

Guiding Media. Inspiring Innovation. Leading Local.

U.S. Local Media Forecast 2016 – Spring Update

National Overview: Specific Local Media Estimates & Analyses

June 2016

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- **Specific Media Forecasts** (in order of largest to smallest contribution to local media pie in 2016):
 - 1. Direct Mail
 - 2. Local Video*
 - a) Local Over-the-Air Television
 - b) Local Cable Television
 - c) Out-of-Home Video
 - 3. Newspapers
 - 4. Online / Interactive
 - 5. Radio
 - 6. Mobile
 - 7. Directories
 - 8. Social*
 - 9. Local Magazines

Note: Media groupings with asterisks contain components that overlap with the mobile and online sections.



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



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 finetune 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

Definition

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 has begun with the U.S. economy overall growing at a sluggish pace.
 - First-quarter real GDP increased only marginally following moderate growth in the final quarters of 2015.
 - The number of new monthly jobs continues to show steady growth with some encouraging data on increases in the number of people looking for work.
 - Wage gains are showing some signs of rebounding in early 2016, suggesting hope for consumer spending and resulting advertising spending.
- Weaker performances in some traditional media leads to a slight decrease in our total advertising estimate for 2016 to \$146.3 billion.
- The 2016 total level is still stronger than the final 2015 level because of the substantial amount of political advertising and continued strong growth in social and mobile advertising.



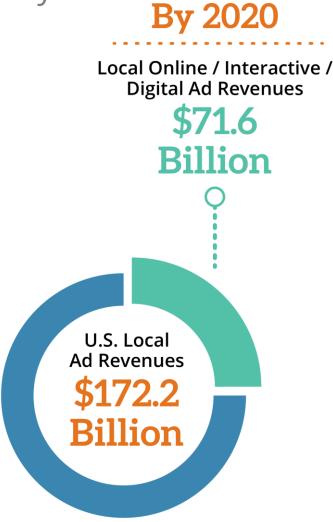
Overall Local Media Advertising

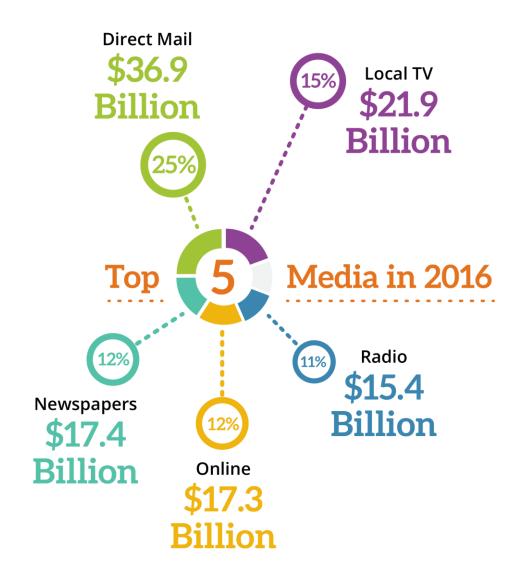
- The overall local media marketplace will see consistent growth of 4.2% CAGR from 2015-2020, due to exceptional growth in mobile and social advertising, continued strong political advertising in even-numbered years, and overall growth in the U.S. economy, reaching approximately \$172.2 billion by 2020.
- Growth in online/digital advertising revenues will be stronger than originally predicted, with a 2015-2020 CAGR of 12.8%.
- That compares with a flat 2015-2020 CAGR of 0.0% for traditional advertising revenues.
- By 2020 local online/interactive/digital advertising revenues will be \$71.6 billion, growing to 41.6% of total local media advertising revenues from 28.0% share in 2015.



U.S. Local Advertising Forecast 2016

Top Takeaways









National and Specific Media Overview

Total U.S. Spending in Local Markets



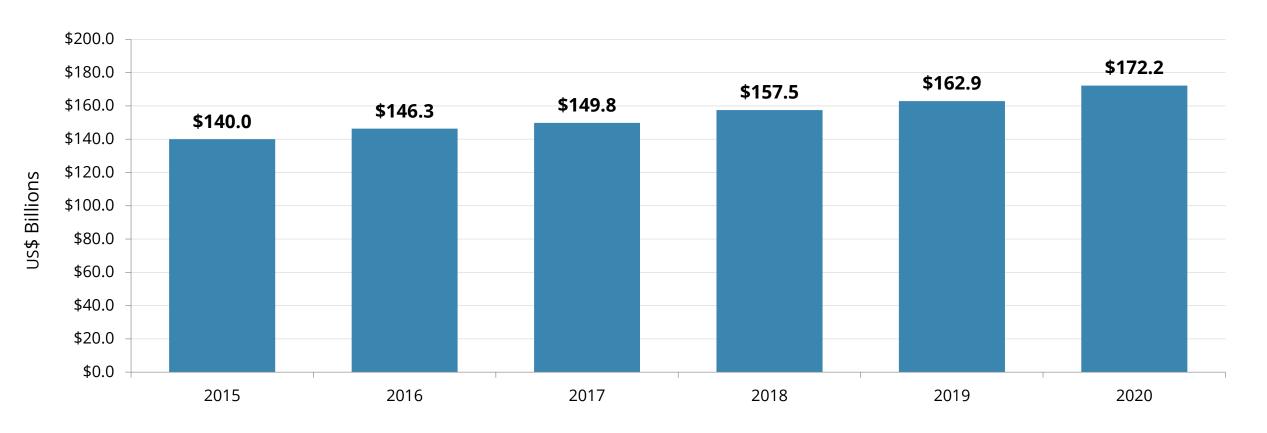


Total U.S. Spending in Local Markets Slightly lower than expected in 2016, but growth will be consistent in the following years



Local Media: Five-Year Forecast





Note: Numbers are rounded.

