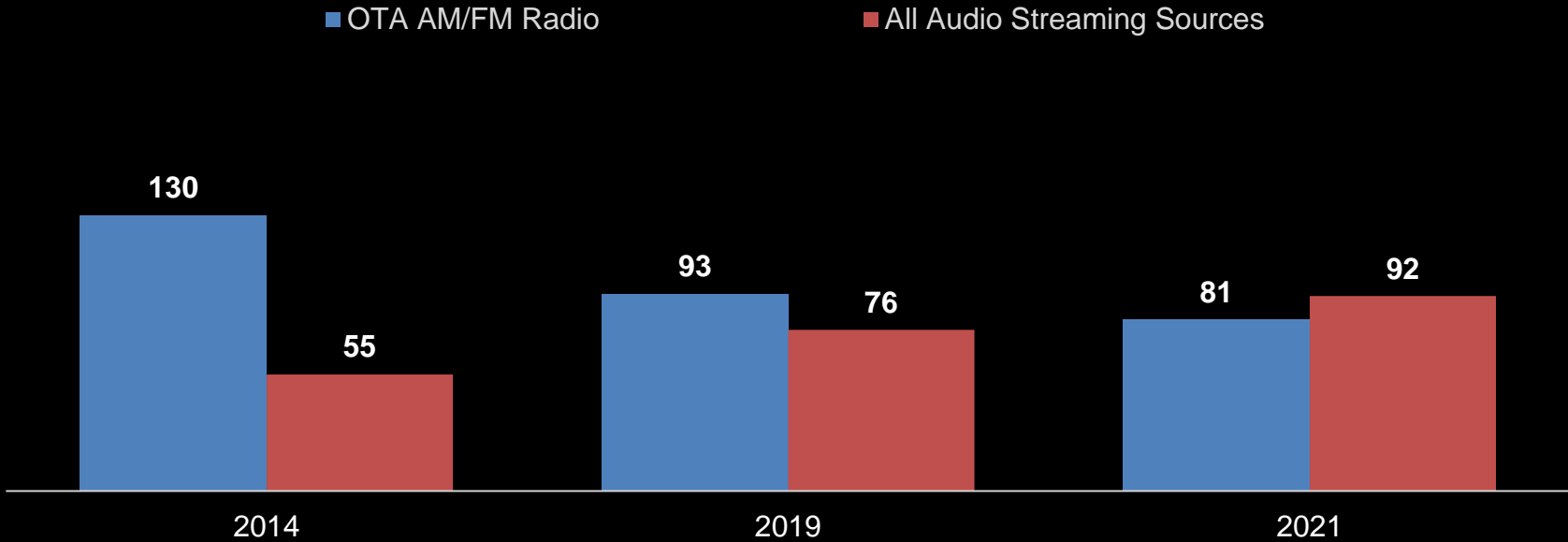
Podcasts

Online AM/FM radio streams

Share of Ear

Americans' 13+ Daily Time Spent Listening to Audio Sources in Minutes

Key Finding



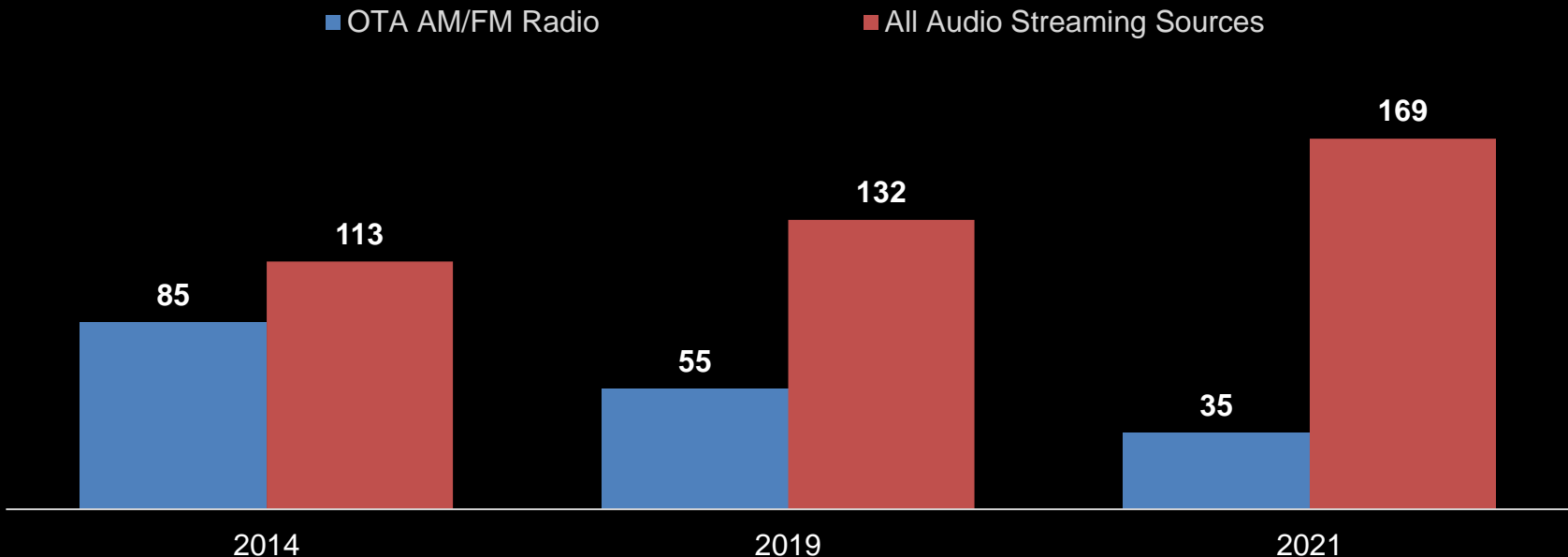
All Audio Streaming Sources includes pure plays such as Pandora, Spotify and others; YouTube for music and music videos only; Podcasts; online AM/FM radio streams
OTA AM/FM Radio includes over the air AM/FM radio broadcasts
Edison Research Share of Ear © 2020 Q3-Q4; 2021 Q1-Q2



Share of Ear

Americans' 13-24 Daily Time Spent Listening to Audio Sources in Minutes

Key Finding



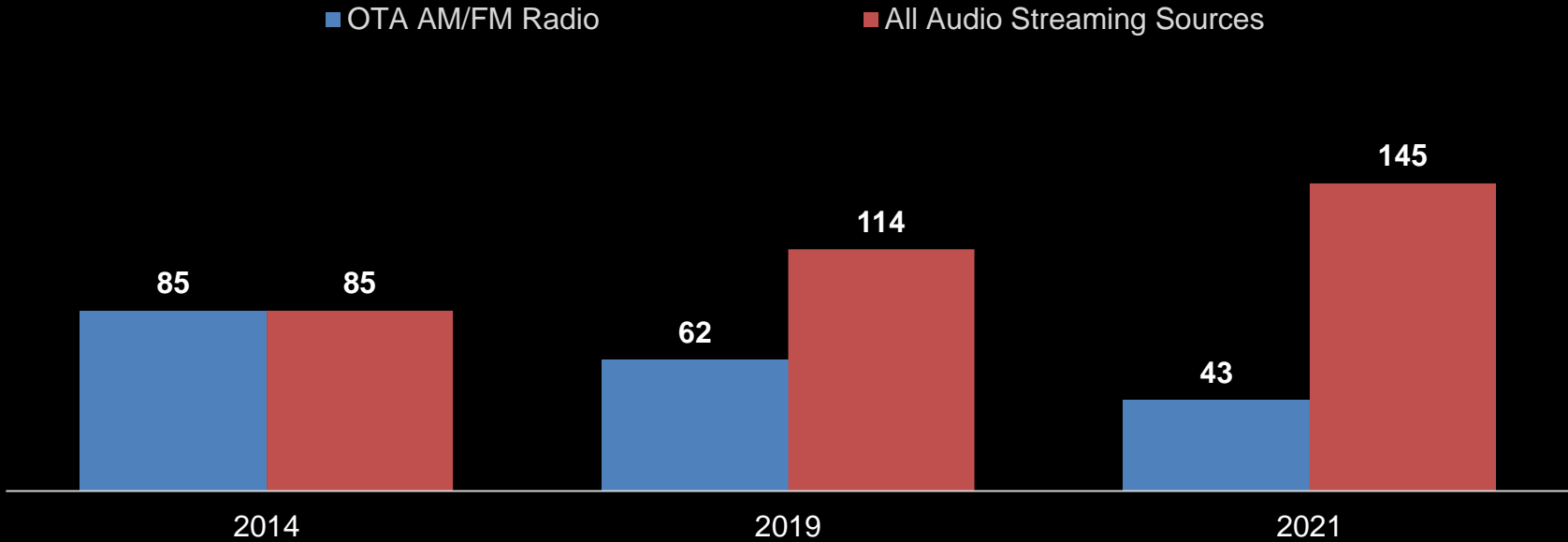
All Audio Streaming Sources includes pure plays such as Pandora, Spotify and others; YouTube for music and music videos only; Podcasts; online AM/FM radio streams
OTA AM/FM Radio includes over the air AM/FM radio broadcasts
Edison Research Share of Ear © 2020 Q3-Q4; 2021 Q1-Q2



Share of Ear

Americans' 13-34 Daily Time Spent Listening to Audio Sources in Minutes

Key Finding



All Audio Streaming Sources includes pure plays such as Pandora, Spotify and others; YouTube for music and music videos only; Podcasts; online AM/FM radio streams
OTA AM/FM Radio includes over the air AM/FM radio broadcasts
Edison Research Share of Ear © 2020 Q3-Q4; 2021 Q1-Q2

