

Guiding Media. Inspiring Innovation. Leading Local.

U.S. Local Advertising Forecast 2017

National Overview: Specific Local Media Estimates & Analyses for 2016-2021

October 2016

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 - Media Highlights

- Specific Media Forecasts (in order of largest to smallest contribution to local media pie in 2017):
 - 1. Direct Mail
 - Local Video* (Including Local Over-the-Air Television, Local Cable Television, Out-Of-Home Video, Mobile Video)
 - 3. Online / Interactive (Including Local Online/Interactive, Local Search, Local Display)
 - 4. Newspapers
 - 5. Mobile
 - 6. Radio
 - 7. Out-of-Home
 - 8. <u>Directories</u> (PYP and IYP)
 - Social* (Including Mobile Social vs. Desktop/Tablet and Social Media Advertising by Company)
 - 10.<u>Local Magazines</u>
- Key Media Takeaways



About This Forecast

- BIA/Kelsey continuously monitors the local media marketplace. Twice annually we build a forecast that brings together these media for a holistic view of the U.S. local advertising picture (definitions are provided).
 - Our main yearly forecast is produced in October to support the budgeting and planning activities of our clients.
 - The update is published the following spring (May).
- The slides that follow present an overall assessment of the local media market, including forecasts and explanations, followed by a drilldown of various segments (beginning on slide 26).

For more information on the various segments that constitute the overall local media market, please contact Mark Fratrik, SVP and chief economist, at mfratrik@biakelsey.com.



Objectives

Our forecast objectives include:

- Presenting an overall assessment of the local media market
- Providing a 360-degree view of the market for local advertising defined as some form
 of targeted messaging to specific geographic markets spent by national, regional and
 SMB advertisers
- Offering an independent, objective and credible five-year forecast of the market situation
- Giving clients a view into the key drivers and assumptions behind the top-line forecasts



Forecast Methodology

- BIA/Kelsey gathers as much proprietary and secondary information as available by segment.
- We then generate preliminary forecasts by segment and discuss them with leaders in our key media — online, mobile, Yellow Pages, TV, radio, etc.
- Our process includes using third-party and public company reports to adjust and fine-tune forecasts.
- We tie a bottom-up approach with a top-down approach.
- Our forecast utilizes long-standing industry expertise and knowledge to adjust drivers and key assumptions.



Executive Summary



Overall Local Media / Advertising Platforms

BIA/Kelsey defines the **local media advertising marketplace** as all media generating revenues by selling access to local audiences to all types of advertisers. "Local" audience advertising sales include buys specifying in local and regional markets.

- 2016 saw inconsistent U.S. economic growth.
 - The first two quarters of real GDP growth were disappointing, although the second half will be somewhat stronger.
 - Job growth has slowed slightly as we move closer to full employment.
 - Wage gains are showing some signs of increasing, emboldening consumers as well as national and local advertisers to increase their spending.
- Weaker performances in some traditional media led to a slight decrease in our total advertising estimate for 2016 to \$145.2 billion.
 - The 2016 total level is down from our original estimate in large part due to lower than expected political advertising. However, political advertising was still a strong boost in this even-numbered year.



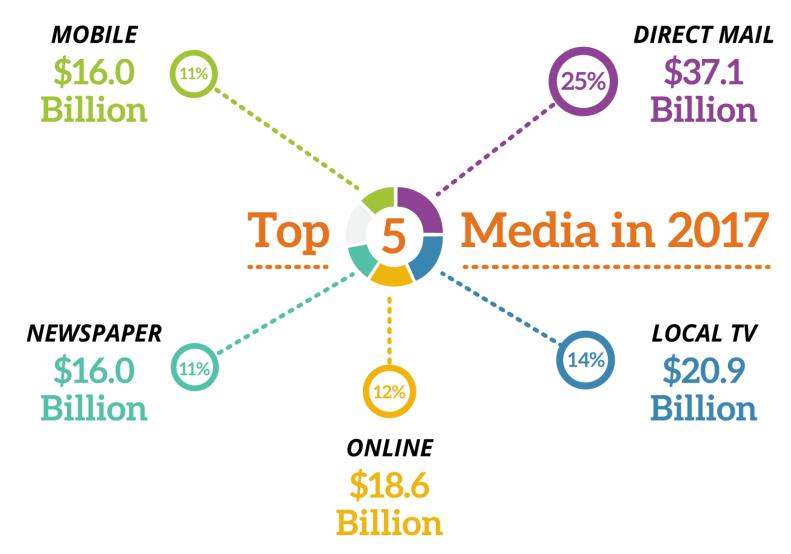
Overall Local Media/Advertising Platforms

- For 2017 total local advertising will increase 2.4%, even with the absence of significant political advertising.
- Overall, the local advertising marketplace will see consistent growth of 3.8% CAGR from 2016-2021, powered by strong growth in mobile and social advertising, noticeable political advertising in even-numbered years, and overall growth in the U.S. economy.
- As a result of robust growth, local advertising spending will reach approximately \$174.9 billion by 2021.
- Growth in online/digital advertising revenues will be higher than originally predicted, with a 2016-2021 CAGR of 11.5%.
- Traditional advertising revenues will actually see a decrease in the 2016-2021 period with a CAGR of -0.5%.
- By 2021 local online/interactive/digital advertising revenues will be \$76.3 billion, growing to 43.6% of total local media advertising revenues from a 30.4% share in 2016.



U.S. Local Advertising Forecast 2017

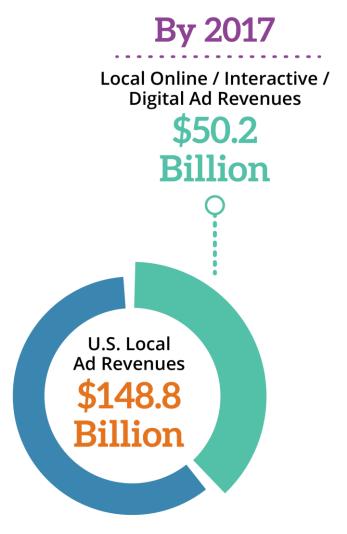
Top 5 Media

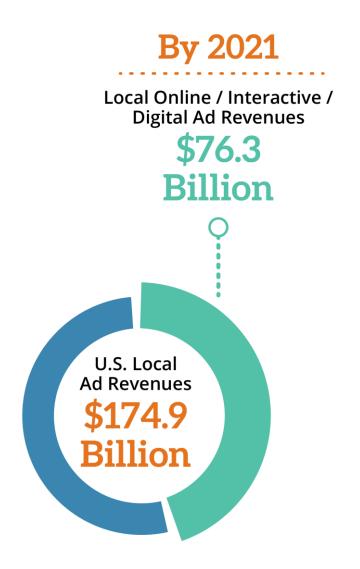




U.S. Local Advertising Forecast 2017 vs 2021

Looking Ahead









National and Specific Media Overview Total U.S. Spending in Local Markets





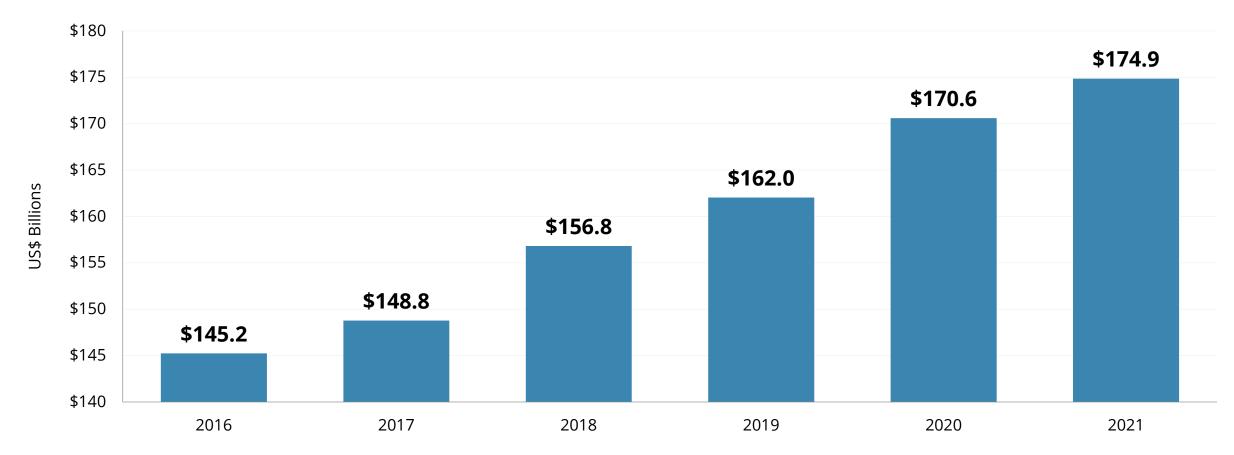
Total U.S. Spending in Local Markets

Although slightly less than expected in 2016, due in part to lower political ad spending, targeted local advertising will still grow from both national and local advertisers



Local Advertising: Five-Year Forecast





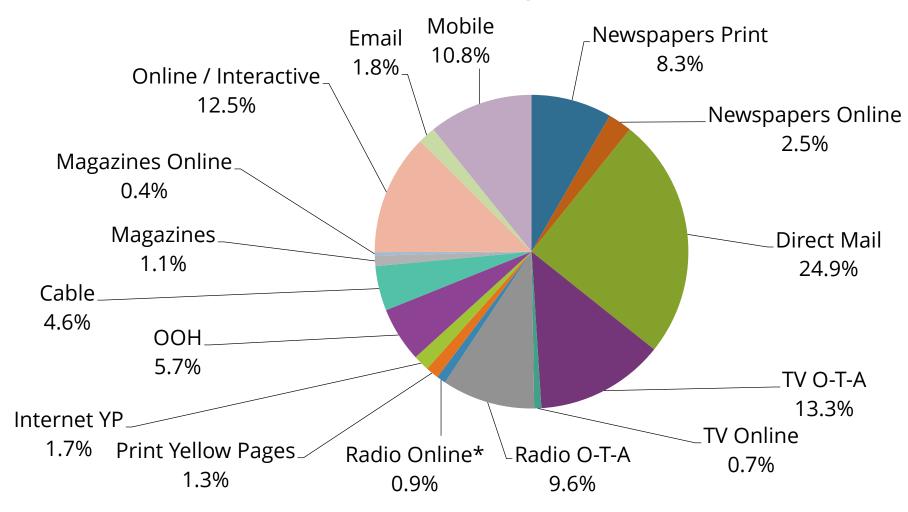
Note: Numbers are rounded.



Traditional Media Maintain Noticeable Share of Local Ad Market in 2017



2017 U.S. Local Advertising Revenues — \$148.8 Billion

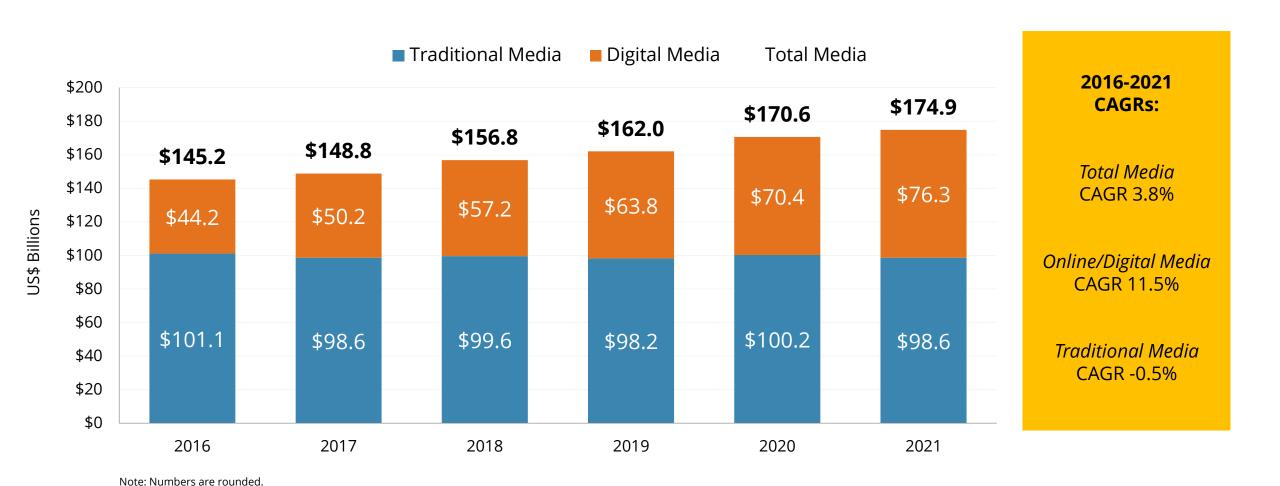




^{*}Radio online revenues include online revenues from terrestrial and online streaming services. Note: Numbers are rounded.