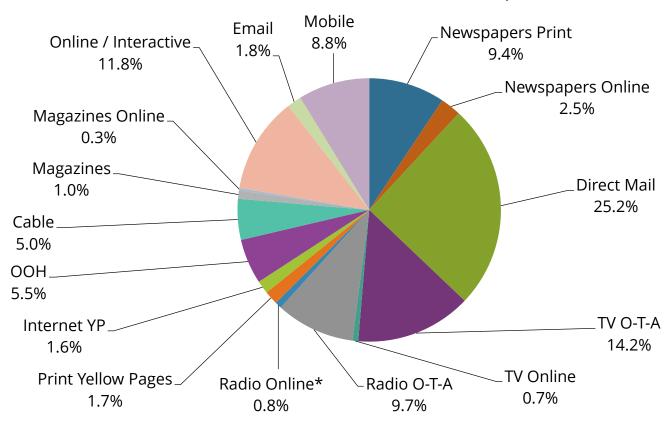


Local Ad Market Still Sees Noticeable Shares



for Traditional Media

2016 U.S. Local Media Revenues — \$146.3 Billion



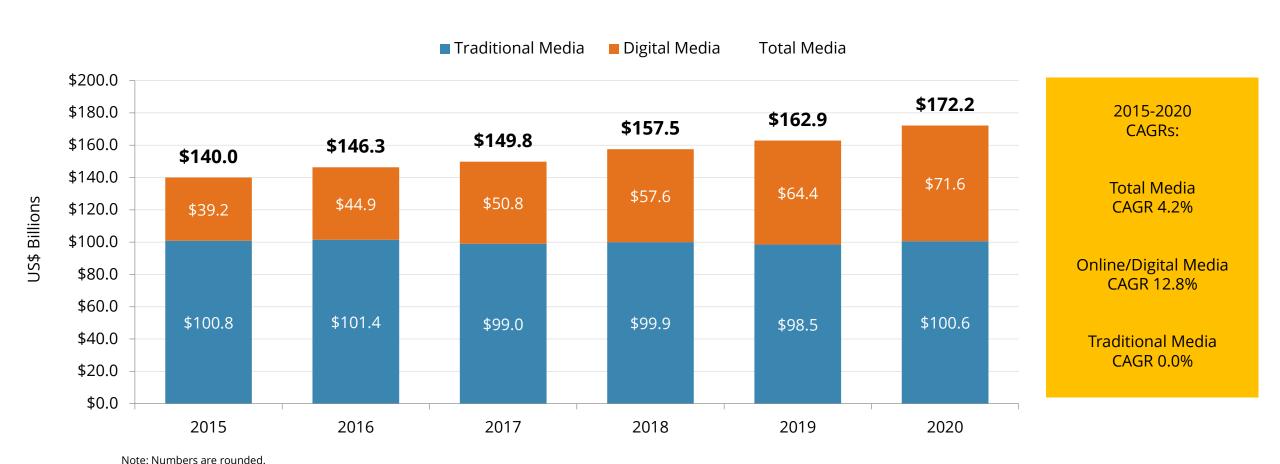
 $[\]hbox{*Radio online revenues include online revenues from terrestrial and online streaming services.}$

Note: Numbers are rounded.



Steady Shift Toward Digital Media – Ad Revenues

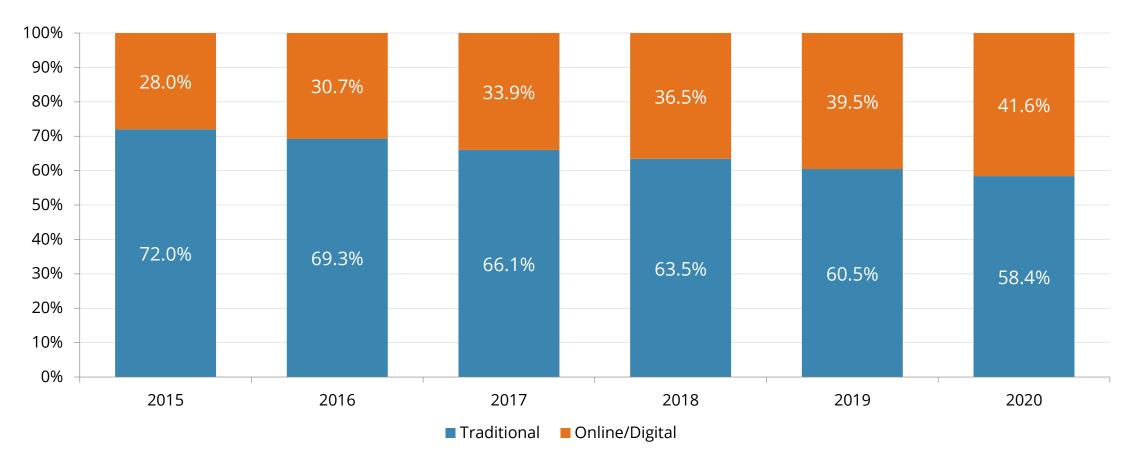






Steady Shift Toward Digital Media – Percentage





Note: Numbers are rounded.





Traditional Media Decline is Not Uniform: Traditional electronic media is only slightly losing share

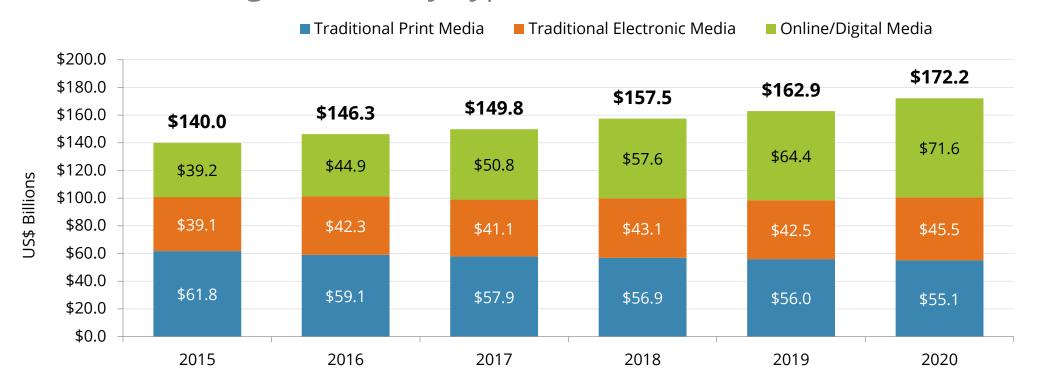


Local Online/Interactive Advertising Cutting Into Mostly



Traditional Print

Local Advertising Revenue by Type: 2015-2020



2015-2020 CAGRs:

Total Media CAGR 4.2%

Online/Digital Media CAGR 12.8%

Traditional Electronic
Media
CAGR 3.1%

Traditional Print Media CAGR -2.3%

Traditional Electronic includes local over-the-air television, local cable systems and local radio.

Traditional Print includes local newspapers, local magazines, direct mail, printed OOH, and print yellow pages.

Note: Numbers are rounded.