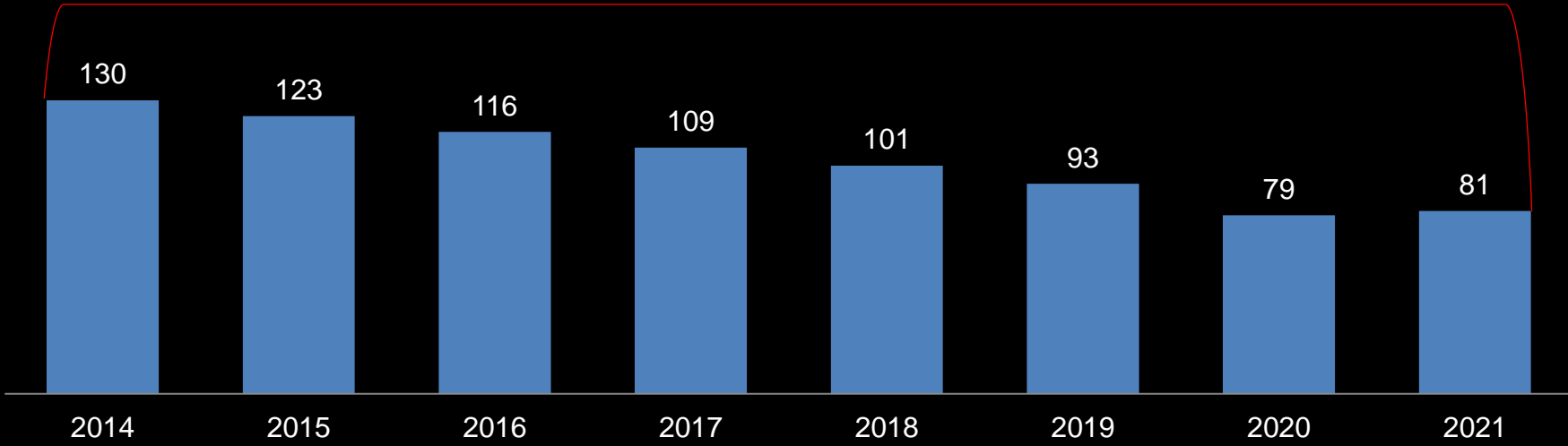


Share of Ear

Key Finding

Americans' 13+ Daily Time Spent Listening to Audio Sources in Minutes:
Over the Air AM/FM Radio

2014-2021:
-37%



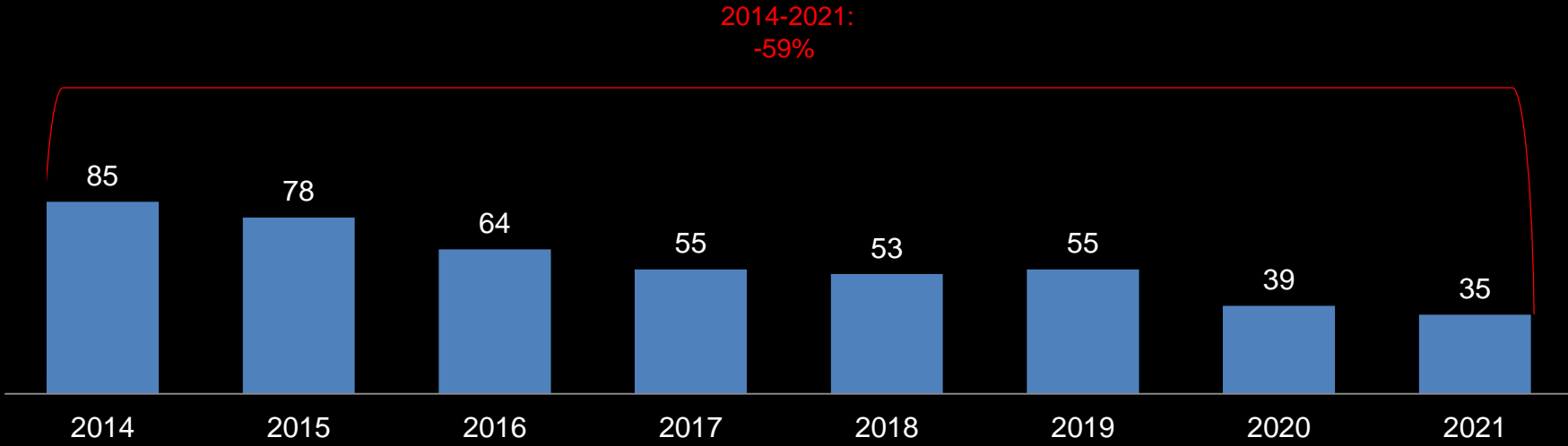
All Audio Streaming Sources includes pure plays such as Pandora, Spotify and others; YouTube for music and music videos only; Podcasts; online AM/FM radio streams
OTA AM/FM Radio includes over the air AM/FM radio broadcasts
Edison Research Share of Ear © 2020 Q3-Q4; 2021 Q1-Q2



Share of Ear

Key Finding

Americans' 13-24 Daily Time Spent Listening to Audio Sources in Minutes:
Over the Air AM/FM Radio



All Audio Streaming Sources includes pure plays such as Pandora, Spotify and others; YouTube for music and music videos only; Podcasts; online AM/FM radio streams
OTA AM/FM Radio includes over the air AM/FM radio broadcasts
Edison Research Share of Ear © 2020 Q3-Q4; 2021 Q1-Q2

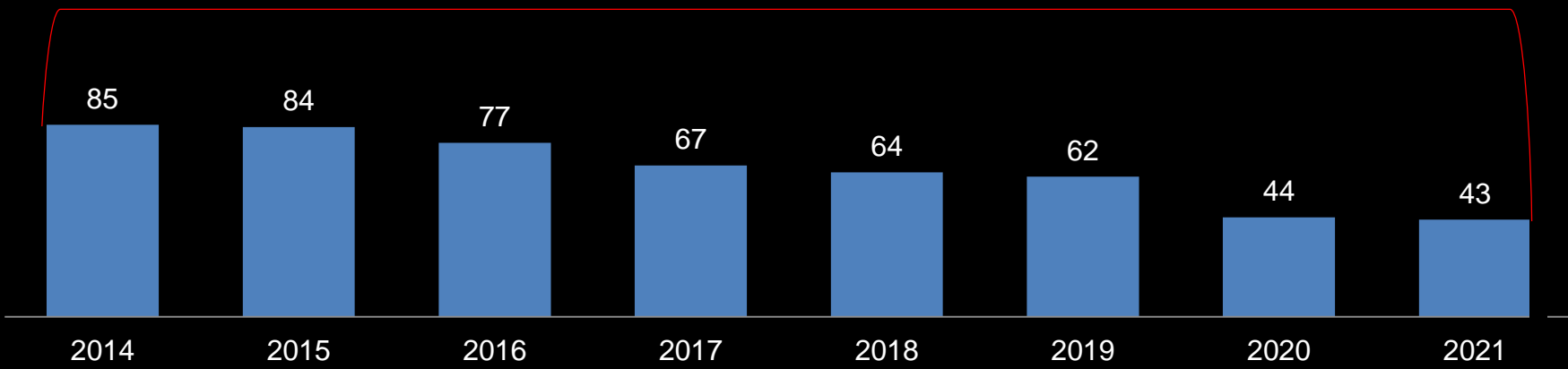


Share of Ear

Key Finding

Americans' 13-34 Daily Time Spent Listening to Audio Sources in Minutes:
Over the Air AM/FM Radio

2014-2021:
-50%



All Audio Streaming Sources includes pure plays such as Pandora, Spotify and others; YouTube for music and music videos only; Podcasts; online AM/FM radio streams
OTA AM/FM Radio includes over the air AM/FM radio broadcasts
Edison Research Share of Ear © 2020 Q3-Q4; 2021 Q1-Q2

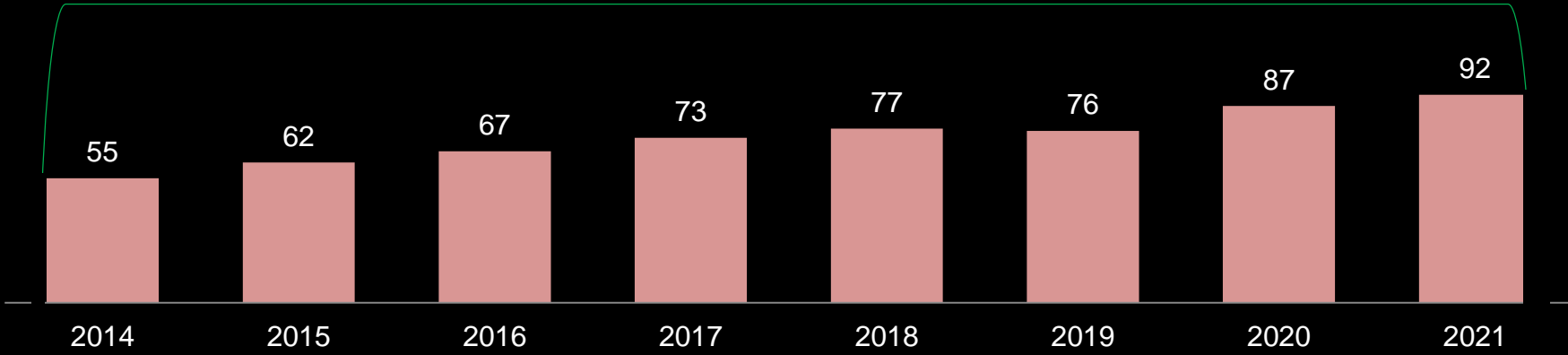


Share of Ear

Key Finding

Americans' 13+ Daily Time Spent Listening to Audio Sources in Minutes:
All Audio Streaming Sources

2014-2021:
+69%



All Audio Streaming Sources includes pure plays such as Pandora, Spotify and others; YouTube for music and music videos only; Podcasts; online AM/FM radio streams
OTA AM/FM Radio includes over the air AM/FM radio broadcasts
Edison Research Share of Ear © 2020 Q3-Q4; 2021 Q1-Q2