Shift Toward Digital Media Continuing – Ad Revenues

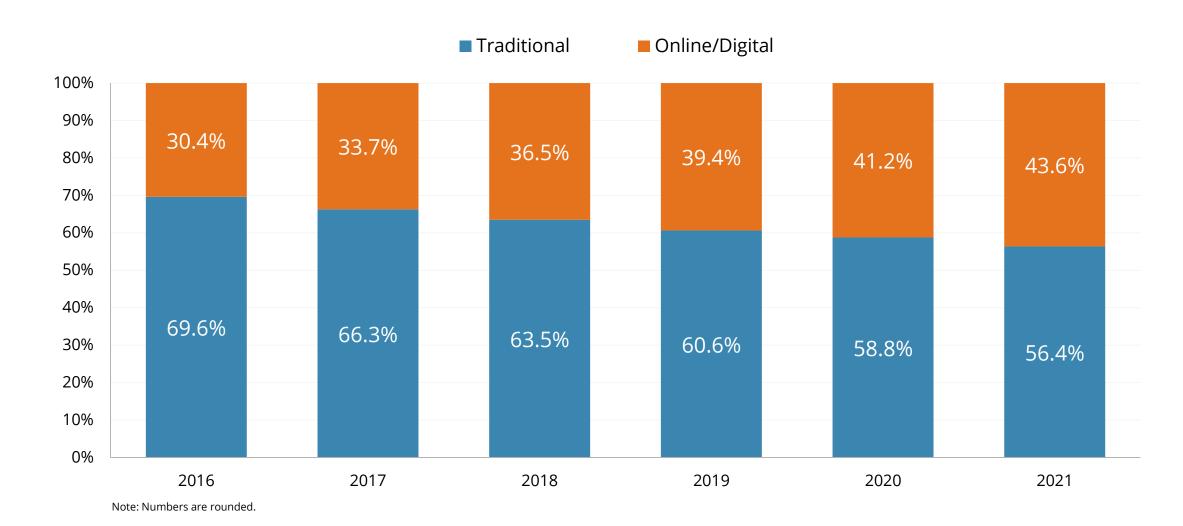




BIA Kelsey

Shift Toward Digital Media Continuing – Percentage









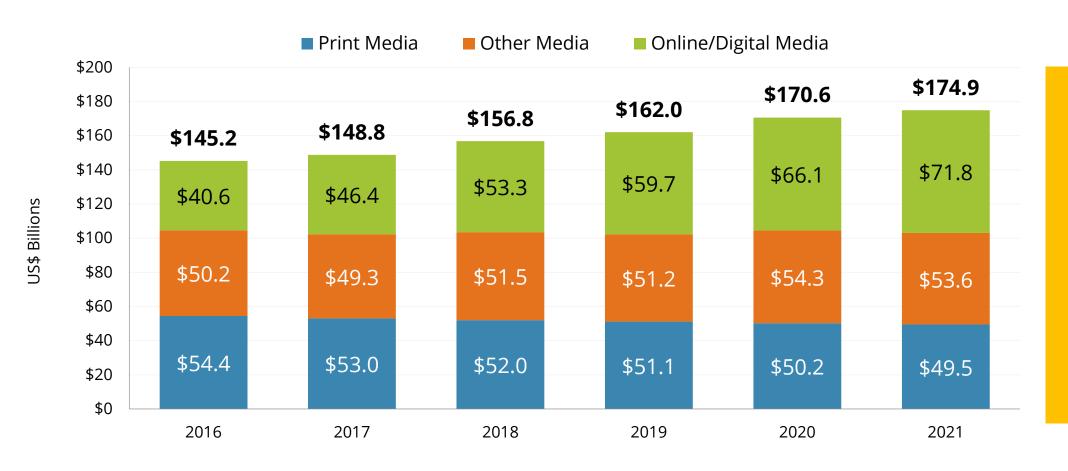
Traditional Media Decline Is Not Uniform Online/digital's share of local advertising market will exceed the share of print media by 2018



Local Online/Interactive Cutting Deeply Into Print



Local Advertising Revenues by Type: 2016-2021



2016-2021 CAGRs:

Total Media CAGR 3.8%

Online/Digital Media
CAGR 12.1%

Other Media CAGR 1.3%

Print Media CAGR -1.9%

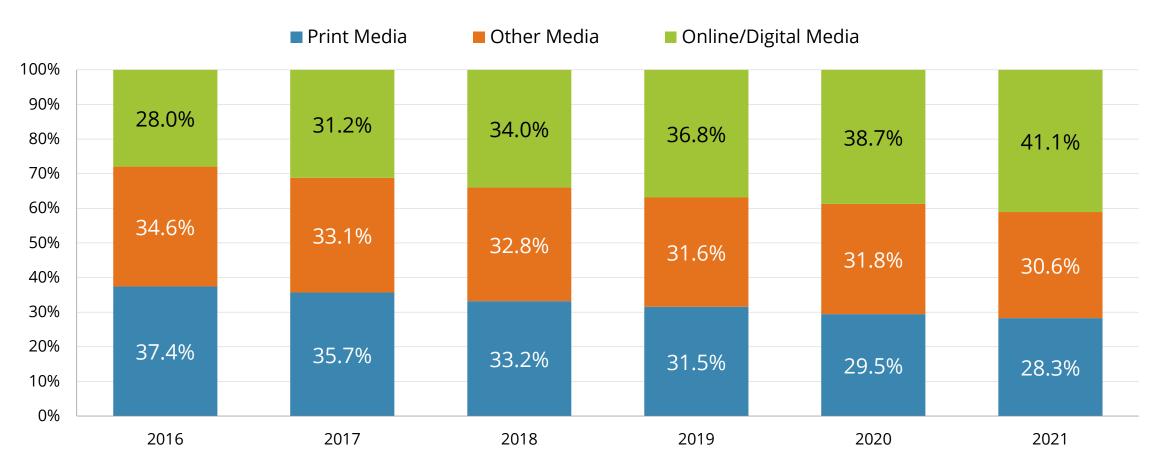
Note: Numbers are rounded. Print media includes local newspapers, local magazines, direct mail and print Yellow Pages. Other media includes local over-the-air television, local cable systems. out-of-home and local radio. Online/digital includes all forms of online desktop and mobile ad spending.



Local Online/Interactive Cutting Deeply Into Print



Local Advertising **Share** by Type: 2016-2021

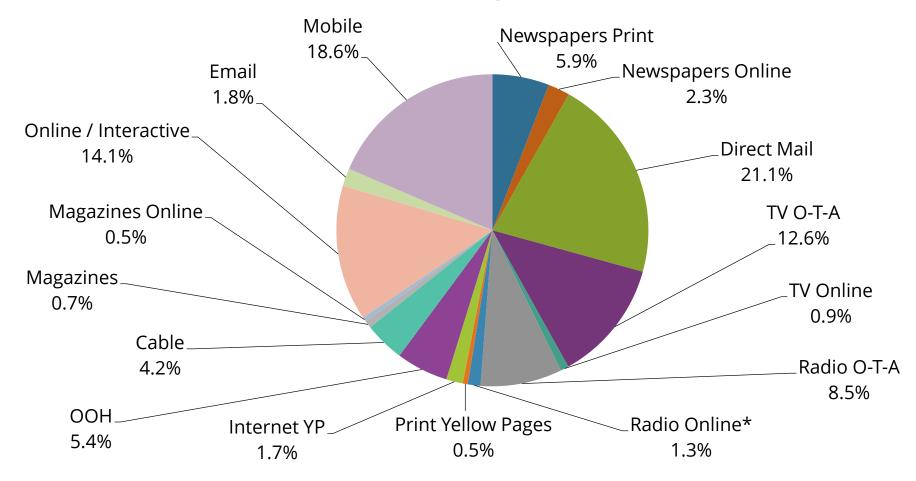


Note: Numbers are rounded. Print media includes local newspapers, local magazines, direct mail and print Yellow Pages. Other media includes local over-the-air television, local cable systems, out-of-home and local radio. Online/digital includes all forms of online desktop and mobile ad spending.



Local Ad Market Includes Smaller Shares for Some Traditional Media in 2021

2021 U.S. Local Advertising Revenues — \$174.9 Billion





Specific Media: Revenues & Share



Media (in order of largest to smallest contribution in local advertising pie for 2017)



Direct Mail - \$37.1B (25% share)

Direct mail (such as direct solicitation, couponing and catalogs) remains an important part of advertising mixes for different types of national and local advertisers.



Local Video* - \$32.1B (22% share)

While local television stations and cable systems have the largest shares in this segment, online and mobile video options are cutting into those shares.



Local Over-the-Air Television - \$19.8B (13% share)

This is still an important advertising platform for many national and local advertising mixes.



Local Cable Television - \$6.9B (5% share)

In a non-political year, share will decrease, and with cord-cutting, cord-shaving and skinny bundles, future growth may be limited.



Out-of-Home Video - \$1.7B (1% share)

The ability to reach audiences with advertising messages that cannot be avoided (e.g., digital cinema advertising, video in taxicabs and elevators) makes these platforms attractive.



Specific Media: Revenues & Share (continued)



Media (in order of largest to smallest contribution in local advertising pie for 2017)



Mobile Video - \$1.0B (1% share)

Mobile video is expected to grow substantially over the next few years as smartphone usage rockets forward.



Online - \$18.6B (12% share)

Competition has kept desktop advertising revenue growth slow.



Newspapers - \$16.0B (11% share)

Print advertising continues to decrease while online advertising growth is limited due to competition.



Mobile - \$16.0B (11% share)

Mobile advertising revenues maintain rapid growth as smartphone usage increases, with all local mobile ad segments rising at double-digit rates over the next few years.



Radio - \$15.7B (11% share)

Competition for both audiences and advertisers has slightly decreased the share from over-the-air advertising while online efforts by stations continue to increase revenues.



Specific Media: Revenues & Share (continued)



Media (in order of largest to smallest contribution in local advertising pie for 2017)



Out of Home - \$8.4B (6% share)

This platform remains one of the best ways to reach audiences in a wide variety of locations.



Social* - \$4.6B (3% share)

Local social advertising continues to grow at extraordinary rates as more mobile apps are devoted to this area.



Directories - \$4.5B (3% share)

Digital services growth is only partially offsetting slides in print revenues and reach.



Local Magazines - \$2.1B (1% share)

Increased revenues on the online side are not enough to compensate for continued decreases in print revenues.



Media Definitions



Media	Description			
Direct Mail	All revenues spent by national and local advertisers in promoting their products/services through mailings and catalogs			
Newspapers	All revenues generated by local daily and weekly newspapers from national and local advertisers. Includes all online advertising revenues generated by these local newspapers.			
Cable Television	All revenues generated by local cable systems for sale of time to either national or local advertisers on all their aired networks. Does not include any advertising sold by national cable networks.			
Email	All revenues spent by national and local advertisers in email solicitation.			
Internet Yellow Pages (IYP)	All revenues generated by local directory companies for their digital/online listing services. Also includes revenues from other digital products sold by directory companies including services related to websites, video, SEM and mobile ad networks.			
Print Yellow Pages (PYP)	All revenues generated by local directory companies for their print listings.			
Magazines	All revenues generated by local/regional magazines from either national or local advertisers. Does not include any advertising generated by magazines with a national subscriber base.			