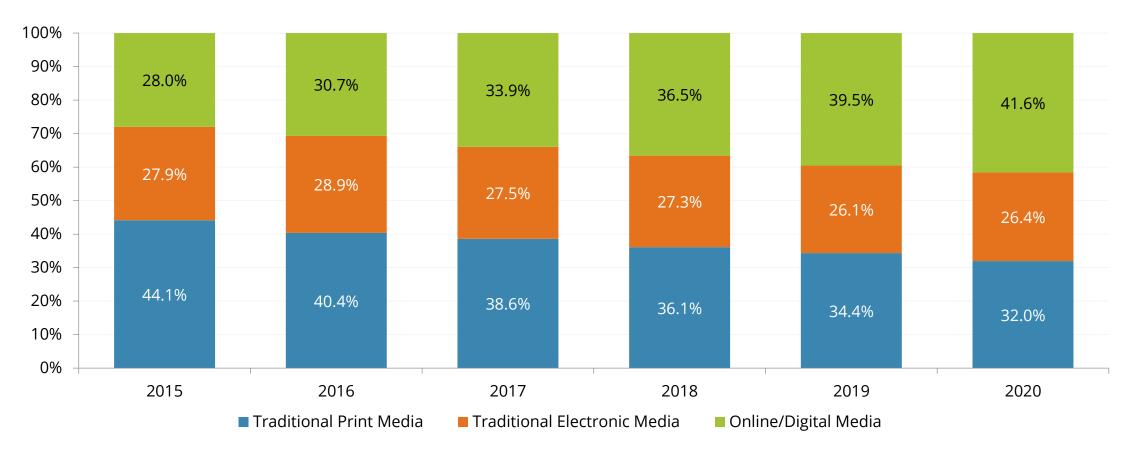


Local Online/Interactive Advertising Cutting Into Mostly



Traditional Print

Share of Local Advertising Revenue by Type: 2015-2020

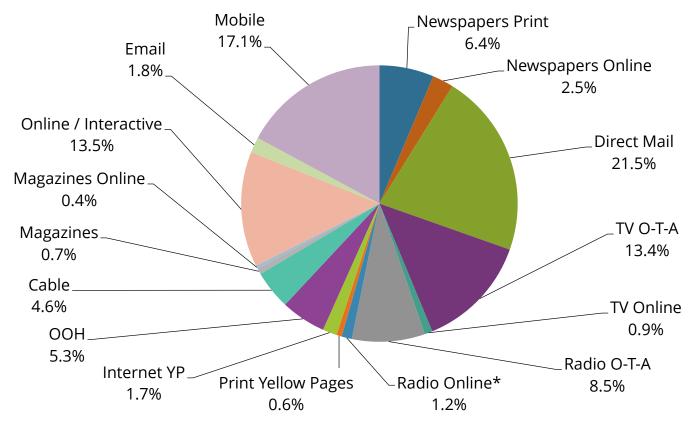


Note: Numbers are rounded.



Local Ad Market Sees Smaller Shares for Some Traditional Media in 2020

2020 U.S. Local Media Revenues — \$172.2 Billion



^{*}Radio online revenues include online revenues from terrestrial and online streaming services.

Note: Numbers are rounded.



Specific Media: Revenues & Share



Highlights (in order of largest to smallest contribution to local media pie in 2016)

Media



Direct Mail - \$36.9B (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* - \$32.9B (22% share)

Online and mobile video options show the strongest growth, increasing their share in this segment.



Local Over-the-Air Television - \$21.9B (14% share)

In even-numbered years political candidates continue to use local television stations as important venues to get their messages out.



Local Cable Television - \$7.4B (5% share)

Many political candidates and national parties utilize the targeting aspect of cable networks to broadcast their messages.



Out-of-Home Video - \$1.6B (1% share)

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



Mobile Video - \$0.7B (0.5% share)

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

Note: Media groupings with asterisks contain components that overlap with mobile and online sections.



Specific Media: Revenues & Share



Highlights (in order of largest to smallest contribution to local media pie in 2015)

Media



Newspapers - \$17.4B (12% share)

Online advertising is growing but not enough to overcome faster-than-expected declines in print advertising revenues.



Online - \$17.3B (12% share)

Desktop advertising revenues are showing some slowing single-digit growth as usage of mobile devices increases.

Radio - \$15.4 (11% share)



✓ ★ More audio and advertising competition is limiting growth of over-the-air advertising revenues, though online efforts by stations continue to increase revenues.



Mobile - \$12.8B (9% share)

Mobile advertising revenues continue to grow rapidly as smartphone usage increases, with all local mobile ad segments rising at double-digit growth over the next five years.



Social* - \$3.6B (2% share)

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



Local Magazines - \$1.9B (1% share)

Online magazines are growing but not enough to offset the sliding print side of the equation, resulting in overall contraction.

Note: Media groupings with asterisks contain components that overlap with mobile and online sections.



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 websites, video, SEM and mobile display networks.					
Print Yellow Pages (PYP)	All revenues generated by local directory companies for their print listings.					
Magazines	All revenues generated by local market magazines from either national or local advertisers. Does not include any advertising generated by magazines with a national subscriber base.					



Definitions



Media	Description			
Mobile	All revenues generated from advertising on mobile devices. This includes search, display, mobile video, SMS 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 signage, taxicabs and 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. Currently the predominant ad format is display, though native advertising formats are quickly emerging as display alternatives that 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.			





Key Takeaways

'The continued growth in mobile spending over and above our previously expected strong growth is truly remarkable. Many advertisers are finding successful advertising strategies utilizing the demographic and geographic targeting aspects of mobile advertising while also utilizing traditional media to provide a broader advertising message in concert.'

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



Key Takeaways



- **Mobile** is the primary force behind the continuing increase in digital advertising, largely driven by social advertising, and jumping to a 17.1% share of the media pie by 2020.
- Local Over-the-Air Television continues to receive the largest share of political advertising spending, resulting in a 14.2% share of total 2016 advertising revenues.
- Local Social spending is growing at a 31.8% CAGR, continuing to exceed the growth of traditional and even other digital media. Social will be a larger chunk of the digital media pie in the years ahead.
- Local Video spending is growing on all video platforms (cable/TV over-the-air/OOH/online/mobile) at CAGRs ranging from 4% to 30% as you move from left to right, respectively, resulting in combined local video becoming a larger slice of the overall local advertising pie.

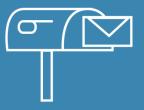


Key Takeaways



- Radio over-the-air revenues, while not growing in recent years, are expected to show very muted growth of around 1%, slower than the growth of the total local advertising market, reducing its market share in future years.
- Direct Mail spending will decline slightly, and its share will slowly decrease. The medium
 continues to hold a noticeable share of the local advertising pie, especially with retailers
 and financial firms, given its effectiveness at accessing addressable audiences and
 providing useful information to consumers.
- Newspapers/Directories/Local Magazines continue to lose advertising market share as their usage (circulation) decreases, leading to revenue declines in their print operations that growth in their online segments cannot overcome.