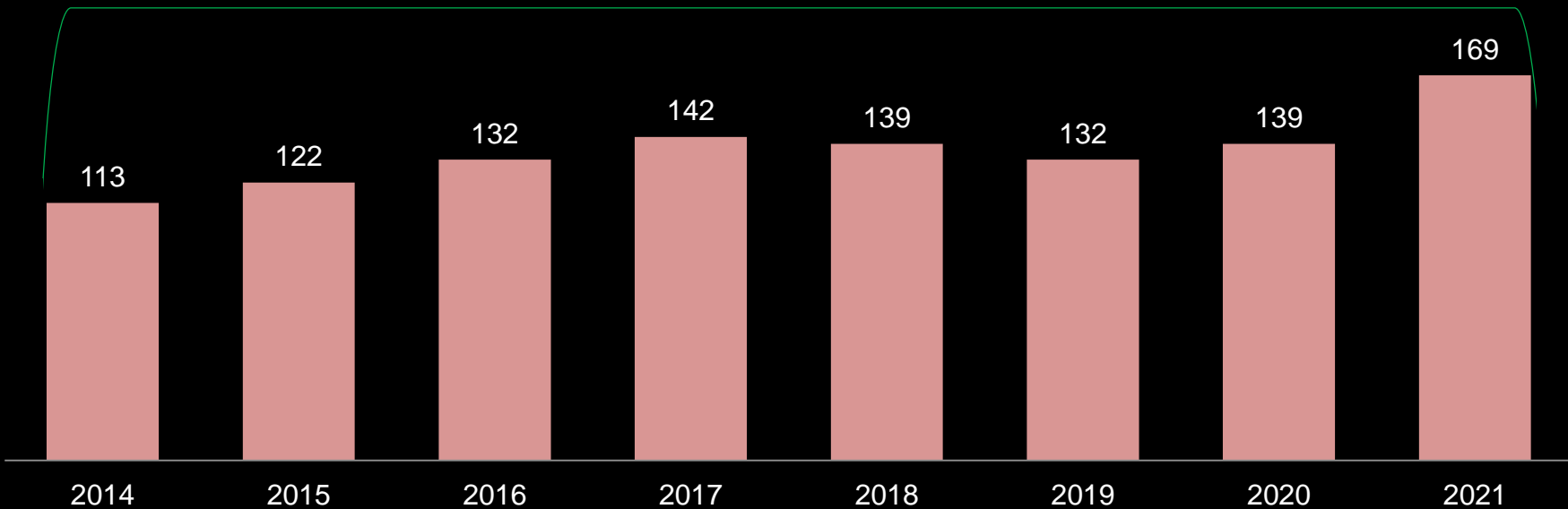


Share of Ear

Key Finding

Americans' 13-24 Daily Time Spent Listening to Audio Sources in Minutes:
All Audio Streaming Sources

2014-2021:
+50%



All Audio Streaming Sources includes pure plays such as Pandora, Spotify and others; YouTube for music and music videos only; Podcasts; online AM/FM radio streams
OTA AM/FM Radio includes over the air AM/FM radio broadcasts
Edison Research Share of Ear © 2020 Q3-Q4; 2021 Q1-Q2

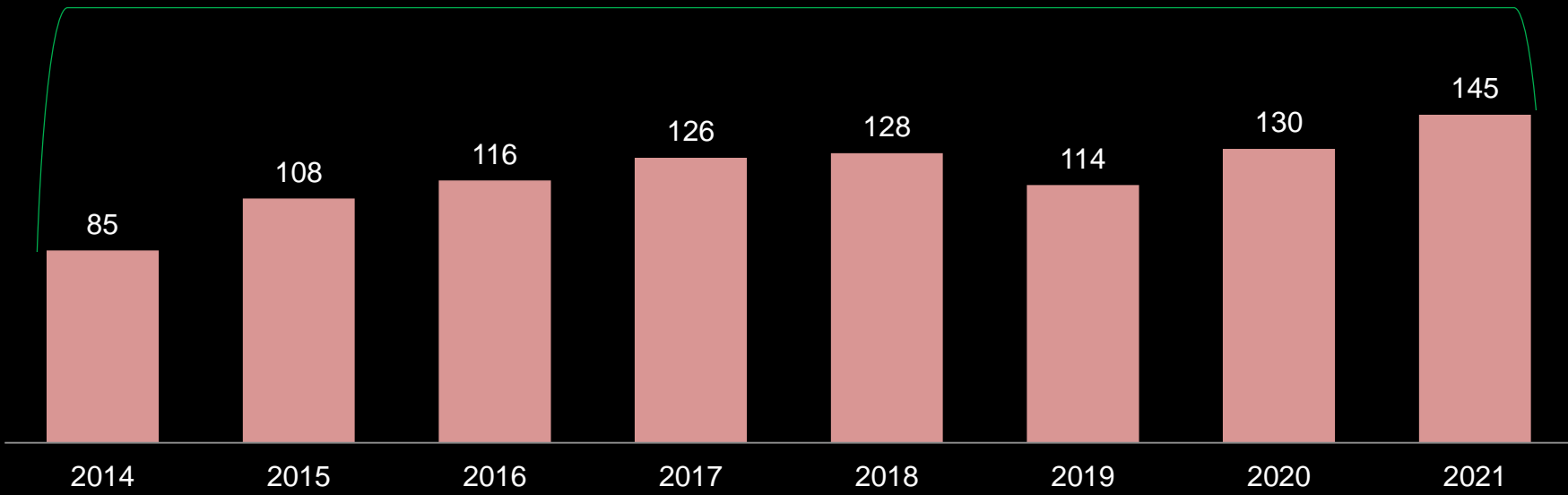


Share of Ear

Key Finding

Americans' 13-34 Daily Time Spent Listening to Audio Sources in Minutes:
All Audio Streaming Sources

2014-2021:
+70%



All Audio Streaming Sources includes pure plays such as Pandora, Spotify and others; YouTube for music and music videos only; Podcasts; online AM/FM radio streams
OTA AM/FM Radio includes over the air AM/FM radio broadcasts
Edison Research Share of Ear © 2020 Q3-Q4; 2021 Q1-Q2





How you know.SM

Share of Ear 2014-2021
All respondents 13+
edison research

	2014		2015		2016		2017		2018		2019		2020		Q2 2021			
	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening		Percent change in minutes listened between 2014 and 2021
Daily average minutes listened to AM/FM over-the-air	130.1	50.4%	123.3	48.2%	116.1	46.4%	109.2	43.8%	100.8	42.0%	93.4	40.6%	78.5	35.1%	81.3	34.8%		-37%
Daily average minutes listened to SiriusXM	15.5	6.0%	16.0	6.3%	16.0	6.4%	16.4	6.6%	17.5	7.3%	21.3	9.3%	18.4	8.2%	19.3	8.2%		24%
Daily average minutes listened to All streaming audio sources (including AM/FM digital streams, Streaming Audio, Music on YouTube, and Podcasts)	54.6	21.1%	61.7	24.1%	66.6	26.6%	72.5	29.1%	76.6	31.9%	76.1	33.1%	87.1	38.9%	92.0	39.4%		69%
Daily average minutes listened to AM/FM digital streams	6.8	2.6%	8.2	3.2%	8.7	3.5%	8.5	3.4%	8.8	3.7%	8.4	3.7%	9.5	4.3%	10.3	4.4%		52%
Daily average minutes listened to Streaming Audio (Pandora/Spotify, etc.)	28.7	11.1%	32.6	12.8%	34.6	13.8%	34.1	13.7%	34.1	14.2%	37.8	16.5%	40.8	18.3%	41.7	17.8%		45%
Daily average minutes listened to Music on YouTube	14.2	5.5%	15.5	6.1%	17.9	7.2%	22.8	9.2%	25.3	10.5%	21.6	9.4%	22.8	10.2%	26.3	11.3%		85%
Daily average minutes listened to Podcasts	4.9	1.9%	5.4	2.1%	5.4	2.2%	7.2	2.9%	8.4	3.5%	8.3	3.6%	13.9	6.2%	13.7	5.9%		179%
Daily average minutes listened to Owned music	42.4	16.4%	38.9	15.2%	35.7	14.3%	32.2	12.9%	29.2	12.2%	25.2	11.0%	23.7	10.6%	23.3	9.9%		-45%
Daily average minutes listened to TV Music Channels (Music choice, etc.)	12.9	5.0%	12.6	4.9%	11.5	4.6%	11.3	4.5%	11.3	4.7%	8.0	3.5%	8.1	3.6%	8.8	3.7%		-32%
Daily average minutes listened to Some other type of audio	2.9	1.1%	3.1	1.2%	3.9	1.6%	4.5	1.8%	4.8	2.0%	5.9	2.6%	7.8	3.5%	7.2	3.1%		146%