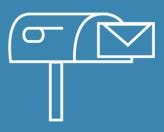


Media Definitions



Media	Description
Mobile	All revenues generated from advertising on mobile devices. This includes search, display, mobile video, messaging and native social ads.
Online	All revenues generated by online companies selling locally targeted advertising. These advertisements could be sold by local pure-play online companies or national companies offering geo-targeted advertising. Includes display, search and classified/vertical advertising.
Out-of-Home (OOH)	All revenues generated from sale of advertising in locations outside homes. Includes traditional billboards, digital billboards, digital cinema.
Radio	All revenues generated by local radio stations for sale of time to either national or local advertisers. Does not include any advertising sold by national radio networks.
Television	All revenues generated by local television stations for sale of time to either national or local advertisers. Does not include any advertising sold by over-the-air national networks or any retransmission consent revenues generated by these local television stations.
Social	Money spent on ad formats across social networks. Now predominantly consisting of native advertising formats that serve as an alternative to display and can generate higher engagement and command premium rates.
Video	Local video advertising includes all advertising revenues generated by video advertising shown by local over-the-air television stations, local cable systems, mobile devices, online sites and out-of-home displays.





Direct Mail





Direct Mail

This traditional medium is still heavily used to drive local commerce



Direct Mail Forecast Summary



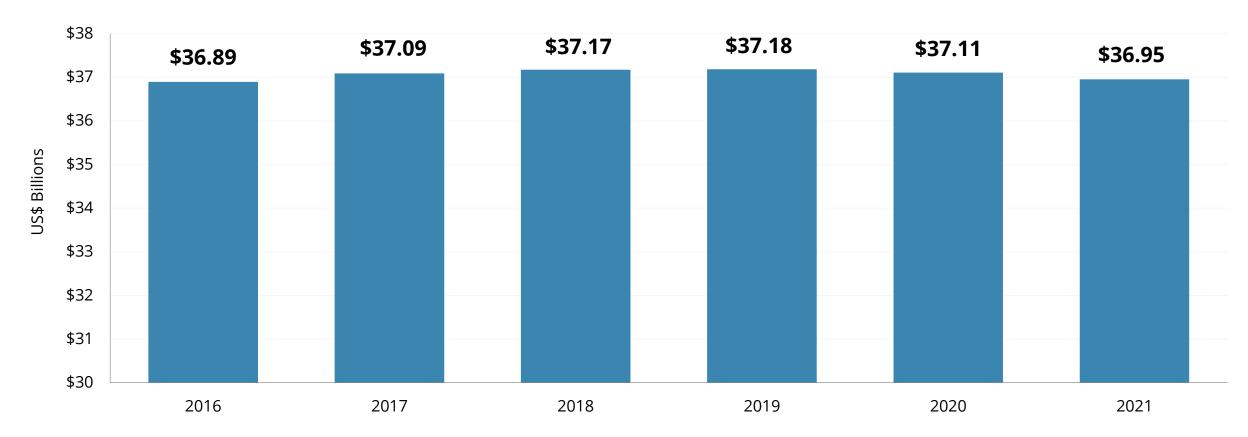
- Direct mail remains a large chunk of the local media pie due to its effectiveness at reaching local audiences and directly generating foot traffic to local retailers, where the majority of commerce continues to happen.
- Given that delivery costs have been reduced this year with cheaper postage prices from the U.S.
 Postal Service, current direct mail ad budgets go a long way and effectively reach more people.
- Direct mail volumes have held fairly steady over the past year and will likely see only a mild slide in the next few years.
- Although the CPMs for direct mail can be higher than some alternative media when factoring in production and delivery costs, direct mail remains worthy of the premium prices given its effectiveness in reaching geographically and demographically targetable audiences. Direct mail ads are unique because they can physically be held and viewed multiple times per person and by multiple members of a household. It should come as no surprise that at times some online companies (even Google) use direct mail to reach new customers.



Direct Mail



Five-Year Forecast



Note: Numbers are rounded.



Direct Mail: Annual Revenue Changes



Media	2016	2017	2018	2019	2020	2021	CAGR (2016-2021)
Direct Mail	-2.7%	0.5%	0.2%	0.0%	-0.2%	-0.4%	0.0%
Total Local Adv.	3.9%	2.4%	5.4%	3.3%	5.3%	2.5%	3.8%
GDP	3.0%	4.4%	4.3%	4.2%	4.3%	4.1%	4.3%





Local Video





Local Video Marketplace

Mobile and online video are making substantial gains in the overall video marketplace



Local Video Advertising Defined



This estimate involves combining the advertising revenues from several media:

- Local Television all its core over-the-air advertising revenues (excludes digital revenues and retransmission consent fees)
- Local Cable all its local cable systems' advertising revenues
- Out-of-Home digital cinema advertising revenues and advertising revenues from out-of-home video delivery (e.g., taxicab video)
- Online portion of local online revenues generated from video advertising by pure-play online companies and online sites of other local media (newspapers, television, radio and directories)
- Mobile revenues from advertising related to mobile video services



Local Video Advertising Trends

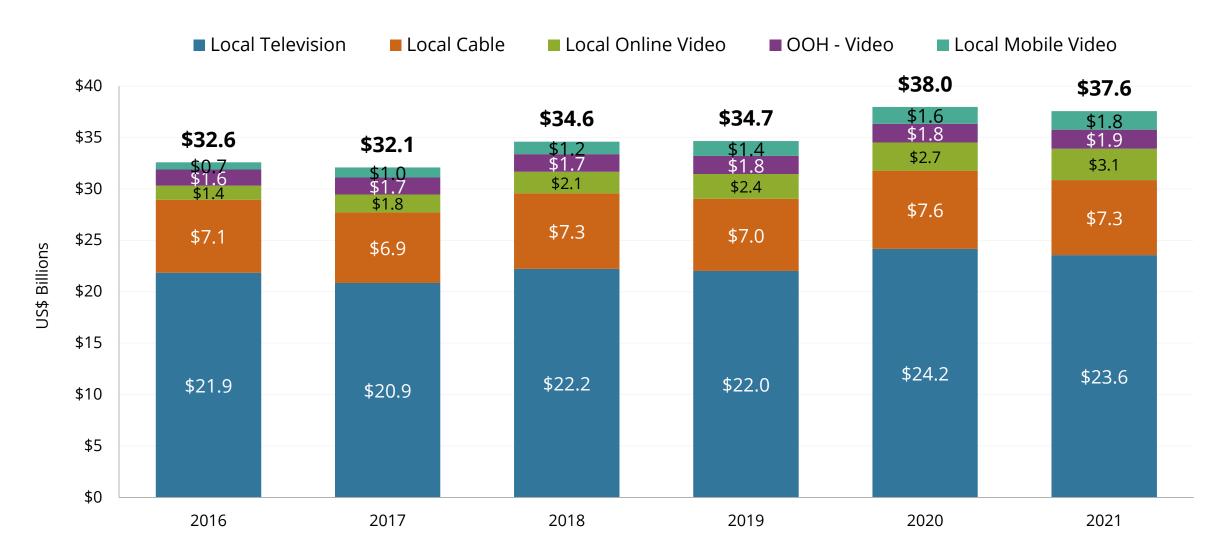


- Overall local video advertising revenues will grow slower between 2016 and 2021 than the total local marketplace 2.9% CAGR vs. 3.8% CAGR due to the lack of political advertising in 2021 (however, looking at non-political years, local video growth for 2017-2021 is at a 4.0% CAGR and clearly exceeds the overall local marketplace).
- Local television stations remain the dominant players in this market as many different types of advertisers (e.g., automobile dealers) still greatly utilize this medium in their advertising mix.
- Local cable systems show consistency in selling advertising, especially in the even-numbered years
 with political advertising gains. "Cord-cutting" and "cord-shaving" behavior by consumers and "skinny
 bundle" offers by distributors will limit growth.
- Local online video continues to demonstrate strong growth (CAGR +17.2%), as advertisers strive to reach consumers across multiple platforms.
- Out-of-home video, including digital cinema, maintains its share in the local video marketplace, growing at almost the same rate (CAGR +3.5%).
- Local mobile video (CAGR +20.5%) is still the fastest growing part of this market, as more advertisers trying to reach consumers are increasingly accessing this advertising platform.



Local Video Advertising Revenues





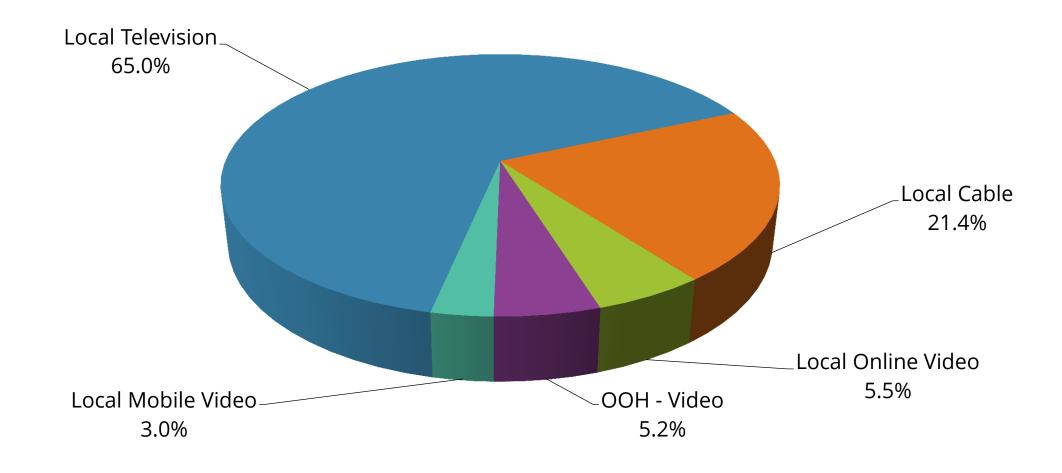


Note: Numbers are rounded.