Direct Mail





Direct Mail

Still utilized extensively by several types of businesses in their advertising mix



Direct Mail Forecast Summary

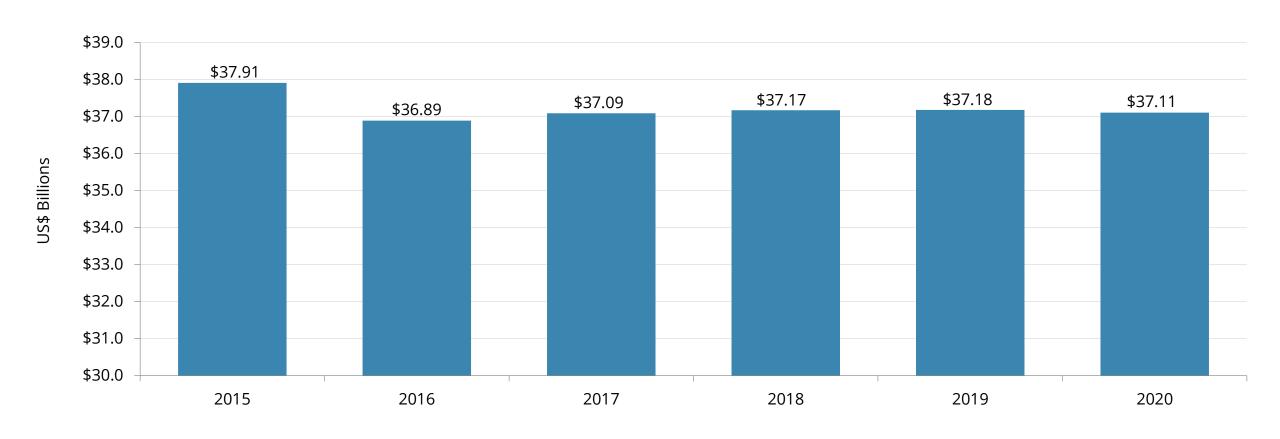


- Direct mail continues to represent a large slice of the media spending pie given its effectiveness in reaching and mobilizing consumers. Although online commerce has put some pressure on local retail activity and direct mail, the vast majority of commerce still happens off-line locally, where direct mail is an important part of generating local sales.
- **Delivery costs have come down this year** with cheaper postage prices from the USPS, allowing current direct mail ad budgets to effectively reach more people.
- Compared with CPMs of online alternatives, direct mail has a higher price given production and delivery costs to reach individuals. What makes direct mail attractive and worthy of the premium price is that it physically reaches a geographically/demographically targetable audience. Additionally ads are held and sometimes viewed multiple times by the recipient and other members of the household. Even some online businesses use direct mail to reach potential customers.
- **Direct mail volumes have held fairly steady over the past year** and will likely see only a mild slide in years ahead as businesses continue their reliance on the medium to draw local consumers to visit stores and even websites.



Direct Mail: Five-Year Forecast





Note: Numbers are rounded.



Direct Mail: Annual Revenue Changes



Media	2015	2016	2017	2018	2019	2020	CAGR (2015- 2020)
Direct Mail	1.1%	-2.7%	0.5%	0.2%	0.0%	-0.2%	-0.4%
Total Local Adv.	0.1%	4.5%	2.4%	5.1%	3.4%	5.7%	4.2%
GDP	3.5%	4.2%	4.5%	4.6%	4.8%	5.0%	4.6%





Local Video





Local Video Marketplace

Online cutting into share of local over-the-air and cable TV



Local Video Advertising Definition



- 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., taxi cab 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

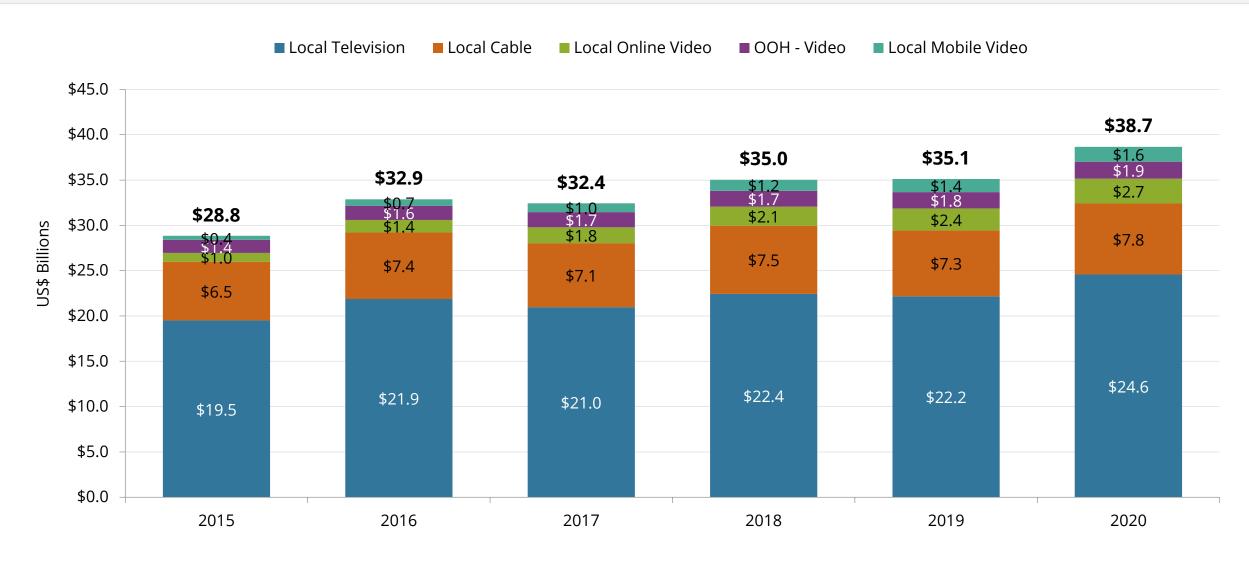


- Overall **local video** advertising revenue growth will outpace the total local marketplace 6.0% CAGR vs. 4.2% CAGR spurred by double-digit growth in both online and mobile video.
- Local television stations still maintain a large presence in this market as it continues to be used by many different types of advertisers, especially political advertisers in even-numbered years.
- Local cable systems also continue to make strong inroads in political advertising, leading to noticeable increases in the even-numbered years, though the "cord-cutting" and "cord-shaving" behavior limits this growth, as some consumer eliminate or reduce their cable TV subscriptions in favor of streaming videos online instead.
- Local online video is seeing persistently strong growth (CAGR +23.0%), which will keep increasing its market share, as advertisers follow video streaming consumers online.
- Out-of-home video, including digital cinema, is still growing, though at a slower rate than online and mobile video (CAGR +5.3%).
- Local mobile video (CAGR +30%) is expected to be the fastest growing part of this market as more consumers access mobile devices.