Share of Ear 2014-2021
Respondents 13-24
edison research

	2014		2015		2016		2017		2018		2019		2020		Q2 2021			
	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening		Percent change in minutes listened between 2014 and 2021
Daily average minutes listened to AM/FM over-the-air	85.4	28.3%	77.8	25.9%	63.8	22.8%	54.8	19.9%	53.1	20.3%	54.8	20.8%	38.5	16.7%	34.9	14.1%		-59%
Daily average minutes listened to SiriusXM	10.0	3.3%	7.9	2.6%	6.8	2.4%	6.6	2.4%	7.4	2.8%	16.5	6.3%	7.3	3.2%	6.5	2.6%		-35%
Daily average minutes listened to All streaming audio sources (including AM/FM digital streams, Streaming Audio, Music on YouTube, and Podcasts)	112.5	37.2%	121.7	40.6%	131.9	47.1%	141.9	51.6%	138.9	53.0%	131.6	49.9%	139.2	60.4%	168.9	68.3%		50%
Daily average minutes listened to AM/FM digital streams	4.3	1.4%	6.9	2.3%	7.2	2.6%	7.8	2.8%	8.2	3.1%	6.6	2.5%	5.7	2.5%	7.5	3.0%		74%
Daily average minutes listened to Streaming Audio (Pandora/Spotify, etc.)	53.8	17.8%	63.1	21.0%	67.6	24.1%	61.6	22.4%	66.9	25.5%	67.4	25.6%	69.6	30.2%	92.0	37.2%		71%
Daily average minutes listened to Music on YouTube	42.6	14.1%	40.7	13.6%	46.0	16.4%	58.3	21.2%	55.0	21.0%	46.4	17.6%	45.7	19.8%	52.1	21.1%		22%
Daily average minutes listened to Podcasts	11.8	3.9%	10.9	3.6%	11.1	4.0%	14.2	5.2%	8.8	3.3%	11.2	4.2%	18.1	7.9%	17.3	7.0%		47%
Daily average minutes listened to Owned music	78.5	26.0%	71.7	23.9%	61.8	22.1%	51.7	18.8%	49.2	18.8%	49.6	18.8%	32.2	14.0%	21.1	8.5%		-73%
Daily average minutes listened to TV Music Channels (Music choice, etc.)	12.7	4.2%	16.0	5.3%	10.1	3.6%	10.0	3.7%	7.9	3.0%	6.2	2.3%	3.1	1.3%	3.1	1.3%		-76%
Daily average minutes listened to Some other type of audio	2.4	0.8%	4.9	1.6%	5.2	1.9%	10.3	3.8%	5.6	2.1%	4.9	1.8%	10.3	4.5%	6.2	2.5%		157%

Share of Ear 2014-2021
Respondents 13-34
edison research

	2014		2015		2016		2017		2018		2019		2020		Q2 2021			
	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening		Percent change in minutes listened between 2014 and 2021
Daily average minutes listened to AM/FM over-the-air	84.7	32.9%	84.2	30.6%	77.4	28.8%	67.3	25.2%	64.1	24.2%	62.0	25.5%	44.3	19.8%	42.7	17.6%		-50%
Daily average minutes listened to SiriusXM	11.1	4.3%	9.5	3.4%	9.8	3.6%	10.5	3.9%	10.2	3.8%	16.1	6.6%	9.4	4.2%	9.9	4.1%		-10%
Daily average minutes listened to All streaming audio sources (including AM/FM digital streams, Streaming Audio, Music on YouTube, and Podcasts)	85.3	33.1%	108.3	39.3%	116.1	43.2%	126.0	47.2%	128.3	48.4%	113.6	46.8%	129.7	58.0%	145.2	60.0%		70%
Daily average minutes listened to AM/FM digital streams	5.2	2.0%	8.5	3.1%	8.8	3.3%	8.8	3.3%	8.8	3.3%	7.0	2.9%	7.0	3.1%	7.9	3.3%		52%
Daily average minutes listened to Streaming Audio (Pandora/Spotify, etc.)	45.1	17.5%	56.7	20.6%	61.2	22.8%	57.6	21.6%	57.8	21.8%	55.2	22.7%	62.2	27.8%	70.3	29.0%		56%
Daily average minutes listened to Music on YouTube	27.8	10.8%	32.4	11.8%	35.7	13.3%	46.3	17.4%	50.7	19.1%	38.7	15.9%	39.4	17.6%	47.0	19.4%		69%
Daily average minutes listened to Podcasts	7.2	2.8%	10.6	3.8%	10.4	3.9%	13.3	5.0%	10.9	4.1%	12.7	5.2%	21.1	9.4%	20.1	8.3%		178%
Daily average minutes listened to Owned music	63.4	24.6%	57.9	21.0%	51.2	19.0%	44.9	16.8%	45.7	17.2%	37.7	15.5%	26.5	11.9%	23.8	9.8%		-62%
Daily average minutes listened to TV Music Channels (Music choice, etc.)	10.6	4.1%	12.1	4.4%	9.2	3.4%	10.0	3.8%	12.1	4.6%	6.8	2.8%	4.0	1.8%	8.2	3.4%		-22%
Daily average minutes listened to Some other type of audio	2.3	0.9%	3.6	1.3%	3.6	1.3%	4.2	1.6%	2.0	0.7%	6.8	2.8%	9.8	4.4%	7.7	3.2%		232%

Share of Ear 2014-2021

Car listening

All respondents 13+

edison research

	2014		2015		2016		2017		2018		2019		2020		2021			
	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening		Percent change in minutes listened between 2014 and 2021
Daily average minutes listened to AM/FM in the car	52.5	68.6%	51.0	70.5%	51.0	70.2%	49.8	69.0%	46.5	66.6%	45.8	62.4%	35.8	61.5%	34.7	58.0%		-33.8%
Daily average minutes listened to SiriusXM in the car	10.6	13.8%	11.0	15.2%	10.7	14.7%	10.9	15.1%	11.9	17.1%	14.2	19.4%	10.4	17.9%	11.1	18.6%		5.2%
Daily average minutes listened to Streaming Audio (Pandora, Spotify, etc.) in the car	1.6	2.1%	2.0	2.7%	2.3	3.2%	2.7	3.8%	3.1	4.4%	4.3	5.8%	4.0	6.8%	4.8	8.0%		201.6%
Daily average minutes listened to Music on YouTube in the car	0.3	0.4%	0.3	0.3%	0.3	0.4%	0.6	0.8%	1.1	1.5%	1.0	1.4%	1.0	1.7%	1.3	2.2%		331.2%
Daily average minutes listened to Podcasts in the car	0.4	0.6%	0.6	0.8%	0.6	0.9%	1.0	1.4%	0.9	1.3%	1.3	1.8%	1.6	2.7%	1.9	3.2%		341.1%
Daily average minutes listened to Owned music in the car	11.0	14.3%	8.5	11.8%	7.2	9.8%	6.2	8.6%	5.6	8.0%	6.1	8.3%	4.6	7.9%	4.9	8.2%		-55.4%
Daily average minutes listened to Some other type of audio in the car	0.1	0.2%	0.2	0.3%	0.5	0.7%	1.1	1.5%	0.7	1.0%	0.6	0.9%	0.9	1.5%	1.1	1.8%		

Share of Ear 2014-2021
Car listening
Respondents 13-24
edison research

	2014		2015		2016		2017		2018		2019		2020		2021			Percent change in minutes listened between 2014 and 2021
	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening		
Daily average minutes listened to AM/FM in the car	39.9	63.1%	41.1	64.1%	36.2	62.0%	31.0	59.6%	31.9	57.5%	28.2	49.2%	21.8	51.0%	20.7	48.2%		-48.0%
Daily average minutes listened to SiriusXM in the car	6.2	9.7%	4.8	7.5%	4.5	7.7%	4.4	8.5%	4.2	7.5%	9.5	16.6%	3.7	8.8%	3.5	8.1%		-43.8%
Daily average minutes listened to Streaming Audio (Pandora, Spotify, etc.) in the car	3.9	6.2%	4.7	7.3%	5.5	9.4%	4.8	9.3%	7.2	13.0%	9.4	16.3%	9.0	21.1%	11.2	26.0%		184.6%
Daily average minutes listened to Music on YouTube in the car	0.8	1.3%	0.8	1.2%	0.7	1.3%	1.4	2.6%	2.9	5.3%	1.9	3.3%	1.2	2.8%	1.9	4.4%		122.2%
Daily average minutes listened to Podcasts in the car	0.2	0.3%	0.9	1.5%	0.9	1.6%	0.8	1.6%	0.9	1.5%	1.0	1.7%	1.1	2.7%	1.6	3.7%		789.5%
Daily average minutes listened to Owned music in the car	12.2	19.3%	11.8	18.4%	10.2	17.5%	8.8	16.9%	7.6	13.6%	7.3	12.7%	5.4	12.6%	3.9	9.0%		-68.2%
Daily average minutes listened to Some other type of audio in the car	0.0	0.0%	0.1	0.1%	0.4	0.6%	0.7	1.3%	0.8	1.4%	0.1	0.1%	0.5	1.1%	0.3	0.6%		

Share of Ear 2014-2021
Daily average minutes listened to in the car
Respondents 13-34
edison research

Total minutes listened	2014		2015		2016		2017		2018		2019		2020		2021			Percent change in minutes listened between 2014 and 2021
	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening	Daily average minutes	Average share of listening		
Daily average minutes listened to AM/FM in the car	48.6	68.4%	46.0	67.8%	45.3	66.5%	39.8	63.7%	37.3	60.5%	36.4	54.4%	25.2	52.3%	25.3	49.7%		-47.9%
Daily average minutes listened to SiriusXM in the car	7.2	10.2%	5.9	8.7%	5.8	8.5%	5.4	8.7%	5.9	9.6%	10.9	16.3%	5.1	10.7%	5.4	10.6%		-25.4%
Daily average minutes listened to Streaming Audio (Pandora, Spotify, etc.) in the car	2.8	4.0%	3.8	5.7%	5.0	7.3%	5.4	8.7%	6.0	9.8%	7.4	11.1%	7.8	16.1%	9.7	19.1%		242.3%
Daily average minutes listened to Music on YouTube in the car	0.5	0.8%	0.5	0.8%	0.7	1.1%	1.3	2.1%	2.7	4.4%	2.0	3.0%	1.5	3.1%	2.6	5.2%		386.8%
Daily average minutes listened to Podcasts in the car	0.5	0.7%	1.1	1.6%	1.1	1.7%	1.4	2.3%	1.1	1.8%	2.3	3.4%	2.6	5.4%	2.8	5.4%		493.7%
Daily average minutes listened to Owned music in the car	11.4	16.0%	10.4	15.4%	9.7	14.3%	8.6	13.8%	8.0	13.0%	7.4	11.1%	5.3	11.0%	4.5	8.9%		-60.2%
Daily average minutes listened to Some other type of audio in the car	0.0	0.0%	0.1	0.1%	0.4	0.6%	0.5	0.8%	0.6	0.1%	0.5	0.7%	0.6	1.3%	0.6	1.1%		