2017 Local Video Advertising Revenues



Distribution Across Media

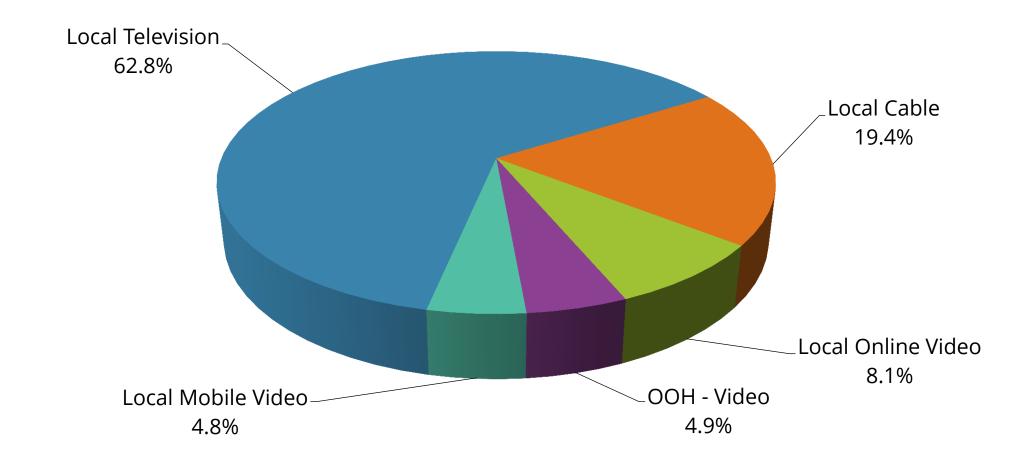




2021 Local Video Advertising Revenues



Distribution Across Media

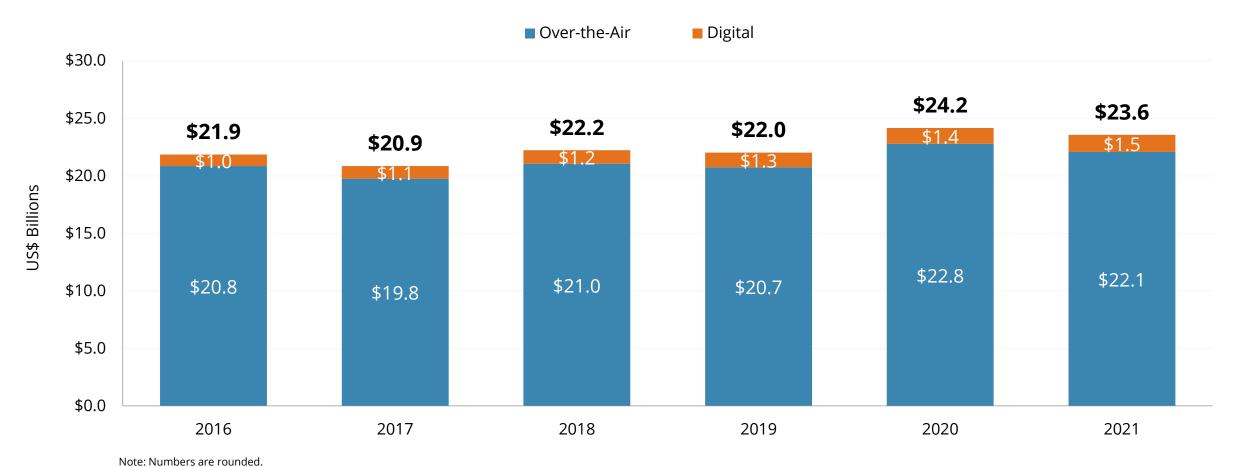




Television



Five-Year Forecast



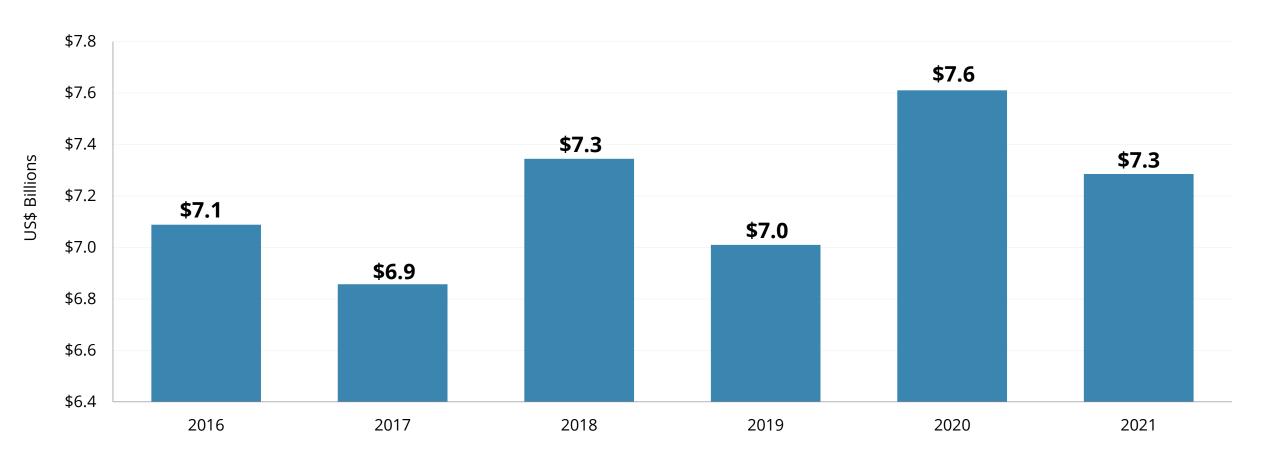




Local Cable



Five-Year Forecast



Note: Numbers are rounded.



Local Video: Annual Revenue Changes



Media	2016	2017	2018	2019	2020	2021	CAGR (2016-2021)
Local Online Video	41.9%	26.7%	19.6%	15.5%	13.5%	11.4%	17.2%
Out-of-Home Video	8.6%	5.6%	3.1%	3.0%	2.8%	2.8%	3.5%
Local Television	12.1%	-4.6%	6.6%	-0.9%	9.7%	-2.5%	1.5%
Local Cable	9.4%	-3.3%	7.1%	-4.6%	8.6%	-4.3%	0.6%
Local Mobile Video	59.3%	37.6%	26.3%	17.6%	14.2%	9.0%	20.5%
Total Local Video	13.0%	-1.6%	7.8%	0.1%	9.6%	-1.1%	2.9%
Total Local Adv.	3.9%	2.4%	5.4%	3.3%	5.3%	2.5%	3.8%
GDP	3.0%	4.4%	4.3%	4.2%	4.3%	4.1%	4.3%





Online / Interactive





Local Online / Interactive

Desktop video and social are growing at double-digit CAGRs



Online / Interactive Forecast Summary



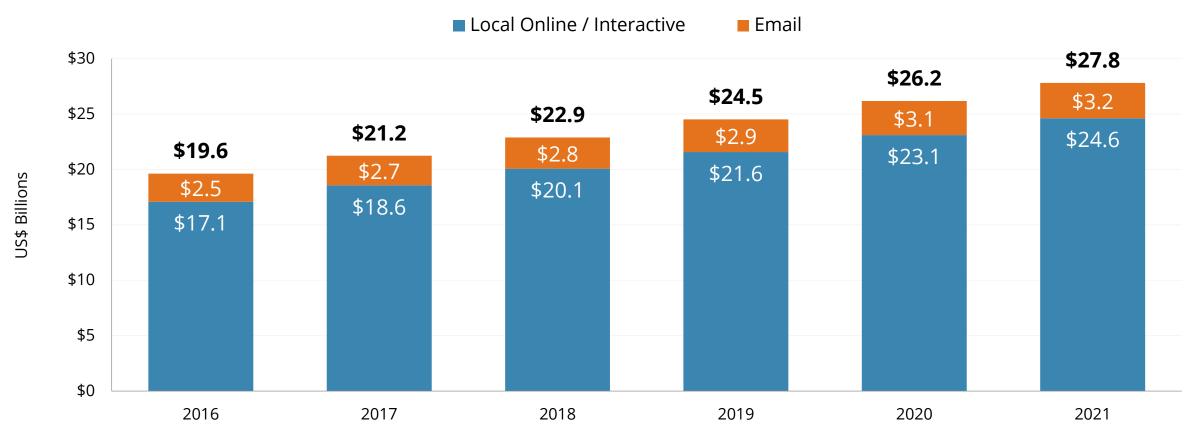
- Online/interactive as a whole will grow at a 7.6% CAGR, with local desktop video experiencing a strong 17.2% CAGR, followed by local desktop social at an 11.6% CAGR.
- Local desktop display (inclusive of video and social) is expected to have a 10.3% CAGR, as improved broadband access makes high-quality online streaming and sharing of content easier.
- Local search on desktop devices will grow at a 5.7% CAGR. As more search activity takes
 place on mobile devices, mobile is cannibalizing search dollars from desktop. However,
 ultimately the local search dollars still go to the same giant players (Google/Bing) that have
 footholds in both channels.
- Email is expected to grow at a 4.7% CAGR, driven by volume increases with consumers choosing to opt in to more lists of their favorite businesses. The mutually beneficial relationship allows consumers to stay informed of the latest offerings and promotions while generating repeat business for firms.



Local Online / Interactive



Five-Year Forecast



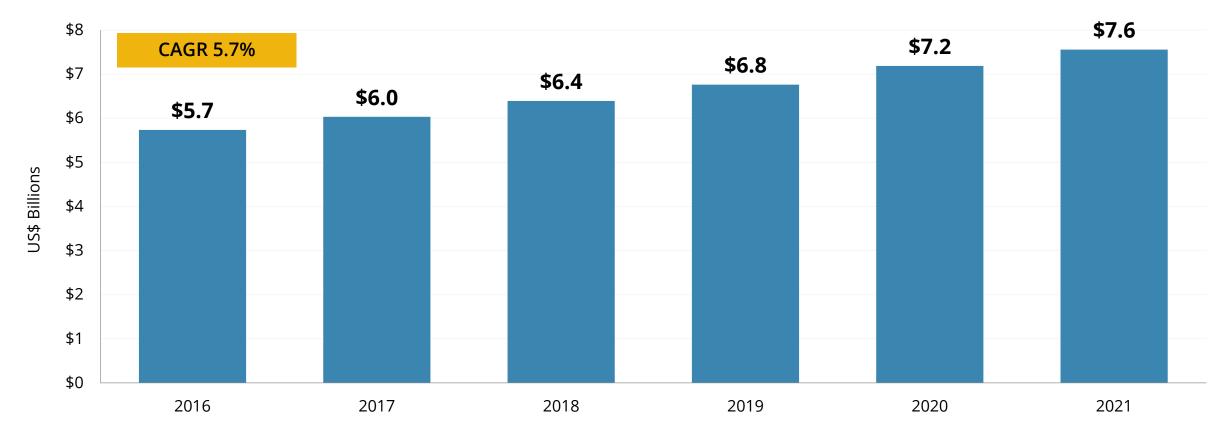
Note: Numbers are rounded. Digital revenues associated with traditional media (e.g., websites of local TV stations, local radio stations, newspapers and magazines) are included in the revenues for the traditional media and not in online/interactive revenues above.



Local Search



Five-Year Forecast



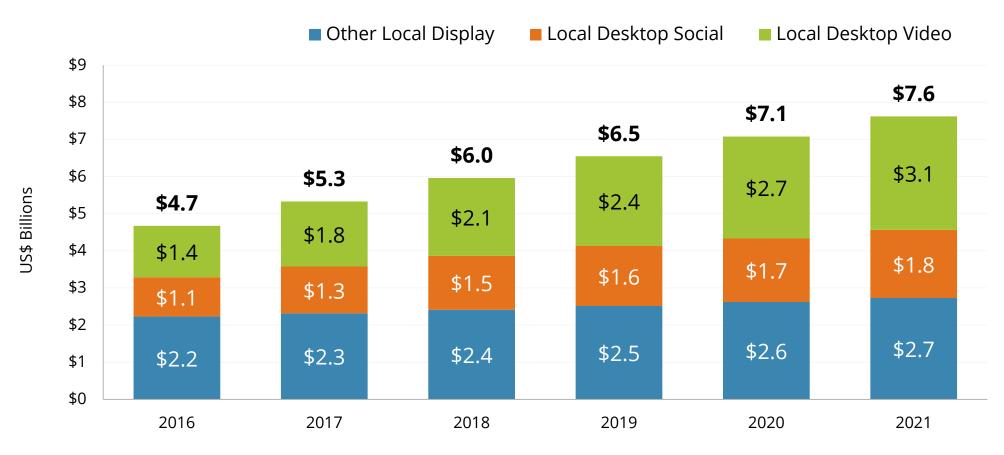
Note: Numbers are rounded.



Local Display



Five-Year Forecast



2016-2021 CAGRs:

Local Desktop Display Combined CAGR 10.3%

Local Desktop Video CAGR 17.2%

Local Desktop Social CAGR 11.6%

Other Local Desktop Display CAGR 4.1%

Note: Numbers are rounded.