Local Video Advertising Revenues





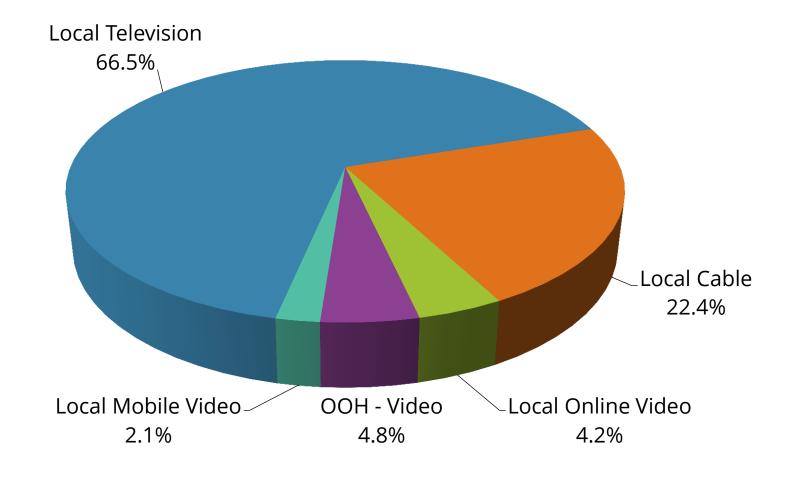


Note: Numbers are rounded.