Share of Ear 2021			
Listening to over-the-air AM/FM radio			
edison research			
	All respondents 13+	Age 13-24	Age 13-34
Did not listen to over-the-air AM/FM radio	41.0%	57.4%	51.3%
Listened for 15 minutes	2.9%	4.2%	3.9%
Listened for 30 minutes	8.0%	7.8%	8.3%
Listened for 45 minutes	6.0%	6.9%	6.9%
Listened for one hour	7.3%	8.1%	8.5%
Listened for more than 1 hour - 2 hours	16.3%	10.5%	13.7%
Listened for more than 2 hours - 3 hours	6.8%	1.9%	3.5%
Listened for more than 3 hours - 4 hours	3.9%	0.8%	1.4%
Listened for more than 4 hours - 5 hours	2.0%	1.5%	1.2%
Listened for more than 5 hours - 6 hours	1.3%	0.4%	0.4%
Listened for more than 6 hours	4.6%	0.8%	0.9%
Listened to over-the-air AM/FM radio at all during their diary day	59.0%	42.6%	48.7%
Listened to over-the-air AM/FM radio for 30 minutes or less	52.0%	69.4%	63.4%
Listened to over-the-air AM/FM radio for more than 30 minutes	48.0%	30.6%	36.6%
Listened to over-the-air AM/FM radio for one hour or less	65.2%	84.4%	78.8%
Listened to over-the-air AM/FM radio for more than one hour	34.8%	15.6%	21.2%

Q2 2021 Share of Ear Methodology Statement

Edison Research conducted a national study of 4,200 Americans ages 13+ to measure their time spent listening to audio sources. Respondents completed a 24-hour diary of their audio listening on an assigned day. Diaries were completed both online and by mail using a paper diary. Diaries were completed in both English and Spanish.

Information about the design, execution and analysis of the survey are detailed below.

Design and Data Collection

Americans ages 13+ were recruited to record their time spent listening to audio sources using a 24-hour audio listening diary. A total of 4,200 participants completed the diary; 3,732 of diaries were completed online and 468 diaries were completed by mail.

Participants were asked to record their audio listening in 15-minute increments starting at 6am on an assigned day, reporting their audio listening through 6am the following day. Each 15-minute increment measured what type of audio was listened to, the device on which it was listened, the location, and the audio content.

Participants were recruited in two ways: Dynata recruited panel members to participate in an online diary, and a landline telephone sample was used to recruit participants to fill out a diary by mail. The online survey was programmed, hosted and administered by Edison Research. The paper diary sent by mail was also designed and administered by Edison Research.

The sample design, which recruited participants to complete diaries online and by mail, was implemented in order to ensure that Americans with all levels of Internet usage were represented, including those who do not have access to the Internet and those who used the Internet for an hour or less in the previous 24-hours.

Contact Procedures

Online

Dynata contacted panel members to participate in a 24-hour audio listening diary which would be filled out the following day. Panel members who agreed to participate were immediately sent an email with instructions and were then sent an individual link to their online diary at 5am on their diary day. Participants were instructed to fill out the diary beginning at 6am on their assigned day. Participants were encouraged to update their diary as often as every hour and visited the link after 6am the following day to complete their audio listening report.

Telephone recruit for mail survey

Mail survey participants were recruited by telephone one week in advance of their diary completion day. Only those who had used the internet for one hour or less in the past 24 hours were invited to participate. As many as eight attempts were made to contact every sampled telephone number. Calls were staggered over times of day and days of the week to maximize the chance of making contact with potential respondents.

Questionnaire Development and Testing

The questionnaires were developed by Edison Research and both the online and mail questionnaire were pretested. Participants were asked to record their audio listening in 15-minute increments starting at 6am on an assigned day, reporting their audio listening through 6am the following day. Each 15-minute increment measured:

- Whether the participant listened to any audio
- What platform he/she listened on: AM/FM Radio, Internet-Only Radio, Owned Music, SiriusXM, TV Music Channels (e.g. Music Choice), Podcasts, Music Videos on YouTube, Audiobooks or any other audio
- The location the participant listened to that audio
- The device listened on: AM/FM radio (over-the-air on a regular radio), Desktop/laptop computer, Mobile Device (smartphone, tablet, etc.), SiriusXM Satellite Radio, TV for audio listening only, Internet-connected TV Device (DVR, TiVo, Gaming console, Apple TV, Roku, etc.), CD Player, Voice-enabled smart speaker, or another device
- The content type listened to: Music, News/Information/Traffic/Weather, Personalities/Talk Shows, Sports (talk, play-by-play), or Audiobooks
- If he/she listened to AM/FM radio, they indicated how they listened: over-the-air, on a mobile app/website of a specific radio station, iHeartRadio, Audacy, TuneIn Radio, or something else
- If he/she listened to Internet-Only Radio, they indicate how they listened: Amazon Music, Apple Music, Google Play, iHeartRadio, Pandora, Rhapsody, SoundCloud, Spotify, or something else

The study also captured key demographic information including age, sex, ethnicity, children in the household, employment status, educational attainment, household income, time spent using the Internet.

Weighting and analysis

Data was weighted in a three-stage process. Post-stratification weights were applied to weight Internet use to the parameters found in the 2021 Infinite Dial Study, a national RDD telephone study that includes landline and cell phones. The combined online and by mail data was then weighted by age, sex, race and region using the 2019 American Community Survey (ACS) administered by the U.S. Census Bureau. The Q2 respondents were then combined with respondents from the three previous waves of Share of Ear and each wave was weighted so that it comprised one quarter of the total sample.

Response Rate

Respondents who participated by mail were recruited first by telephone. The response rate to the telephone recruit was 6%, as calculated by AAPOR Response Rate 3. The completion rate among those recruited was 34%.

Respondents who participated online were recruited first by email. The response rate to the email recruit was 5%, as calculated by AAPOR Response Rate 4. The completion rate among those recruited was 41%.

Margin of Error

The margin of error reported for this survey was computed using the classical SRS formula with an adjustment for the estimated design effect. The overall design effect for a survey is commonly approximated as the 1 plus the squared coefficient of variation of the weights. For this survey, the margin of error (half-width of the 95% confidence interval) incorporating the design effect for full-sample estimates at 50% is ± 2 percentage points. Estimates based on subgroups will have larger margins of error. The margin of error assumes that the weighted estimates are approximately unbiased. This assumption of approximate unbiasedness is based on our assertion that any differences between the survey sample and the target population on key survey outcomes are corrected by raking on the demographics listed in the weighting description.

Exhibit B



INTRODUCTION

In April 2019 we were asked to provide data and analysis on fragmentation among local media channels across the U.S. This is an update to that report as of July 21, 2021.

The research cited in this document comes from four principal sources:

1. **Borrell's database of advertising and marketing expenditures** for all businesses within every U.S. market. This database is used by hundreds of media companies, ad agencies, trade associations, investors, and ad buyers to track, analyze, and forecast advertising and marketing expenditures in individual markets. More information can be accessed at www.adspending.com.
2. **Borrell's surveys of local advertisers buying habits and intent**. The annual survey is the largest survey of local advertisers in the nation.
3. **Borrell's database of digital advertising receipts** for 11,962 local media entities that are selling digital advertising. This is paired with Borrell's database of ad *spending* to show the actual recipients of digital advertising in each U.S. market.
4. **BLS data, SEC filings, company reports and presentations, and other publicly available and purchased research** required to support Borrell's ongoing data-collection efforts.

Borrell Associates has been tracking, analyzing, and forecasting local advertising for 20 years. It was founded as a data-based company that disrupted traditional ways of tracking advertising expenditures. Unlike other ad-trackers that start with advertising receipts from handful of known media entities in a market, Borrell uses a holistic "bottom-up" methodology that starts with spending records from all businesses. Information is gleaned from IRS tax records, BLS, USPS, Dun & Bradstreet, ExactData, and other data points. Borrell tracks and forecasts advertising expenditures in all 3,007 U.S. counties across 11 advertising channels (newspapers, magazines, yellow pages, online, direct mail, cable, out of home, cinema, TV, radio, and telemarketing). Its market-level data currently has approximately 3,000 subscribers.

The company's data and insights are cited frequently in *The Wall Street Journal*, CNN, MSNBC, Ad Age, MediaPost, TV NewsCheck, Radio Ink magazine, and many online publications. Borrell is asked to deliver keynote addresses and presentations at company events and conferences approximately 30 times per year. The company's research has been widely used by trade associations, including by the American Association of Advertising Agencies, the Television Bureau of Advertising, the Radio Advertising Bureau, the Media Financial Management Association.

**EXECUTIVE SUMMARY**

The meteoric rise of digital advertising over the past decade has forged a new reality for local media companies that are heavily dependent on advertising to support their operations. Whereas the first wave of disruption in the 2000s affected mostly print-based media, this second wave is disrupting broadcast media as the Internet morphs from a “read” medium into one that is viewed and heard. The pandemic of 2020 served only to accelerate the trends that were already underway.

The audience shift has disrupted the flow of advertising, which has been the lifeblood of media companies. As a result, these locally based companies are struggling to provide local channels of news, information, and entertainment that have served their markets for generations.

Local businesses have trimmed print and broadcast advertising budgets to fund new, cheaper, and more targeted marketing within an ever-expanding array of digital offerings. To compete, broadcast, print, and outdoor media companies have attempted to offer niche or hyperlocal products, most of them in digital. Despite those efforts, 85% of the digital advertising purchased by local businesses went to out-of-market companies such as Google, Facebook, and Amazon.

These “pureplay” out-of-market companies have a clear advantage. They utilize vast amounts of personalized user data to expand channel offerings without government regulation. As a result, digital media’s share of all local advertising has grown from 26% five years ago to 63% at the end of 2020. By 2023, no locally based media entity will have more than a 6% share of local advertising. Meanwhile, three out-of-market tech companies – Amazon, Google, and Facebook – will control about half of all local advertising expenditures, with an additional 13% controlled by other out-of-market providers.