Online / Interactive: Annual Revenue Changes



Media	2016	2017	2018	2019	2020	2021	CAGR (2016-2021)
Local Online / Interactive	9.4%	8.7%	8.1%	7.5%	7.1%	6.6%	7.6%
Local Desktop Search	2.5%	5.2%	5.9%	5.8%	6.2%	5.2%	5.7%
Local Desktop Display Combined	18.5%	14.1%	11.8%	9.9%	8.1%	7.7%	10.3%
Local Desktop Video	41.9%	26.7%	19.6%	15.5%	13.5%	11.4%	17.2%
Local Desktop Social	28.7%	18.7%	15.4%	11.1%	5.9%	7.2%	11.6%
Other Local Desktop Display	4.0%	4.0%	4.1%	4.2%	4.3%	4.1%	4.1%
Classified, IYP & Vertical Markets	7.0%	5.9%	5.4%	5.1%	5.0%	4.8%	5.2%
Email	6.3%	5.3%	4.9%	4.7%	4.6%	4.0%	4.7%
Total Local Adv.	3.9%	2.4%	5.4%	3.3%	5.3%	2.5%	3.8%
GDP	3.0%	4.4%	4.3%	4.2%	4.3%	4.1%	4.3%





Newspapers





Local Newspapers

This traditional medium continues to lose subscriptions and readership, resulting in lost local ad share



Newspapers Forecast Summary



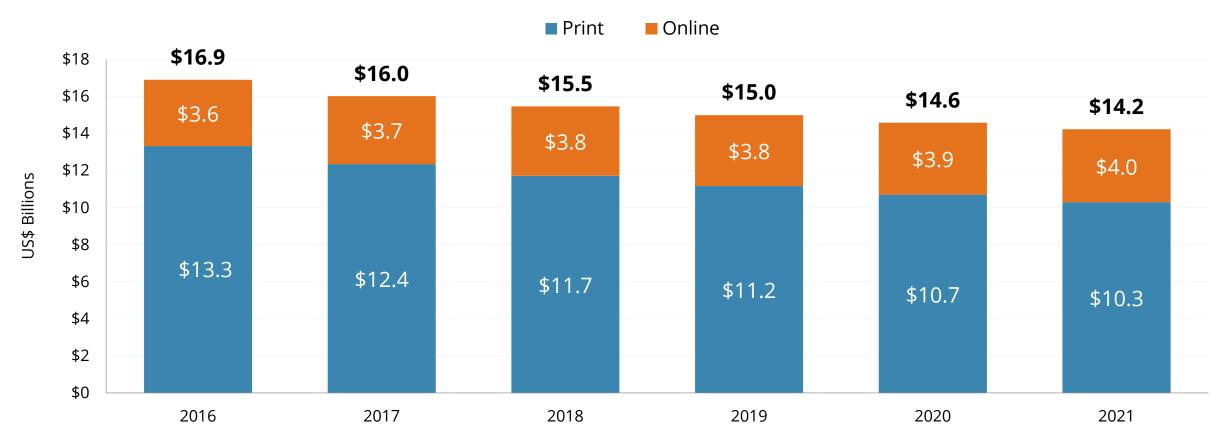
- Print advertising revenues continue to decrease at a rapid rate, and many newspapers are cutting back on their staffing and the number of publishing days.
- Online advertising growth is positive though not enough to make up for the decreases in print advertising.
- As a result, newspapers' share of local advertising is decreasing, with newspapers becoming the sixth ranked local media/advertising platform in 2021, falling from second in 2008.
- Even with this continued decrease, newspapers remain an important part of the advertising mix for certain business categories. However, that position is being challenged by other advertising platforms, especially online and mobile.



Newspapers



Five-Year Forecast



Note: Numbers are rounded.



Newspapers: Annual Revenue Changes



Media	2016	2017	2018	2019	2020	2021	CAGR (2016-2021)
Online	2.0%	2.5%	2.3%	2.0%	1.8%	1.5%	2.0%
Print	-9.6%	-7.3%	-5.2%	-4.7%	-4.2%	-3.9%	-5.0%
Total Newspaper	-7.4%	-5.2%	-3.5%	-3.1%	-2.7%	-2.4%	-3.4%
Total Local Adv.	3.9%	2.4%	5.4%	3.3%	5.3%	2.5%	3.8%
GDP	3.0%	4.4%	4.3%	4.2%	4.3%	4.1%	4.3%





Mobile





Mobile Advertising

Mobile will represent 10.8% of local advertising spend in 2017 and will grow to 18.6% by 2021



Mobile-Specific Forecast Methodology



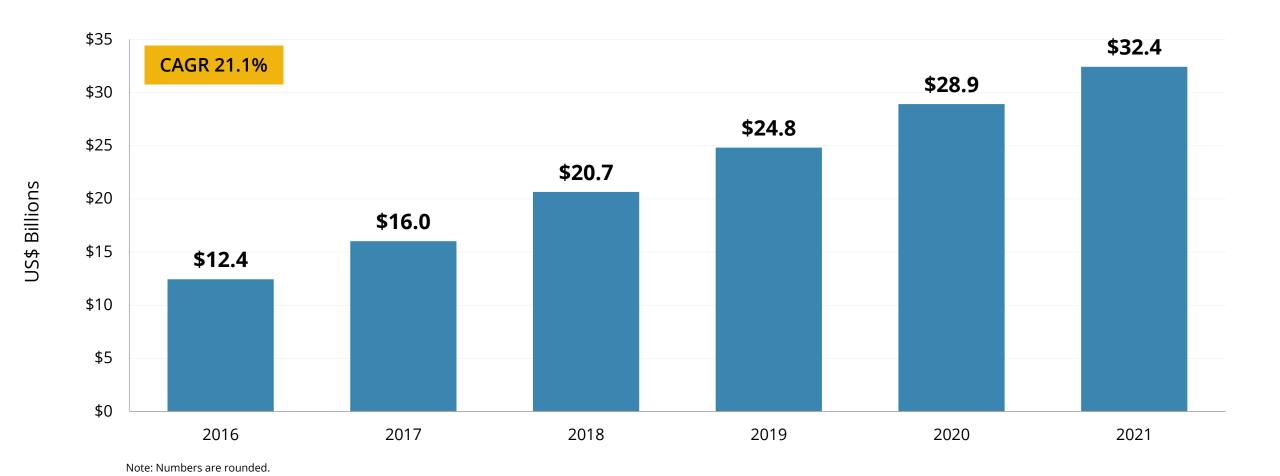
- In addition to interviews and company reports, BIA/Kelsey's mobile forecast is based on:
 - Mobile usage trends
 - Evolving mobile content and ad formats
 - Advertiser adoption patterns
 - Ad performance measurements (e.g., clickthrough and cost-per-click rates)
- This top-down forecasting is then vetted against a bottom-up approach that examines revenues for top players in each mobile advertising segment (e.g., Facebook, Google and ad networks).
- For location-targeted ad revenues, measurement criteria include geographic ad placement, location-specific copy and calls to action (e.g., call local store).
- Mobile ad revenues from apps and web are included.
- Revenues from advertising that appears on tablets are not included in BIA/Kelsey's classification of mobile.*



Location-Targeted Mobile Ad Spend



Five-Year Forecast





Location-Targeted Mobile Ad Revenues



- U.S. location-targeted mobile ad revenues are projected to grow from \$12.4 billion in 2016 to \$32.4 billion in 2021, a 21.1% CAGR.
- Location-targeted mobile advertising is based on a user's location or includes proximityrelevant content to trigger local offline conversions.
- It includes large national advertisers, SMBs and mid-range businesses that are "in-market" (i.e., regional car dealership group).
- Location-specific ad copy or calls to action (e.g., call local store) will classify a given ad as location targeted.
- Audience targeting is an emerging application of location data that uses historical (not current) location as a targeting trigger. This is included in BIA/Kelsey's measurement of location targeted advertising.



Location-Targeted Mobile Ad Revenues



- National advertisers* drive a large portion of the localized share of mobile ad revenues.
 - Adoption of mobile local advertising tactics (e.g., geo-fencing, click-to-call and click-to-map) continues to grow among national advertisers.
 - National advertisers gravitate toward effective, increasingly available and currently undervalued mobile local ad inventory.
 - Innovation among ad networks and ad tech providers (e.g., Google and xAd) will accelerate this draw to location-targeted mobile ads.
- SMB adoption* a lesser but growing share of localized mobile advertising will likewise affect revenues.
 - BIA/Kelsey sees evolving SMB savvy and propensity to self serve with offerings like Facebook ads (pull).
 - Local media companies such as YP will also accelerate adoption through sales and bundling efforts (push).
 - Facebook is growing as a mobile ad choice for SMBs (currently 3 million globally), driven primarily by its relative ease, as well as proprietors' familiarity with the platform based on their personal use.



Location-Targeted Mobile Ad Revenues



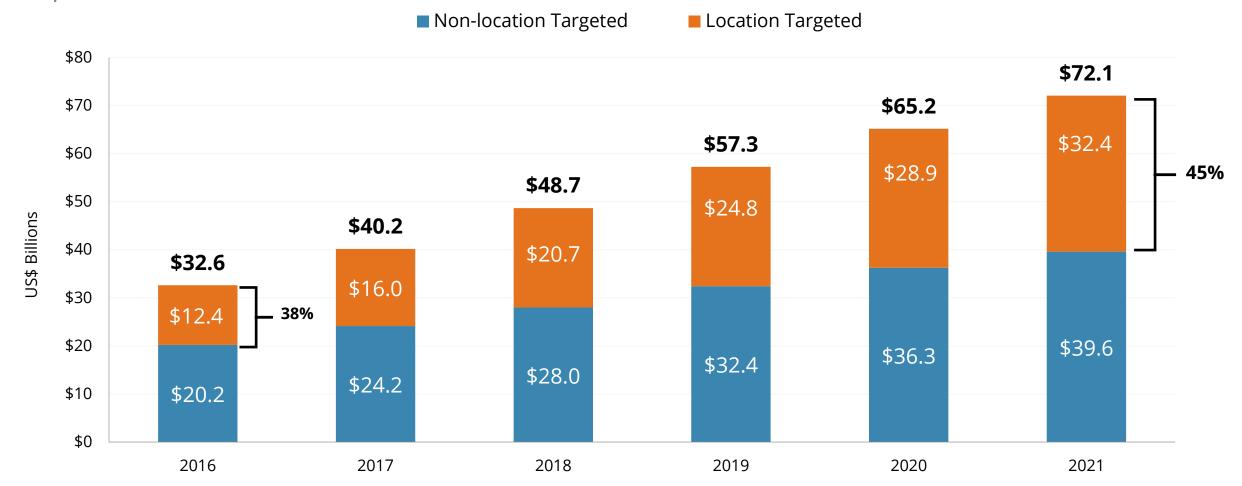
- Localized mobile ad share will also grow as a result of premium ad rates.
- Premiums will come mostly from higher performance (e.g., clickthrough rates, phone calls and store visits).
- Performance deltas are in turn a function of:
 - Higher relevance, immediacy and alignment with consumer local buying intent, all of which are more prevalent in mobile than in other digital and print media.
 - For example, roughly 30% of mobile searches have intent to find local information or products, compared with around 20% of desktop searches that carry local intent.
 - Advertisers increasingly include calls to action to capture this high local intent (e.g., in-unit "map," "reserve" or "call" buttons).



Location-Targeted vs. Non-location-Targeted



Ad Spend in Mobile



Note: Numbers are rounded.



Location-Targeted vs. Non-location-Targeted Ad Revenues



- Location-targeted mobile advertising is a subset of overall U.S. mobile advertising revenues.
- The dynamics and drivers of that location-targeted portion were covered in the previous slides.
- The overall U.S. mobile advertising market is conversely driven by separate but related factors.
 - The largest revenue share is held by Google, which controls roughly 50% of the U.S. mobile ad market, followed by Facebook.
 - Facebook's mobile ad revenue growth is the most notable, with about 84% currently coming from mobile.*
 - Newer entrants are growing quickly with native-social ad innovations (explored later), including Snapchat and Instagram.
 - All of the above companies are evolving their mobile ad models and innovating quickly with new targeting and reporting features.
 - The evolution of these formats will have an impact on market share leaders such as Google in the coming years and influence the direction of the rest of the mobile ad ecosystem.