2016 Local Video Advertising Revenues –



Distribution Across Media

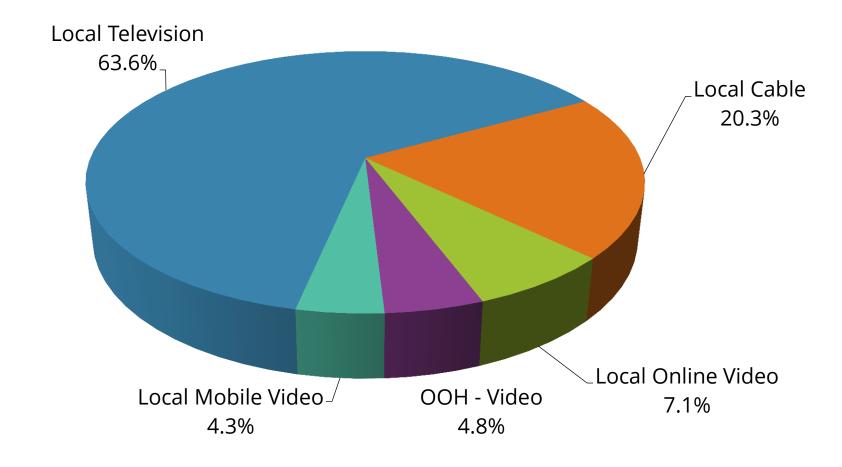




2020 Local Video Advertising Revenues –



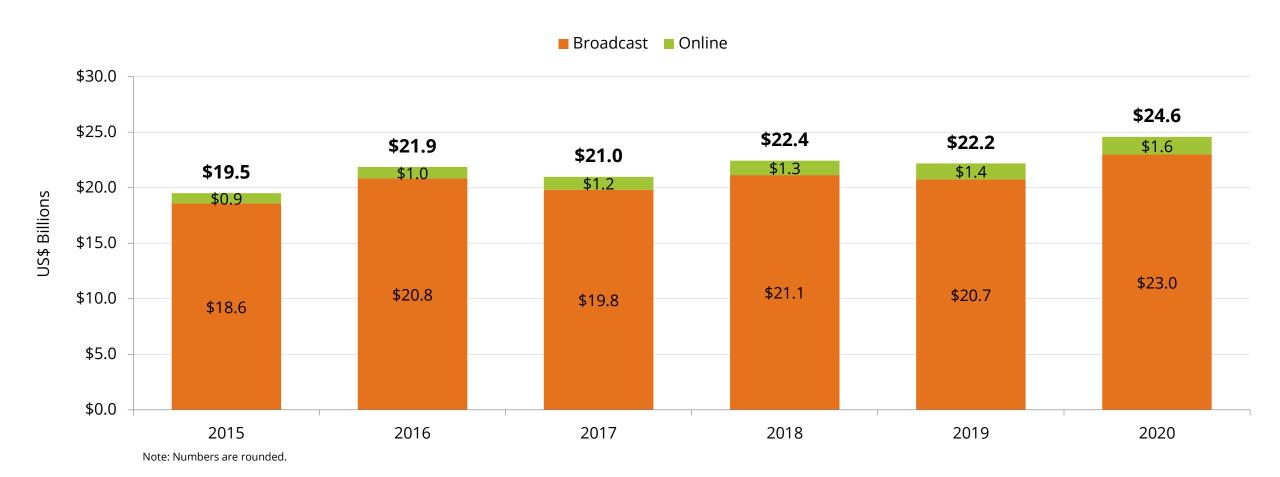
Distribution Across Media





TV: Five-Year Forecast

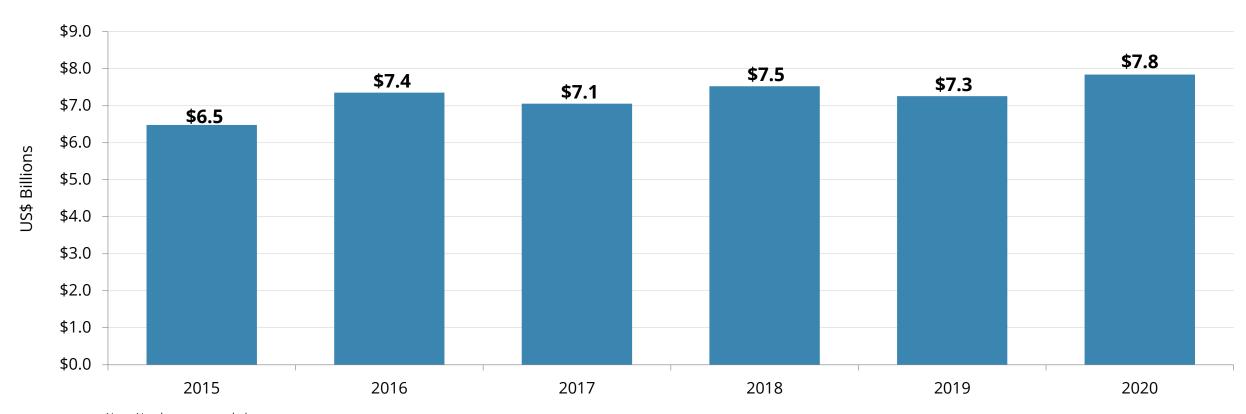






Local Cable: Five-Year Forecast



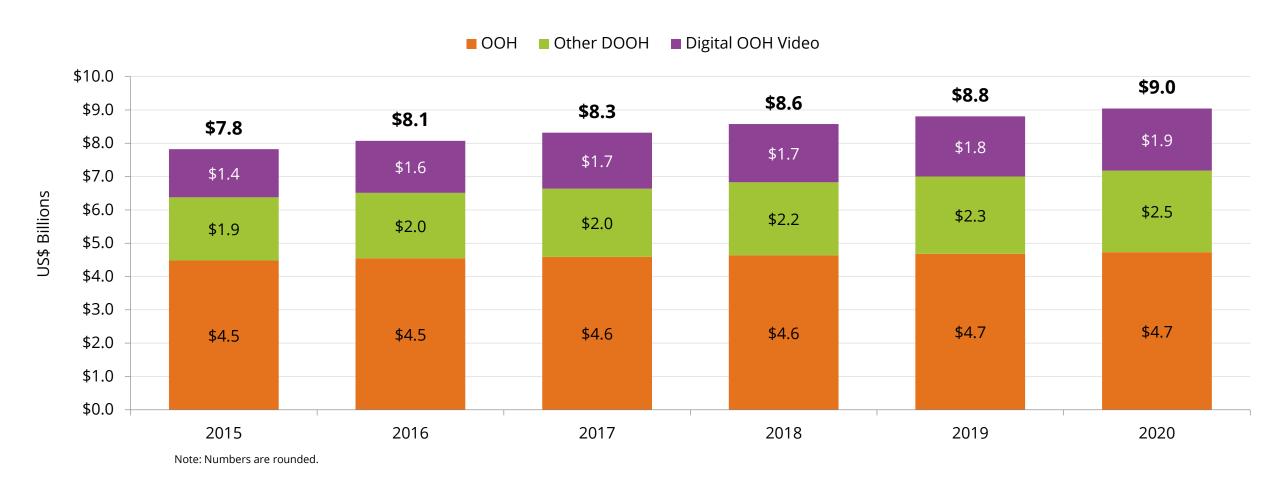


Note: Numbers are rounded.



Out-of-Home: Five-Year Forecast







Local Video: Annual Revenue Changes



Media	2015	2016	2017	2018	2019	2020	CAGR (2015-2020)
Local Online Video	62.8%	41.9%	26.7%	19.6%	15.5%	13.5%	23.0%
Out-of-Home Video	15.3%	8.3%	7.4%	4.2%	3.5%	3.2%	5.3%
TV	-6.4%	12.1%	-4.1%	7.0%	-1.1%	10.8%	4.7%
Cable TV	-9.3%	13.5%	-4.1%	6.7%	-3.5%	8.0%	3.9%
Local Mobile Video	63.7%	59.3%	37.6%	26.3%	17.6%	14.2%	30.0%
Total Local Video	-4.2%	14.0%	-1.4%	8.0%	0.2%	10.1%	6.0%
Total Local Adv.	0.1%	4.5%	2.4%	5.1%	3.4%	5.7%	4.2%
GDP	3.5%	4.2%	4.5%	4.6%	4.8%	5.0%	4.6%





Newspapers





Local Newspapers

Losing subscriptions, readership and share in local ad marketplace as print product declines



Newspapers Forecast Summary

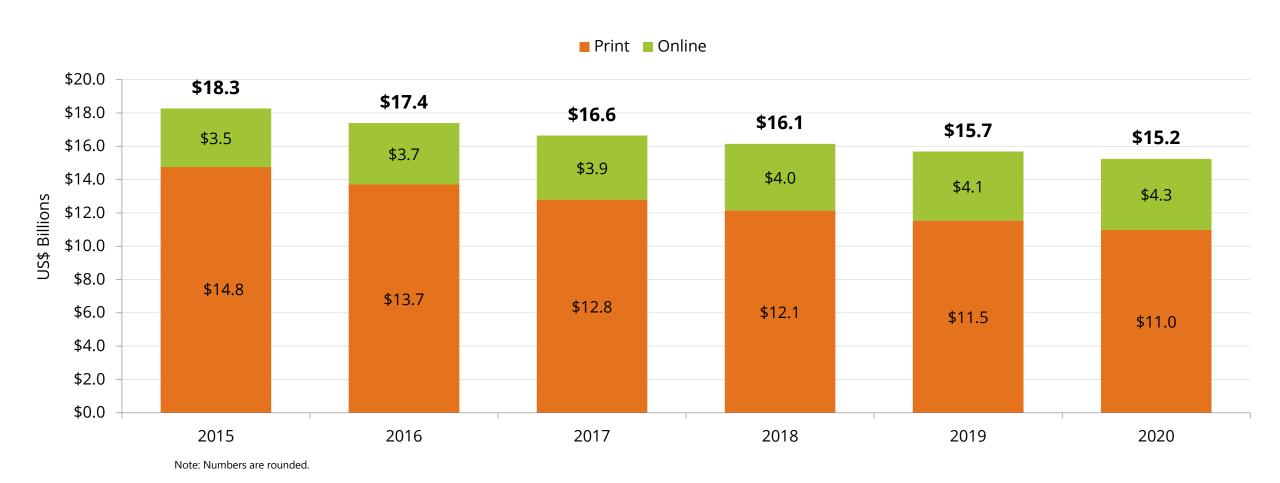


- Print advertising revenues are decreasing even faster than earlier predicted as more newspapers cut back on their staffing and the number of publishing days.
- Many newspapers are considering an industry exit as well.
- Online advertising will only be marginally stronger in 2016, clearly not making up the significant decreases in print ad revenues. Newspapers' share of local advertising is decreasing at very noticeable rates through 2020.
- For certain business categories, such as the retail sector, newspapers remain an important part of the advertising mix, though that position is being challenged by other local advertising platforms.