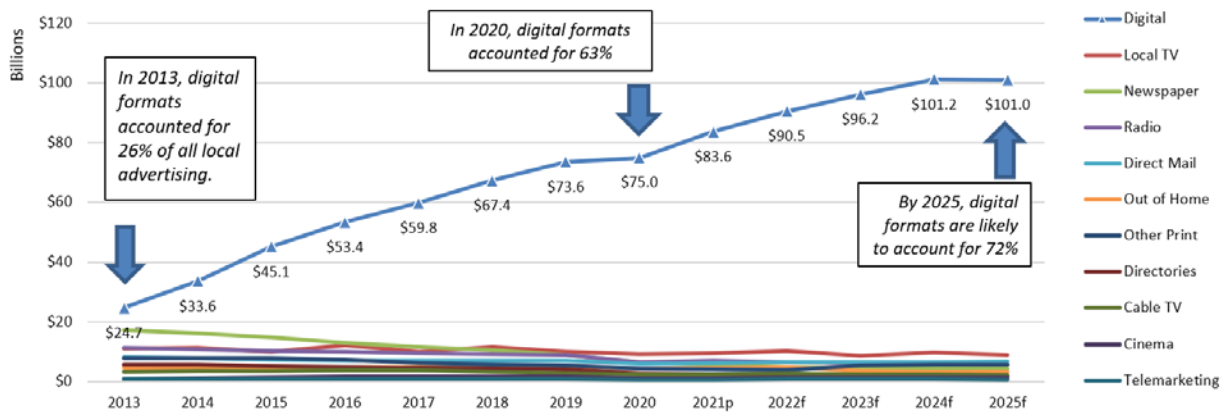
The swift growth and popularity of social media, particularly Facebook and Instagram, has had perhaps the greatest effect on radio, which considers itself “the original social media channel.” Radio’s collective share of local advertising has slipped into the single digits; for individual stations, the share will be in virtually every case be less than 1% of total advertising.



LOCAL ADVERTISING ASSESSMENT

By the end of 2020, local businesses had spent \$118.7 billion on media advertising. The figure was 7% below the prior year, due to 40% of local businesses halting or slowing down their marketing during the pandemic. 2020 was the first year since the Great Recession that local advertising showed a year-over-year decline, and annual growth has been tepid over the past decade. For the past 15 years, businesses have been spending less money on classic forms of advertising as a percentage of their total gross revenues in the past 15 years and more on internally controlled "owned" media such as their own websites and social media pages.1 Of the \$118.7 billion spent in 2020, nearly two-thirds, or \$74.9 billion, went to digital media, which has been consuming market share at the expense of traditional forms of local media. Last year acted as a springboard for digital forms of media, at traditional media's expense. In fact, digital media was the only form of media that grew in 2020; all other forms (print, broadcast, etc.) declined. We expect digital advertising to continue growing, accounting for 72% of local advertising, by 2025.

U.S. Local Advertising by Media Type, 2013-2025



Source: Borrell Associates Inc., July 2021

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The past decade has been difficult for print and broadcast media, which continue to see diminishing shares of a space that was once the exclusive domain of companies that had a physical presence (printing press, broadcast tower, sales office) in that market. The share of local advertising expenditures going to out-of-market digital media companies doubled between 2013 and 2018. It is expected to grow an additional nine points between 2020 and 2025. Growth in the 2013-2018 period was fueled mostly by Facebook's late 2012 rollout of a do-it-yourself advertising program that made buying ads simple and inexpensive for local businesses. Since then, Facebook blossomed into the most popular form of local marketing, used by more local businesses than any other type of advertising media.2 Even at the peak of the yellow pages industry, when every local business of note seemed to have an ad in the local directory, not as many businesses were doing so at the rate of participation that Facebook currently enjoys.

Facebook's biggest victim may be radio – which calls itself "the original social medium." Facebook 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.). Our 2020 survey of 944 radio

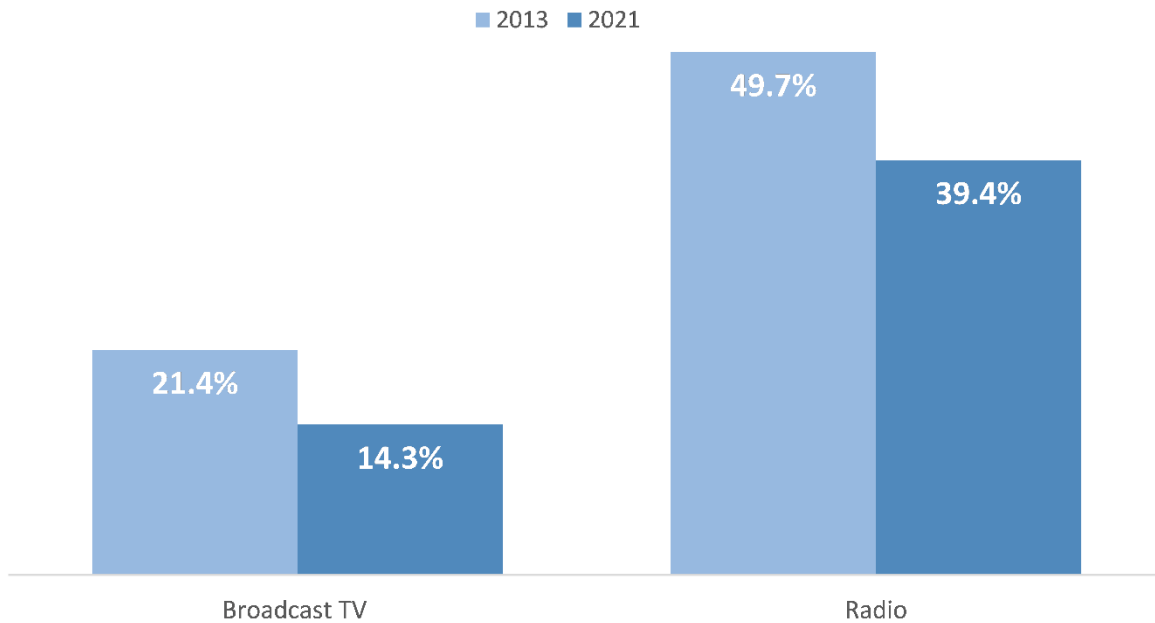
1 Source: IRS, Pivotal Research

2 Source: Borrell's 2018 Local Advertiser Survey; 91% of 3,860 local ad-buyers surveyed said they use Facebook, with 82% reporting they buy ads on Facebook. The next-highest percentage was for those using email marketing (57%). All other media, including traditional types of media and search advertising, had lower participation rates.



advertising buyers in the latter half of 2020 showed that 96% of them were buying social media advertising, up from 92% when we first filed this report two years ago. Comparatively, those who do not buy radio advertising are significantly less inclined to participate in social media marketing.³ Seventy-five percent of radio ad buyers in our 2020 survey said they planned to increase their social media spending in 2021, compared with 57% of non-radio buyers saying they had planned to increase it in 2021. From our research, we have concluded that local advertisers see radio and digital advertising as substitutes – shifting dollars back and forth between these media for various reasons. Additionally, we noticed that fewer local businesses are buying radio: Between 2013 and the first half of 2021, there was a 10-point drop in the percentage of local businesses who say they buy radio advertising. TV, meanwhile, dropped 7 points during that period.

% Of Active Local Ad Buyers Buying Each Medium



Source: Borrell's 2013 and 2021 Local Advertiser Surveys

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Facebook's dominance happened fast. Since 2013, it reported 25 consecutive quarters of revenue growth above 30%, with most year-over-year quarterly growth above 50%. As all forms of traditional media saw declines in advertising sales in 2020, Facebook realized growth in all four quarters, averaging 21% growth for the year. Google also experienced strong growth, averaging 9% growth in 2020 with only one quarter of decline in ad revenue.

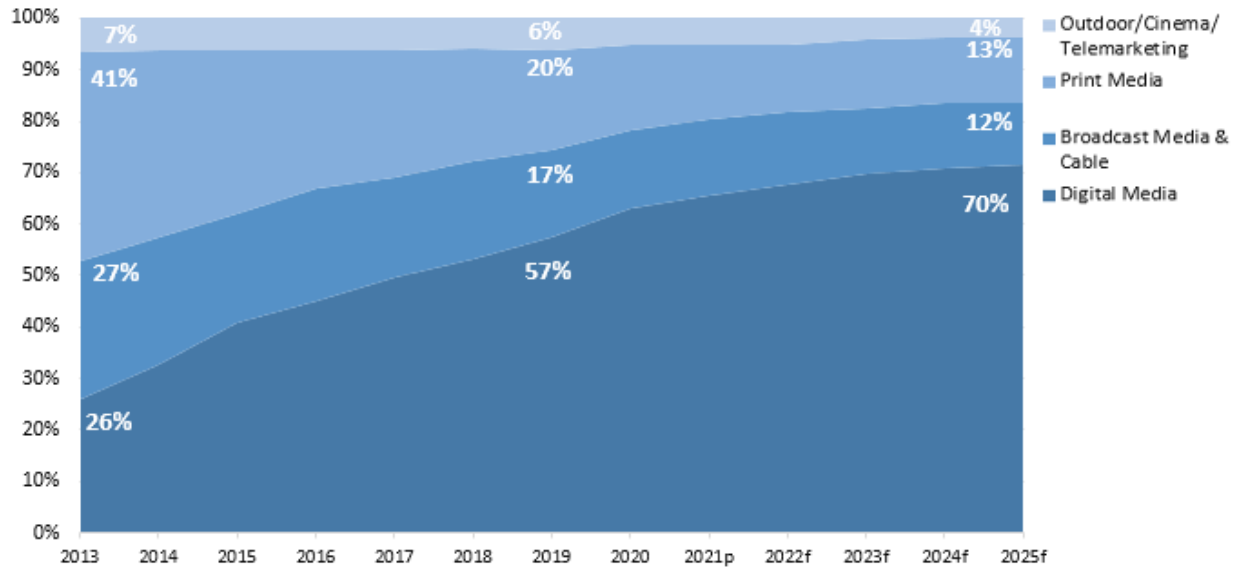
Radio is not the only medium affected over the past decade. Advertising market share has shifted at the expense mostly of print media. Newspapers, magazines, yellow pages, and direct mail lost 23 points from 2013 to 2020, while digital media gained 17 points of advertising share. The loss for radio and TV was 10 points, larger than in previous years.