Overall Mobile Ad Revenue Drivers



- The mobile ad marketplace is in a precarious position due to several unfolding market events.
- A few key factors will decide Google's market share and continued dominance:
 - Most mobile usage happens in-app. However, Google's search volume is built from web (browser) traffic, where it is the front door. This poses a challenge for Google*.
 - Google's answer is to innovate new formats to live in this app-based world. These include Google Assistant,
 Google Home and other products launched in October 2016 to create more intimate touch points with users.
 - Another notable development is Google's new iOS keyboard (launched in May 2016), which brings search and other functionality directly to the mobile device's keyboard, thus lowering friction in having to go to an app or browser to use Google.
 - These moves all have a common theme in getting closer to users and maintain Google's position as the front door to connected experiences. Its success in these endeavors will determine its positioning in the mobile advertising competitive field.
- Ad blocking technology in iOS9 threatens to undermine mobile advertising, but BIA/Kelsey believes this topic will have less impact than reported in industry news. It is only applicable to a narrow portion of mobile advertising (in-browser banner ads for users who download and activate ad blockers).
- It will, however, be a wakeup call for an industry that has gotten lazy in its reliance on low-quality banner advertising, a holdover from the desktop era.



Overall Mobile Ad Revenue Drivers

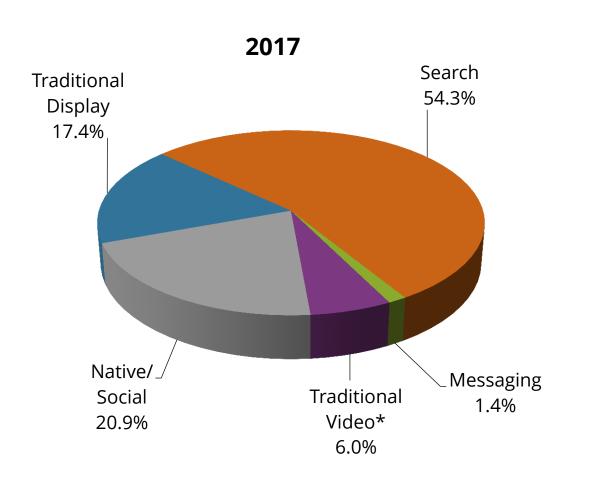


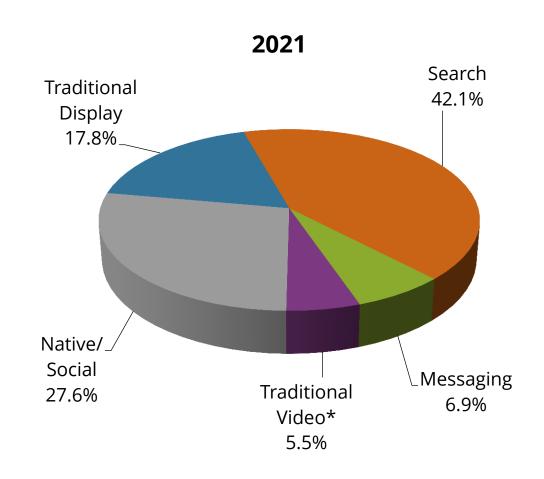
- Another effect of ad blockers will be to motivate advertisers, publishers, agencies and ad tech players to innovate or adopt more effective mobile ad formats.
- This will include, most notably, sponsored content or native social advertising, which is immune to ad blockers.
- Native social advertising is one of the fastest growing formats in mobile advertising. It will pull market share
 from both search and display, due to the above trends, as well as its increasing desirability.
- Native social's advantages stem from high performance compared with other mobile ad formats and benchmarks, and from alignment with mobile device realities. These include:
- The growing consumer influence and buying empowerment of millennials, who are more receptive to native social advertising than other formats.
- Sub-six-inch screens, which favor in-feed units over banners. Mobile screens lack screen real estate for traditional top and side banner ads. Meanwhile, ad inventory inherently grows with a vertically scrolling content feed.
- The continued evolution of in-feed ad units, including action buttons (e.g., "call," "buy") as well as multimedia.
 The latter include increasingly popular and well-performing auto-start/stop video in Facebook and Instagram vertical content feeds.



Local-Targeted Mobile Ad Spend by Format







^{*}Includes traditional video such as in-stream pre-roll ads on YouTube. Does not include natively produced and placed in-feed video in social media, such as Facebook news feed ads. Videos in the latter category are measured separately under native/social.



Mobile Ad Formats: Key Takeaways



- BIA/Kelsey measures various mobile ad formats, including search, display, video, messaging and native social advertising.
- Because they are bought and sold in various ways, different formulas and models apply to the composition and financial modeling of each mobile ad format in this forecast.
- Search advertising currently holds the largest share, followed by display and native social ads.
 Search will continue to eclipse all ad formats and hold the largest share.
- This is driven by premium ad rates that develop as a function of search's intent-driven nature. This
 can be seen so far in Google's commanding lead in U.S. mobile advertising revenues (roughly 50%
 market share).
- This outlook must, however, keep in mind some of the factors mentioned earlier (on slide 62), which could temper search's share in the longer term.
- The search category in this forecast includes web and in-app search, as well as the performance-based advertising that occurs within local listing apps such as Yelp and YP.*
- Search also includes pay-per-call advertising that happens through tools like Google AdWords Extensions.*



Mobile Ad Formats: Key Takeaways



- Native social is a notable and fast-moving format, defined by graphical, multimedia and textual content that is merged into the organic feed-based interfaces* of mobile social apps.
- These in-feed ads are targeted based on granular social signals (e.g., behavior and connections within the social graph), as opposed to traditional display ad targeting methods.
- In that sense, native social should not be confused with traditional display, which mostly takes form in banner ads, including those in social-oriented apps. The latter — though placed adjacent to social content — are counted in the traditional display category.
- Native social ads are conversely defined by their format. They are graphical, multimedia or textual units that are placed in-feed, within social apps composed of a vertical feed of time-based and socially targeted content.*
- The most common examples are Facebook's news feed ads and Twitter's promoted tweets. Instagram and LinkedIn have similar offerings, which continue to grow in prevalence and ad coverage.
- More dynamics and drivers for native social ad growth can be seen in the previous section (slide 63).



Mobile Ad Formats: Key Takeaways



- Another notable trend in this round of mobile forecasting is the inflection point for messaging.
- Previously designated as "SMS," the category was in decline due to clear drops in usage and related advertiser migration.
- However, a new classification now known in this forecast as "messaging" includes rapidly growing messaging apps such as Facebook Messenger (more than 1 billion global users).
- This exploding usage is beginning to show signs for commerce and advertising and is known as "conversational commerce." *
- This involves transactional activity that happens within messaging interfaces, such as customers
 messaging businesses instead of calling them. This will spawn a fair amount of advertising to generate
 transactional activity.
- Moves by Facebook and others to house conversational commerce within these messaging environments has prompted our inclusion of the evolved "messaging" forecast category.
- It not only takes the place of the previous "SMS" category, but it has new growth drivers and calculations, with messaging ultimately growing to about 7% of the local-targeted mobile ad spend pie by 2021 (as seen in slide 64).



Mobile: Annual Revenue Changes



Media	2016	2017	2018	2019	2020	2021	CAGR (2016-2021)
Location-Targeted Mobile	33.1%	28.8%	28.9%	20.2%	16.5%	12.1%	21.1%
Mobile Traditional Display	33.3%	30.5%	28.4%	26.3%	24.3%	2.8%	22.0%
Mobile Search	18.5%	16.6%	19.1%	10.6%	8.9%	9.7%	12.9%
Messaging	50.0%	110.0%	100.0%	91.3%	77.8%	50.0%	84.6%
Mobile Traditional Video*	59.3%	37.6%	26.3%	17.6%	14.2%	9.0%	20.5%
Mobile Native/Social	117.4%	64.4%	51.2%	30.0%	17.0%	16.2%	34.5%
Total Local Adv.	3.9%	2.4%	5.4%	3.3%	5.3%	2.5%	3.8%
GDP	3.0%	4.4%	4.3%	4.2%	4.3%	4.1%	4.3%

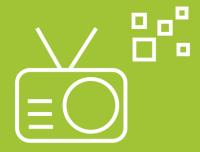
^{*}Includes traditional video such as in-stream pre-roll ads on YouTube. Does not include natively produced and placed in-feed video in social media, such as Facebook news feed ads. Videos in the latter category are measured separately under native/social.





Radio





Local Radio Stations

Radio is experiencing increasing competition for listeners but remains a significant part of many national and local ad campaigns



Radio Forecast Summary



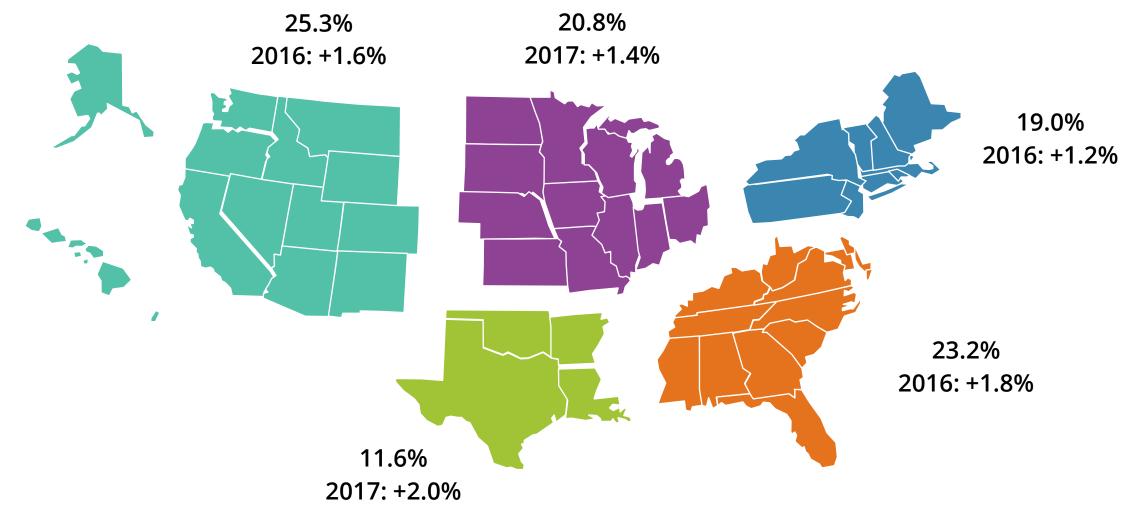
- In 2016 radio over-the-air advertising revenues were slightly positive after two years of negative growth. We expect that meager growth to continue near 1.0% annually.
- Local radio over-the-air advertising still is an important part of certain national and local companies' advertising mixes, especially with business categories such as retail and finance/insurance.
- Some radio groups have made strong efforts in online activities, though the industry's average of total revenues attributable to this area is still quite low.
- Online audio streaming services (e.g., Pandora) continue to attract audiences and more ad dollars now that these companies have some history with their local sales staffs at selling locally targeted advertising on their online platforms.