Newspapers: Five-Year Forecast







Newspapers: Annual Revenue Changes



Media	2015	2016	2017	2018	2019	2020	CAGR (2015- 2020)
Online	5.5%	5.0%	4.5%	4.0%	3.5%	3.0%	4.0%
Print	-13.2%	-7.1%	-6.6%	-5.2%	-5.0%	-4.9%	-5.8%
Total Newspaper	-10.1%	-4.8%	-4.3%	-3.0%	-2.9%	-2.8%	-3.6%
Total Local Adv.	0.1%	4.5%	2.4%	5.1%	3.4%	5.7%	4.2%
GDP	3.5%	4.2%	4.5%	4.6%	4.8%	5.0%	4.6%





Online / Interactive





Local Online / Interactive Search and display continue to grow at steady rates



Online / Interactive Forecast Summary

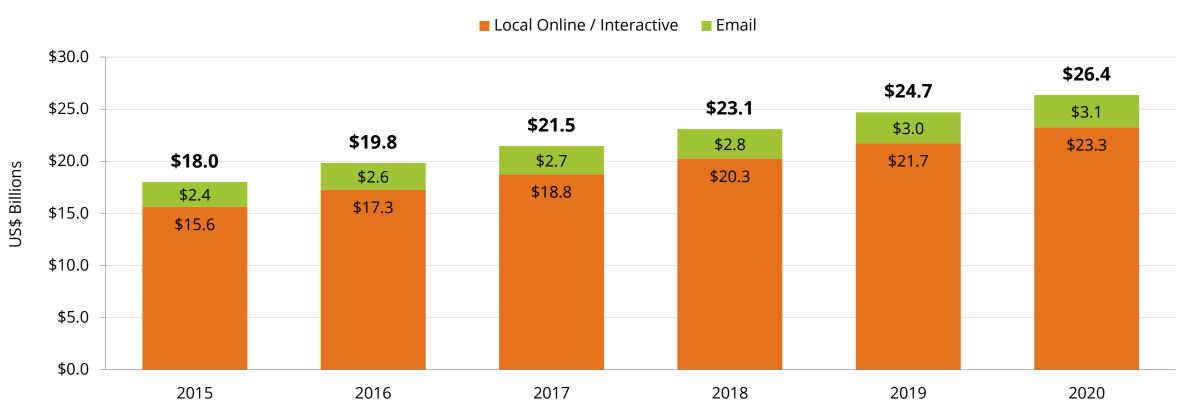


- Online/interactive as a whole will grow at an 8.6% CAGR, with local video growing at a 23.0% CAGR.
- Email spending continues to grow driven by volume increases with consumers choosing to opt in to more lists of their favorite organizations. The mutually beneficial relationship allows consumers to stay informed of the latest offerings and promotions while generating repeat business for companies. Email is expected to grow at a 5.3% CAGR.
- Local search on desktop devices will grow at a 6.2% 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 dominant players (Google/Bing) that have footholds on both channels.
- Local desktop display (inclusive of video and social) is expected to have a 12.6% CAGR, as improved broadband access makes more online streaming and sharing of content possible.



Local Online / Interactive: Five-Year Forecast





Digital revenues associated with traditional media (e.g., websites associated with local TV stations, local radio stations, newspapers and magazines) are included in the revenues for the traditional media, and are not included in Online/Interactive revenues above.

Note: Numbers are rounded.



Local Search: Five-Year Forecast



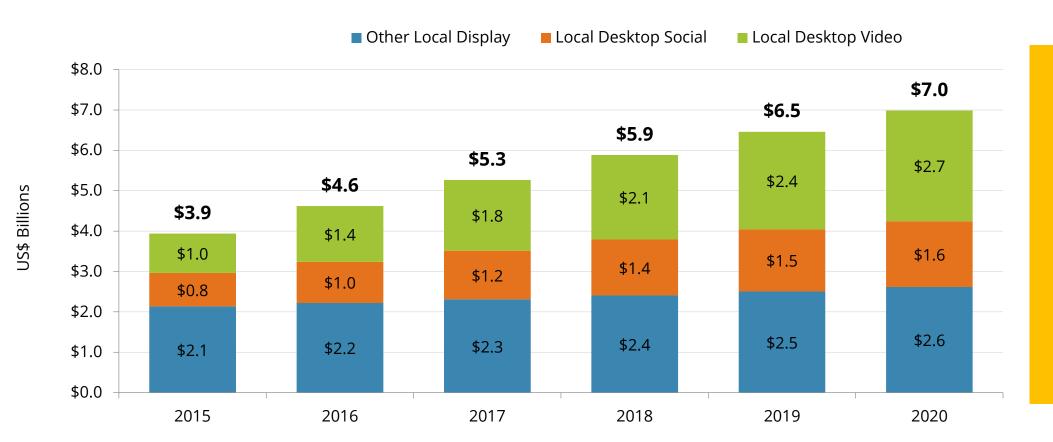


Note: Numbers are rounded.



Local Display: Five-Year Forecast





2015-2020 CAGRs:

Local Desktop Display Combined CAGR 12.1%

Local Desktop Video CAGR 23.0%

Local Desktop Social CAGR 14.4%

Other Local Desktop Display CAGR 4.1%

Note: Numbers are rounded.

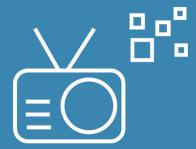


Online / Interactive: Annual Revenue Changes



Media	2015	2016	2017	2018	2019	2020	CAGR (2015-2020)
Local Online / Interactive	8.4%	10.5%	8.6%	7.9%	7.4%	7.0%	8.3%
Local Desktop Search	4.9%	7.6%	5.6%	5.8%	5.9%	6.3%	6.2%
Local Desktop Display Combined	11.0%	17.3%	14.0%	11.7%	9.8%	8.2%	12.1%
Local Desktop Video	62.8%	41.9%	26.7%	19.6%	15.5%	13.5%	23.0%
Local Desktop Social	38.1%	22.6%	18.6%	15.0%	10.7%	6.1%	14.4%
Other Local Desktop Display	-9.1%	4.0%	4.0%	4.1%	4.2%	4.3%	4.1%
Classified, IYP & Vertical Markets	8.4%	7.0%	5.9%	5.4%	5.1%	4.9%	5.6%
Email	11.1%	7.4%	5.8%	4.7%	4.4%	4.4%	5.3%
Total Local Adv.	0.1%	4.5%	2.4%	5.1%	3.4%	5.7%	4.2%
GDP	3.5%	4.2%	4.5%	4.6%	4.8%	5.0%	4.6%





Radio





Local Radio Stations

Face rising competition for listeners, but remain part of multi media ad campaigns