³ Source: Borrell's 2020 survey of 2,262 local ad buyers; among non-buyers of radio advertising, 65% participate in social media marketing.



The disruption to broadcast media, we believe, began in earnest in the early 2010s and will continue through this decade. Since 2012, Internet access speeds have increased nearly sixfold, transforming the digital audience from “readers” into listeners and viewers.⁴ As this new wave of distribution of audio and video content shifts to digital channels, we are forecasting an additional 3-point decline for TV and radio between 2020 and 2025 on top of a 10-point loss between 2013 and 2019.

U.S. Local Advertising Shares, 2013-2025



Examining the traditional media channels separately, we found that broadcast TV became the largest advertising shareholder among traditional forms of media in 2018, surpassing newspapers for the first time. Radio is likely to become the second-largest traditional media category this year, behind TV. The fact that political advertising hasn’t yet migrated so heavily to digital media has certainly helped broadcast TV. In 2020, political spending on broadcast TV outlets totaled nearly \$4 billion, or 39% of all political advertising. Radio is not a particularly large beneficiary, accounting for less than 6% of all political advertising in 2020, down from 7.7% in 2018.

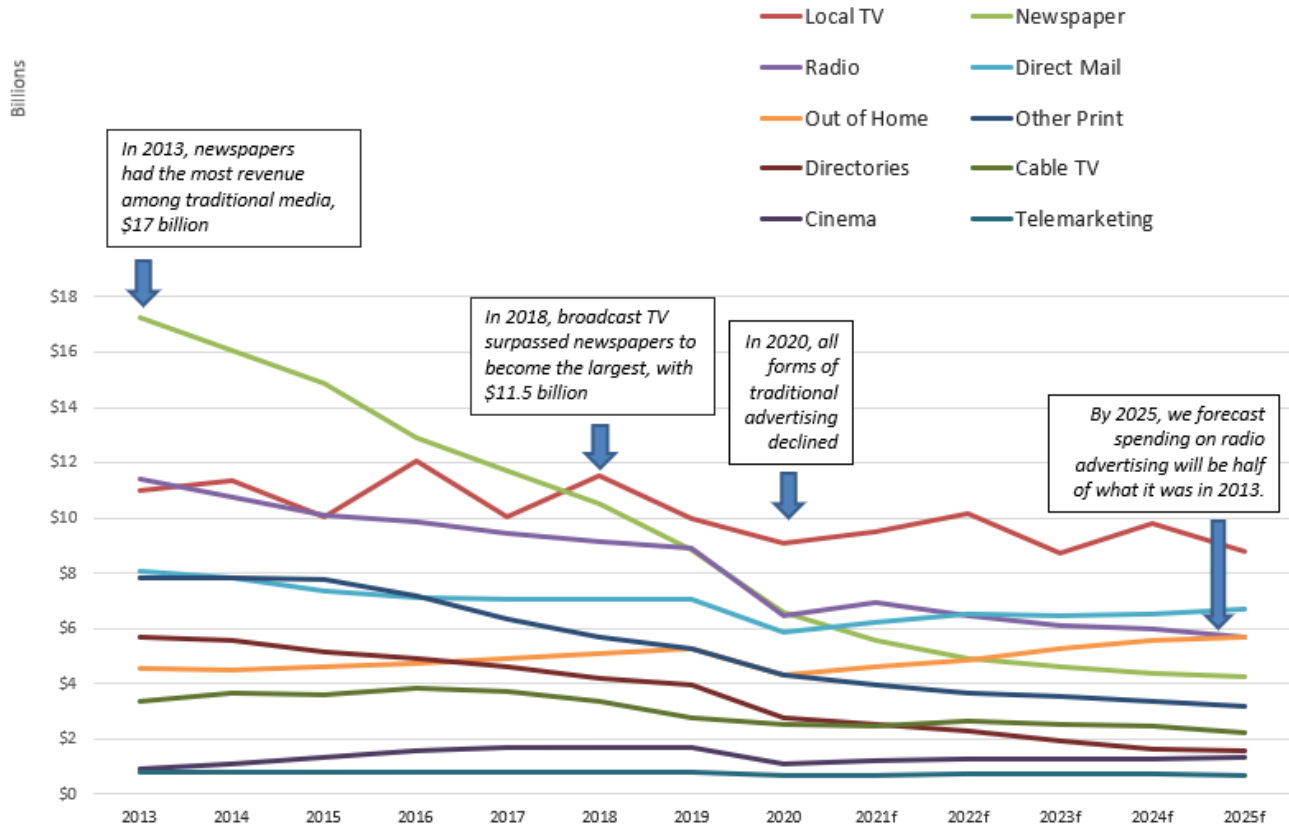
When describing the encroachment of digital media on print and broadcast media’s turf, it is important to note that it’s not exactly “us vs. them.” Today, nearly 80% of the army of 50,000 local ad-sales reps sell some sort of digital advertising or marketing service in tandem with their print, broadcast, outdoor, and cable offerings.⁵ However, many of those digital products are re-sold banner advertising or search advertising inventory; thus, profit margins on digital sales are significantly less than typical broadcast radio advertising EBIDTA.⁶

⁴ Sources: FCC, NCTA; based on actual average download speeds of 15 mbps in 2012 and 86 mbps in 2020.

⁵ Sources: U.S. Bureau of Labor Statistics (2019 data); Borrell

⁶ Source: Borrell’s digital media revenue database

How Local Advertising Is Changing for Traditional Media*



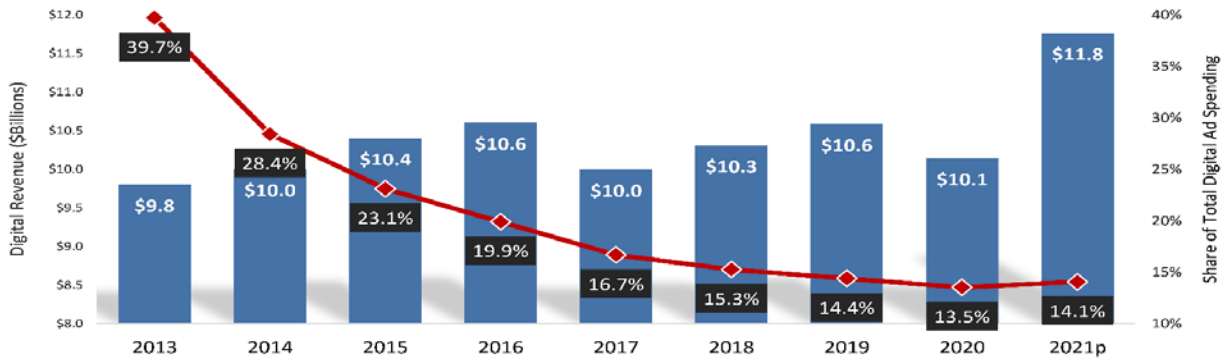
*Does not include digital advertising sold by traditional media companies

(c) 2021 Borrell

In 2020, these home-grown efforts drove \$10.1 billion in digital ad sales, or 13.5% of all locally spent digital advertising. This involves selling banner ads on their websites or inserting audio or video spots in the multimedia streams that can be found on their websites or apps. While sales have been growing, they have not kept pace with the rate at which local businesses have been increasing their digital spending – with the vast majority of digital advertising going outside the market to pureplay Internet companies. In 2013, local media’s share of all digital advertising expenditures was 39.7%. By the end of 2021, we expect it to be 14.1%. In short, local media clients are buying more and more digital advertising from other sources, further eroding overall market share for traditional local media companies.



Total Digital Revenue for U.S. Local Media Cos. And Share of Locally Spend Digital Advertising

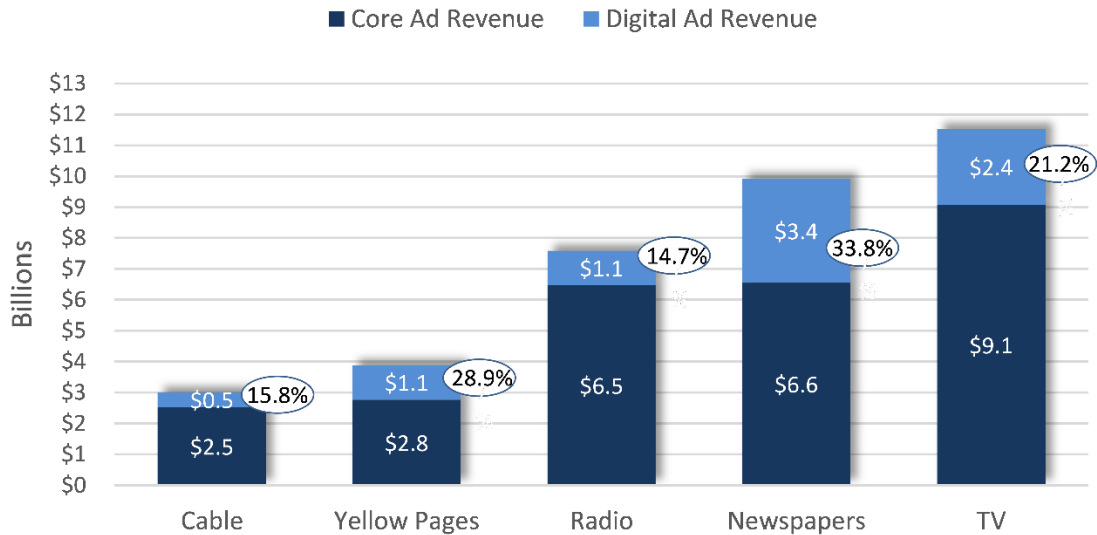


Source: Borrell Associates Inc.
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These digital ad sales have bolstered their core-product sales, contributing anywhere from 16% to nearly 50% of ad revenue for the average cable, radio, TV, yellow page, or newspaper company. Newspapers continue to weigh in with the largest amount of digital revenue, \$3.7 billion in 2020. The ratio of digital sales to core-product sales varies by type of media. Print media have the greatest ratios, while broadcast and cable media are lower. The chart below shows the amounts of digital ad sales relative to core-product sales for each medium, while the table on the following page lists the percentage of total sales attributable to digital advertising for 22 publicly held companies, plus the averages for each type of media.