Distribution of 2017 Local Radio Station Advertising



Revenues and Expected 2017 % Change by Region

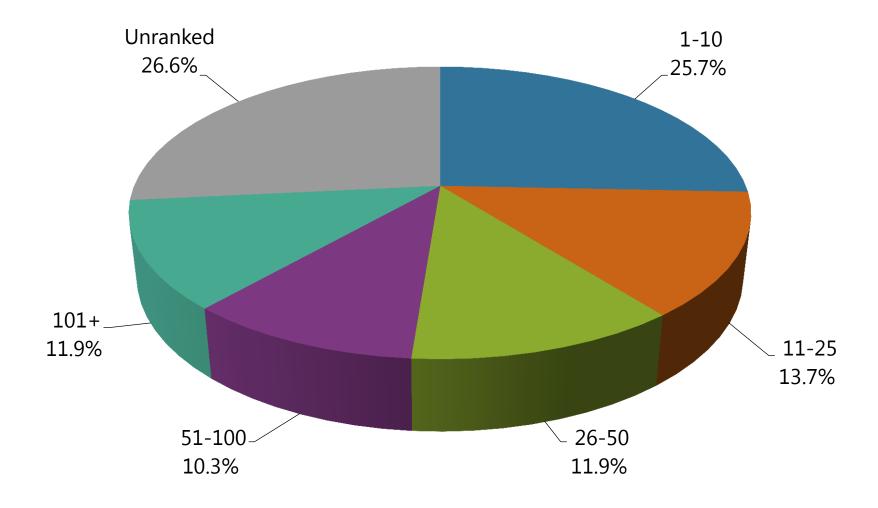




Distribution of Local Radio Station Advertising Revenues



By Market Size in 2017

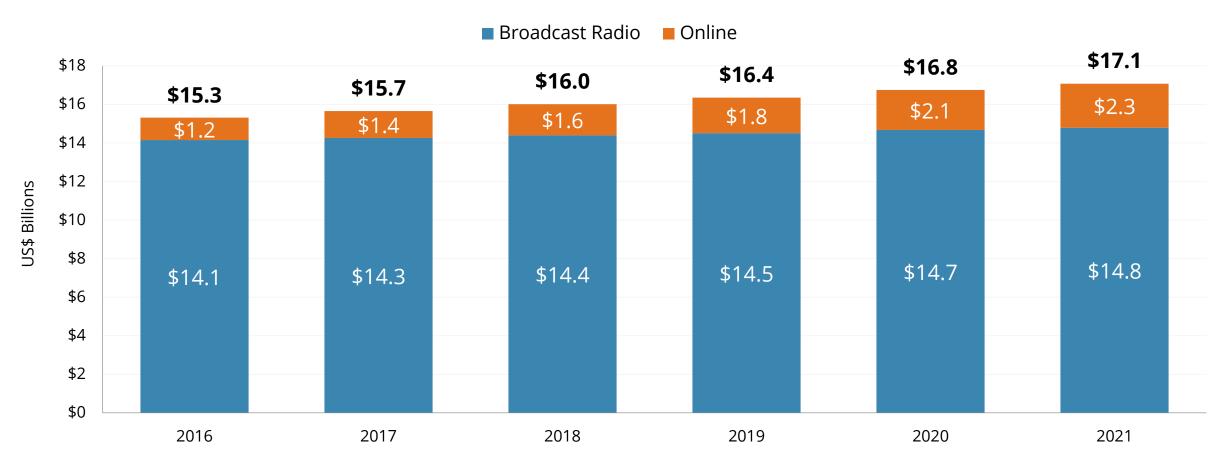




Radio



Five-Year Forecast



Note: Numbers are rounded. Radio online revenues include online revenues from terrestrial and online streaming services.



Radio: Annual Revenue Changes



Media	2016	2017	2018	2019	2020	2021	CAGR (2016-2021)
Online*	21.5%	20.1%	16.1%	13.9%	12.3%	10.2%	14.5%
Broadcast	0.9%	0.8%	0.9%	0.8%	1.2%	0.8%	0.9%
Total Radio	2.2%	2.3%	2.3%	2.1%	2.5%	1.9%	2.2%
Total Local Adv.	3.9%	2.4%	5.4%	3.3%	5.3%	2.5%	3.8%
GDP	3.0%	4.4%	4.3%	4.2%	4.3%	4.1%	4.3%





Out-Of-Home





Out-of-Home

Traditional billboards and newer venues (e.g., elevators) combined effectively reach a wide audience



Local Out-of-Home Trends



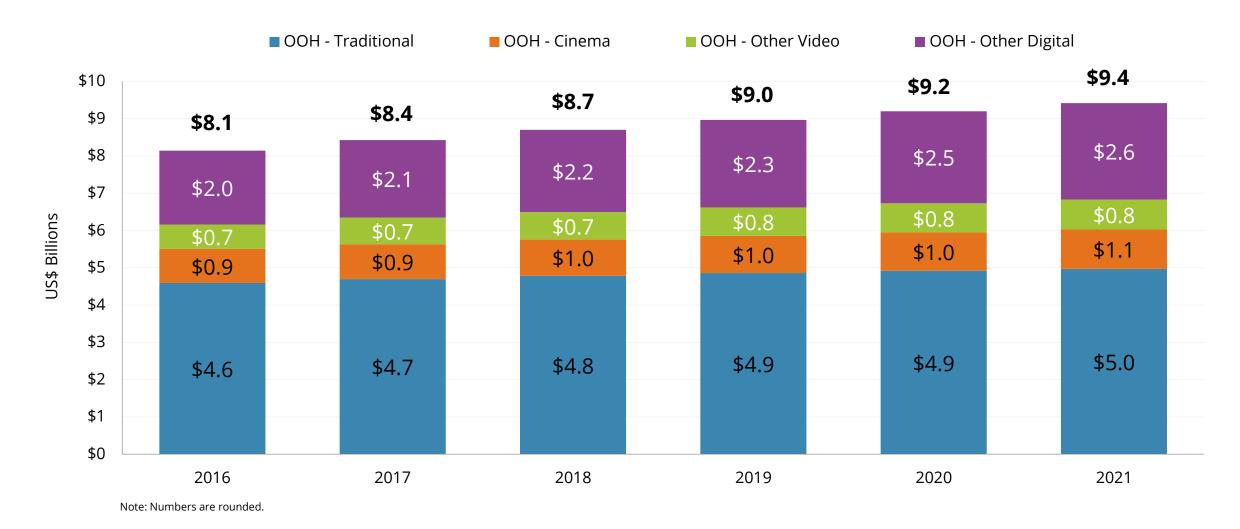
- Local out-of-home consists of various ad platforms: traditional and digital billboards, digital cinema, and other venues (e.g., taxicabs, elevators, kiosks).
- It provides an advertising platform that local audiences cannot avoid and continues to reach a substantial number of consumers.
- Traditional billboard advertising revenues are growing slower in the 2016 to 2021 period than the overall OOH category — 1.6% CAGR vs. 3.0% CAGR — as many national and local advertisers move to more digital OOH and OOH video platforms.
- Cinema advertising is growing at a 2.9% CAGR as cinema operators aim to fully monetize their audiences.
- Other Video is growing at a 4.2% CAGR, providing advertisers opportunities to reach a captive audience with video advertising in taxicabs, elevators, etc.
- Other Digital is growing at a 5.5% CAGR, continuing to attract national and local advertisers with timely advertising such as point-of-sale ads with interactive kiosks.



Local Out-Of-Home



Five-Year Forecast





Local Out-of-Home: Annual Revenue Changes



Media	2016	2017	2018	2019	2020	2021	CAGR (2016-2021)
Traditional Billboards	2.5%	2.2%	2.0%	1.5%	1.3%	1.0%	1.6%
Cinema	7.0%	2.5%	3.0%	3.0%	3.0%	3.0%	2.9%
Other OOH Video	11.0%	10.0%	3.3%	3.0%	2.6%	2.4%	4.2%
Digital OOH	4.4%	4.7%	6.3%	6.3%	5.1%	5.0%	5.5%
OOH Total	4.1%	3.5%	3.3%	3.0%	2.6%	2.4%	3.0%
Total Local Adv.	3.9%	2.4%	5.4%	3.3%	5.3%	2.5%	3.8%
GDP	3.0%	4.4%	4.3%	4.2%	4.3%	4.1%	4.3%





Directories (Yellow Pages)





Directories (Yellow Pages)

The majority of revenues will be digital by 2017



Yellow Pages Forecast Definitions



- BIA/Kelsey's U.S. Yellow Pages forecast is divided into PYP and IYP.
- PYP represents print Yellow Pages revenues, as well as other revenues that companies would account for as print, including White Pages advertising and direct mail.
- The IYP category represents digital revenues. In addition to advertising on Internet Yellow Pages desktop and mobile applications, IYP includes:
 - Display ad networks
 - Email marketing, reputation and presence management
 - Mobile display ad networks
 - SEM/SEO
 - Social media
 - Websites
 - Other digital revenues



Yellow Pages Forecast Summary



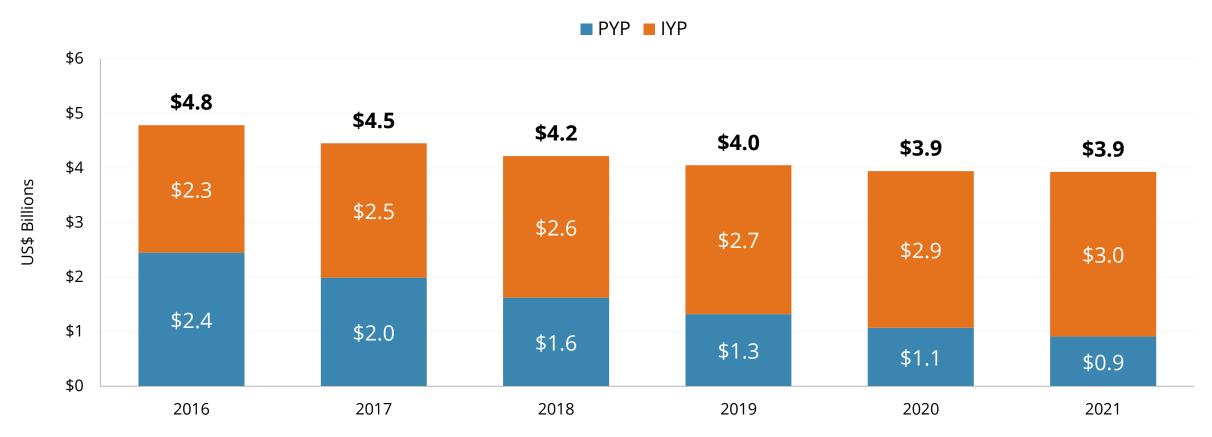
- Print revenue declines will continue (CAGR -17.9%) through 2021, as advertisers shift their ad budgets to newer media.
- We expect to see positive growth on the digital side of the business, growing at a 5.2%
 CAGR for 2016 to 2021.
- Digital growth is strongest in areas like search, mobile and digital services (SEM, websites, social media, programmatic, mobile, presence and reputation management), while it is at best flat in the core IYP product set. More than half of digital revenues are now coming from products other than IYP.
- Digital revenues will surpass print revenues by 2017, and by 2021 digital will account for 77% of Yellow Pages total revenues.



Yellow Pages



Five-Year Forecast



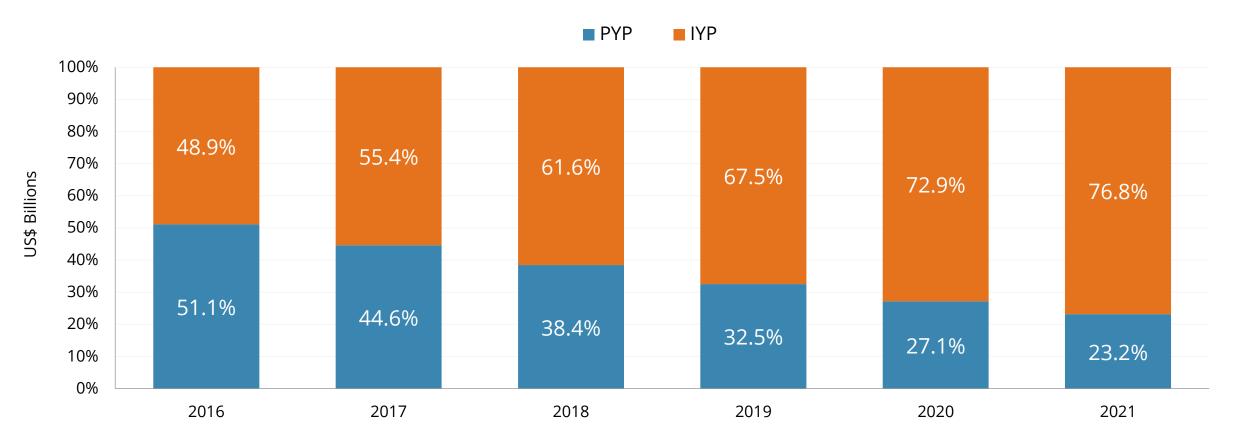




Yellow Pages



Five-Year Forecast



Note: Numbers are rounded.