How 2020 Digital Sales Added Up for Traditional Media Cos.



Source: Borrell Associates Inc.

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U.S. & Canadian Local Media Companies' % of Gross Advertising Revenues from Digital Sales, 2020			
Company	% from Digital Adv.	Company	% from Digital Adv.
Yellow Pages Ltd. (Canada)	75.3%	Entravision (radio & TV)	22.2%
New York Times (newspaper)	54.7%	Entercom (radio)	17.9%
McClatchy (newspapers)	50.9%	TEGNA (television)	17.8%
Thryv (yellow pages)	49.1%	Urban One	15.9%
Postmedia (newspapers)	47.9%	iHeart Media (radio)	14.8%
Gannett/GateHouse (newspapers)	46.9%	Salem Communications (local radio only)	13.6%
Townsquare (radio)	43.6%	Beasley Broadcasting (radio)	11.1%
Lee Enterprises (newspapers)	36.8%	Cumulus (radio)	10.9%
Torstar (metro newspapers/Canada)	31.9%	Nexstar (television)	10.8%
Torstar (community newspapers/Canada)	27.2%	Meredith (television)	3.8%
Tribune (newspapers)	26.6%	Saga Communications (radio)	3.6%
INDUSTRY AVERAGES (Not restricted to companies listed above)			
Newspaper Companies	49.5%	TV Broadcasters	29.3%
Yellow Pages Companies	40.8%	Radio Broadcasters	16.2%

Sources: SEC Filings, public company statements, Borrell estimates

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Another factor affecting locally based media companies is the growth of *in-market* competition over the past several decades. Responding to the need to create more specialized products in the 1990s and 2000s, newspapers, telephone directories, magazines, radio stations, TV stations, and outdoor venues expanded their offerings broadly. While much has been written about the demise of the local newspaper industry, 93% of the daily newspapers that existed 20 years ago are still publishing today. Here is an estimate of the total number of advertising-supported media entities across the U.S.:⁷

- 1,260 daily newspapers
- 4,500 weekly newspapers
- 3,800 yellow page books
- 4,546 AM radio stations
- 6,682 commercial FM stations
- 1,374 UHV/VHF Commercial TV stations
- More than 1,000 cable systems with local sales staffs

The total comes to 23,162, or 3,520 fewer than when we first wrote this report two years ago. That's 16 fewer media properties per TV Market Area (TMA), or a loss of eight per year per market. Radio stations represent 48% of the total number of media entities; the industry suffered a net loss of 194 stations in the past two years.

⁷ Sources: FCC, March 2021; News Media Alliance, Association of Directory Publishers, NCTA, Borrell Associates

**SUMMARY AND CONCLUSIONS**

Locally based media companies are struggling to survive in an unprecedented time. While print and broadcast media operate under ownership restrictions, unregulated national media companies have reached into local markets and carved away more than half of their advertising market share. TV and radio broadcasters and print media have attempted to adapt to this new digital environment, but digital distribution of local audio, video, and written content yields significantly less advertising revenue than their traditional distribution channels. Further, digital distribution of their content erodes their richer core audiences.

Local media's mission is to not only inform and educate the public, but to also provide a voice for local entrepreneurs and business owners for their products and services. As media channels struggle, those local businesses suffer perhaps even more as they watch online retailers such as Amazon Marketplace, Alibaba, eBay, and Shopify erode their business.

The rules governing media ownership at the local level are antiquated. They have given national Internet media an unfair advantage. Data-driven digital media has quietly been able to become "local" by collecting geolocation and other personal data about their user base and visitors. Within five years, Google, Facebook, and Amazon will have crimped off nearly two-thirds of the flow of locally spent advertising dollars – the lifeblood of local print and broadcast media.

We believe that a revision of ownership rules is in order. It has the potential to put local media on a more competitive footing with the Internet giants, which ultimately serves local interests.

Gordon Borrell
Chief Executive Officer
Borrell Associates

Exhibit C

Declaration of W. Lawrence Patrick

1. This declaration is submitted by W. Lawrence Patrick, Managing Partner of Patrick Communications, a nationally prominent broadcast media brokerage and investment banking firm. I started this company in 1984 and have negotiated over \$8.5 billion worth of broadcast transactions since then. This figure includes over 600 radio and 170 television transactions.
2. In addition, along with my wife, Susan, we own 25 small market radio stations in the state of Wyoming. Overall, I have owned or managed more than 100 radio and 80 television stations. My credentials include handling more broadcast station workouts, receivership appointments and bankruptcy trusteeships than all other people combined over the past 25 years. Thus, I recognize the signs of stations heading for financial trouble.
3. In addition, I have testified before the Federal Communications Commission, the Federal Trade Commission, the Copyright Royalty Tribunal and both Houses of Congress multiple times. My expert opinions have regularly been accepted by the FCC over the years to support "failing station" petitions and waivers of satellite station ownership. I have also been qualified as an expert witness in more than 30 different federal and state lawsuits. Finally, I have been an expert witness and consultant to the U. S. Department of Justice in several broadcast valuation and tax cases.
4. My educational background includes a B.A. from the University of Kentucky; a M.S. from the University of Tennessee; a Ph.D. in communication and management from Ohio University; and a J.D. from Georgetown University. I have also completed several certificate programs in management and investment banking at both Oxford University and Pepperdine University.
5. As I review the changing radio marketplace since 2019, I am struck by how many medium and small market stations today are facing severe financial hardship than they were even two years ago. For the first time in my experience, there are stations where there simply are no buyers for the properties, other than a direct competitor who may not be allowed

to purchase the troubled stations because of the current regulations. For the most part, AM stations particularly have little value outside of the largest markets unless they have sports or strong news/talk formats. We simply almost must give these stations away.

6. Admittedly, some of the financial hardships faced by station owners are the result of the economic effects of the pandemic. Federal and some state economic relief programs have helped, but, in many cases, the real cause of this hardship is the presence of tech companies and large digital marketing companies outside of a station's service area targeting local companies. This loss of revenue has been staggering. When Facebook and Google start pulling advertising dollars away from local stations by targeting some of a station's best and largest advertisers, those operators face a bleak future. Even those stations that develop digital marketing efforts of their own pale in comparison to the expertise and reach of the national tech giants.
7. Many owners now show negative advertising revenue growth. They therefore have had to cut expenses drastically which translates into less news and information programming for the local community and fewer live and local personalities on the air. There are few operators today who do not rely on voice-tracking, syndicated or satellite-delivered programming just to stay in business.
8. I know of dozens of markets and unrated cities or towns where owners feel trapped by ownership regulations and the economic realities of radio. For instance, I have a listing for a two-station FM cluster in a rated medium-sized Michigan city currently. There are two larger group operators in the market as well as several other small owners. The two large owners cannot buy these stations because of the limits on station ownership. The other smaller owners are facing their own economic declines and cannot finance a purchase of these stations. The result for the two individuals who own these stations, are in their 70's and now face growing medical concerns, is that there are no buyers at any reasonable price for their stations. They worry, continue to see revenue declines and are hopeful that the Commission will change the ownership rules to allow one of the larger owners to purchase their properties and allow them to retire.

9. Similarly, we have had a half-dozen or more stations in unrated markets go unsold over the past two years because the logical and best buyer for their station or stations was prohibited from purchasing them. These range from stations in Arizona, Missouri, Virginia, California, Michigan, West Virginia, Mississippi, South Dakota, and Wyoming. Prior to 2019, we have never listed and not sold any stations for an owner. Today, the combination of losses in revenues and restrictive ownership caps in the smallest markets threaten to make more owners take their stations dark. Cumulus, for example, has turned in four AM licenses in the past two years. Many other owners have made similar decisions. You simply cannot give away an AM station in a medium and small market.
10. Similarly, if you are a stand-alone FM or a small cluster facing strong competition from the group owners in your market and the drain of revenues to the tech and digital marketing companies, you face a very bleak future. Your listeners are aging, the competition is now fiercer than ever for marketing revenues, and the restrictions of the ownership limits block your exit from the radio business.
11. In my own stations, as Commissioner Carr saw during a visit to our Cody, Wyoming stations a few years ago, we have a competitor in the market whose estate now wants to sell to us. Their station is an empty storefront with a permanently locked front door and a Dell computer playing music selected by a sister station hundreds of miles away from the local property. There are no fulltime employees as well as no news, weather, sports, or any other information programming on these stations. They are simply dumb jukeboxes with no local connection. The owner, before his death last year and now his estate, desperately want to sell these FM signals to my company. I, however, may not purchase them because of the ownership caps in place currently.
12. We have a robust operation in Cody with a news department, sports announcers, live announcers, a promotion department keeping us involved in local events and talk shows daily highlighting local and regional issues. We would take these stations, make them much more local and program them with alternative formats to service the Hispanic listeners in the market or listeners who want to hear more local sports and information programming.

13. In short, the market since 2019 has only grown more desperate and in need of station ownership cap reform. Lifting the caps on medium market stations clusters and abolishing the caps in the smallest markets would be a step toward restoring some financial health to a struggling industry.

Respectfully submitted,

A handwritten signature in blue ink that reads "W. Lawrence Patrick". The signature is written in a cursive style and is positioned above a horizontal line.

W. Lawrence Patrick
Managing Partner
Patrick Communications
Legend Communications