Directories: Annual Revenue Changes



Media	2016	2017	2018	2019	2020	2021	CAGR (2016-2021)
IYP	5.9%	5.3%	5.3%	5.2%	5.2%	5.0%	5.2%
Print YP	-18.7%	-18.7%	-18.5%	-18.7%	-18.8%	-15.0%	-17.9%
Yellow Pages	-8.3%	-6.9%	-5.3%	-4.0%	-2.6%	-0.4%	-3.9%
Total Local Adv.	3.9%	2.4%	5.4%	3.3%	5.3%	2.5%	3.8%
GDP	3.0%	4.4%	4.3%	4.2%	4.3%	4.1%	4.3%





Social Media





Social Media Advertising

Revenues are shooting higher and will more than double current levels by 2021



Social Media Advertising Definition



- Social media advertising is defined as money spent on advertising formats across social networks.
- Social advertising is included in BIA/Kelsey's display revenue forecast, which falls within the online/interactive and mobile advertising categories.
- BIA/Kelsey's definition of social advertising does not include revenues derived from the following:
 - Virtual currency
 - Social marketing/measurement platforms and services
 - Social commerce



U.S. Total Social Media Advertising



Five-Year Forecast



Note: Numbers are rounded.





Mobile Social Advertising

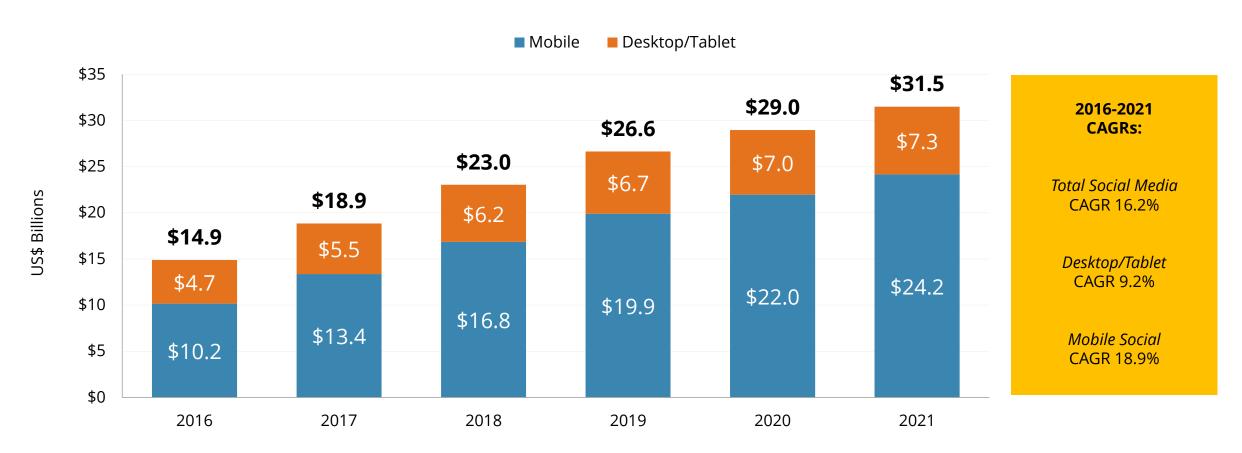
Revenues are growing at an 18.9% CAGR through 2021



U.S. Mobile Social vs. Desktop/Tablet Ad Spend



Five-Year Forecast



Note: Numbers are rounded.



Social Media Advertising Forecast Summary

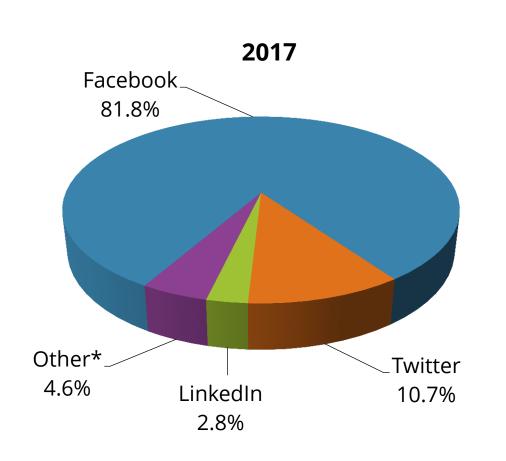


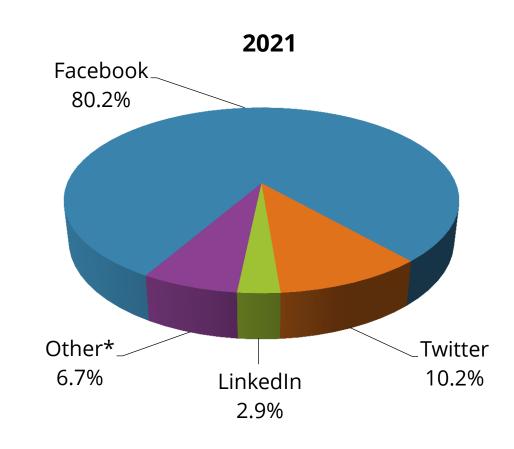
- The social media advertising industry in the U.S. will grow to \$31.5 billion by 2021, from \$14.9 billion in 2016.
- Social media players have successfully optimized their platforms for both mobile users and advertisers; mobile is now the largest contributor of revenues for most social media companies.
- Driven largely by Facebook and Twitter, U.S. mobile social ad revenues will grow almost 2.5 times the 2016 level by 2021, reaching \$24.2 billion an 18.9% CAGR.
- Facebook dominates the industry currently and will continue to maintain its large market share lead of more than 80% in the foreseeable future, but smaller rivals like Snapchat and Pinterest are starting to gain traction with advertisers and will slowly chip away some market share for themselves.
- Facebook has been particularly resilient at maintaining its user base and quickly adjusting to new competitive threats from rivals by offering new features to users and their advertising partners. Many companies have come to recognize Facebook's leadership in the space and rely on it as their primary channel to reach social media users.



Social Media Advertising by Company











Local Social Media Advertising As social media's popularity with SMBs increases, a larger portion of ad spending will target local audiences



Social Local vs. National Ad Spend



Five-Year Forecast



Note: Numbers are rounded.



Social Media Advertising: Annual Revenue Changes



Media	2016	2017	2018	2019	2020	2021	CAGR (2016-2021)
Social Media	49.1%	26.6%	22.2%	15.7%	8.7%	8.8%	16.2%
Desktop/Tablet	25.9%	16.2%	12.9%	8.8%	3.7%	5.1%	9.2%
Mobile	63.0%	31.5%	26.0%	18.2%	10.4%	10.0%	18.9%
Local Social	75.8%	48.7%	41.4%	25.8%	14.8%	14.6%	28.3%
Total Local Adv.	3.9%	2.4%	5.4%	3.3%	5.3%	2.5%	3.8%
GDP	3.0%	4.4%	4.3%	4.2%	4.3%	4.1%	4.3%





Local Magazines





Local Magazines

Readers and revenues are shifting online



Local Magazines Forecast Summary



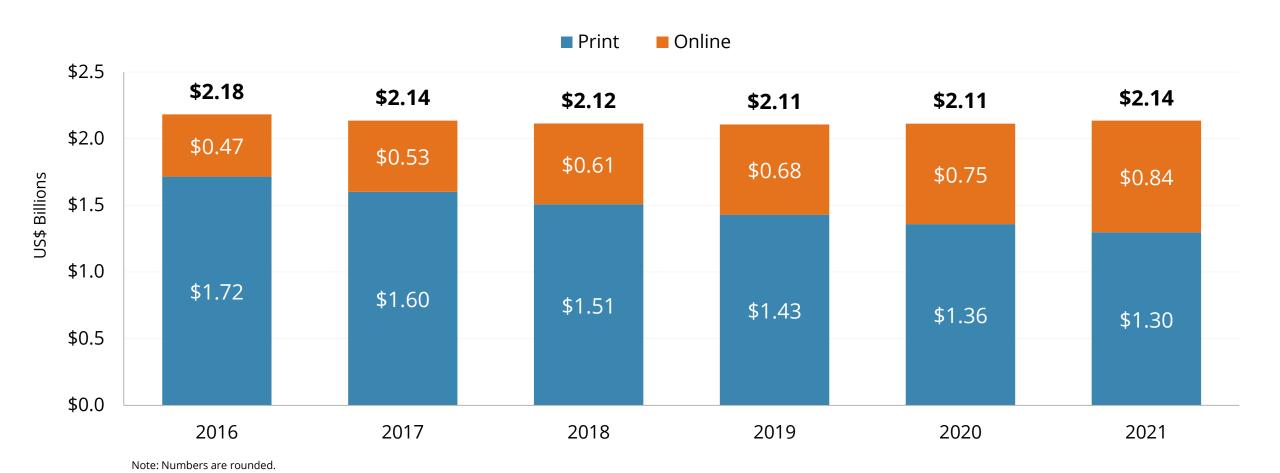
- The number of local/regional print magazines declined by slightly less than 1% in the past year as consumers shift away from print.
- Print revenues for local magazines are estimated to decline by 7.3% this year, driven by lower readership and resulting fewer ad pages and low growth in ad revenues per page.
- Digital revenues are expected to grow 14.6% this year, helping to offset a portion of the decline in print. However, overall magazine ad revenues are estimated to decrease 3.4%.
- The trend of declines in print and growth in digital will likely persist, with digital revenues becoming an increasingly important component for the industry and expected to contribute 39% of total revenues by 2021, nearly doubling from 21% in 2016.



Local Magazines



Five-Year Forecast





Local Magazines: Annual Revenue Changes



Media	2016	2017	2018	2019	2020	2021	CAGR (2016-2021)
Online	14.6%	14.1%	13.7%	11.4%	11.4%	11.1%	12.3%
Print	-7.3%	-6.6%	-5.9%	-5.1%	-4.9%	-4.5%	-5.4%
Local Magazines	-3.4%	-2.2%	-1.0%	-0.4%	0.3%	1.0%	-0.4%
Total Local Adv.	3.9%	2.4%	5.4%	3.3%	5.3%	2.5%	3.8%
GDP	3.0%	4.4%	4.3%	4.2%	4.3%	4.1%	4.3%









"A range of factors will drive local ad revenues higher in 2017 and through the end of the next year. An improving U.S. economy, increased spending by national brands in local media channels, extraordinary growth in mobile and social advertising, and the continued expansion and selection of online/digital advertising platforms. In fact, we are predicting that online/digital ad share will exceed the share of print media by 2018."

– Mark Fratrik, Chief Economist and SVP, BIA/Kelsey





- Local Social continues to show significant growth, 28.3% CAGR, with its ability to target audiences both geographically and demographically. Social will increase its share of the local media pie in the years ahead.
- Online/Interactive as a whole will grow at a 7.6% CAGR, with local desktop video experiencing a strong 17.2% CAGR, followed by local desktop social at an 11.6% CAGR. By 2018 online/interactive will exceed the share of print media.
- Mobile also continues to grow at an exceptional rate, 21.1% CAGR, becoming a more important factor in most advertising mixes. Its share of the local media pie will be 18.6% by 2021.
- Local Over-the-Air Television remains an important advertising platform and even in non-political years maintains a sizable share of the local advertising pie, 13.5% in 2021.
- Local Video spending is solid across all the various video platforms (cable/over-the-air TV/OOH/online/mobile), but the online and mobile segments show particular strength growing at 17.2% CAGR and 20.5% CAGR, respectively.





- Out-Of-Home advertising opportunities are varied, providing some unique opportunities for advertisers to reach local audiences. OOH will maintain its share of roughly 5.4% of the overall media pie.
- Radio over-the-air revenues will continue to grow annually near 1%, while the online division will have low double-digit growth rates. Radio's combined share of the overall media pie will be slightly lower by 2021.
- Direct Mail spending remains consistent, though its share will decline slightly. It is an
 advertising platform that many national and local advertisers continue to employ.
- Newspapers/Directories/Local Magazines continue to see actual annual decreases in advertising revenues, and with the other media/advertising platforms increasing their revenues, the shares of these print media drop precipitously.





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