Radio Forecast Summary



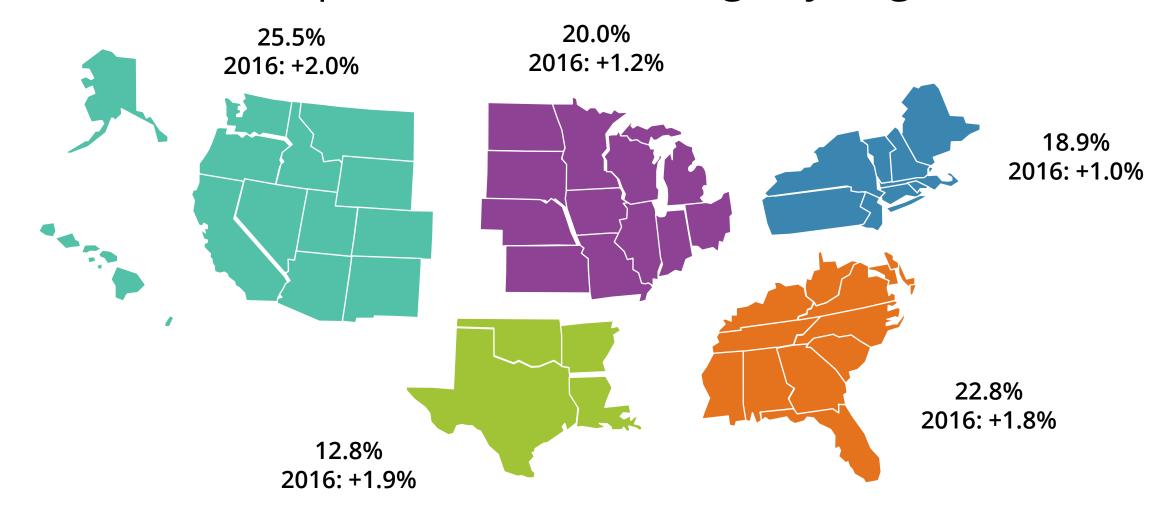
- Radio over-the-air advertising revenues were disappointing in 2015 as it experienced a second year of decline. While we expect that to turn to positive growth in future years, it will only be in the 1.0% to 1.5% range.
- Nevertheless, radio is a prominent player in the local media marketplace. Local radio over-the-air advertising remains an important part of certain national and local companies' advertising mixes.
- The efforts by some radio groups in online activities show strength, though for the industry as a whole it is still a relatively small percentage of total revenues.
- Online audio streaming services (e.g., Pandora) continue to garner audience share, and these companies now have local sales staffs to boost their local advertising revenues.



Distribution of 2016 Over-the-Air Advertising



Revenues and Expected 2016 % Change by Region

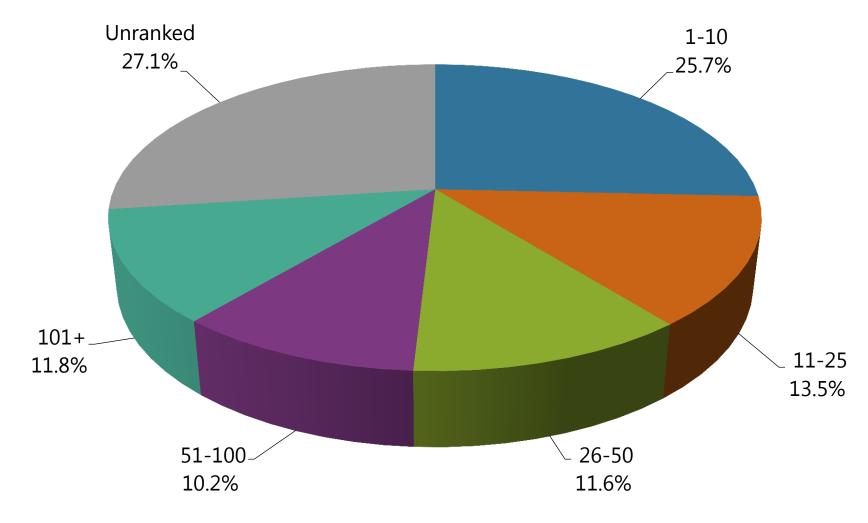




Distribution of 2016 Over-the-Air



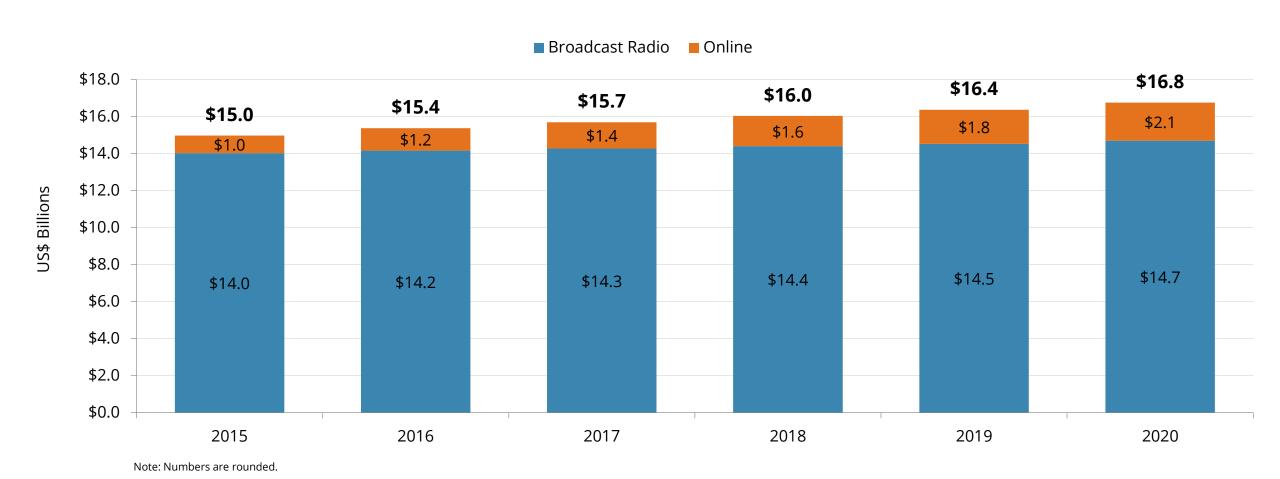
Advertising Revenues by Market Size





Radio: Five-Year Forecast







Radio: Annual Revenue Changes



Media	2015	2016	2017	2018	2019	2020	CAGR (2015-2020)
Online*	50.1%	26.1%	17.7%	14.8%	13.0%	11.7%	16.5%
Broadcast	-1.6%	1.0%	0.8%	0.9%	0.8%	1.2%	1.0%
Total Radio	0.6%	2.6%	2.1%	2.2%	2.1%	2.4%	2.3%
Total Local Adv.	0.1%	4.5%	2.4%	5.1%	3.4%	5.7%	4.2%
GDP	3.5%	4.2%	4.5%	4.6%	4.8%	5.0%	4.6%

^{*}Radio online revenues include online revenues from terrestrial and online streaming services.





Mobile





Mobile Advertising Represents 8.8% of local advertising spend in 2016 and will grow to 17.1% by 2020



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 applies 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).
- Revenues from advertising that appears on tablets are not included in BIA/Kelsey's classification of mobile.*

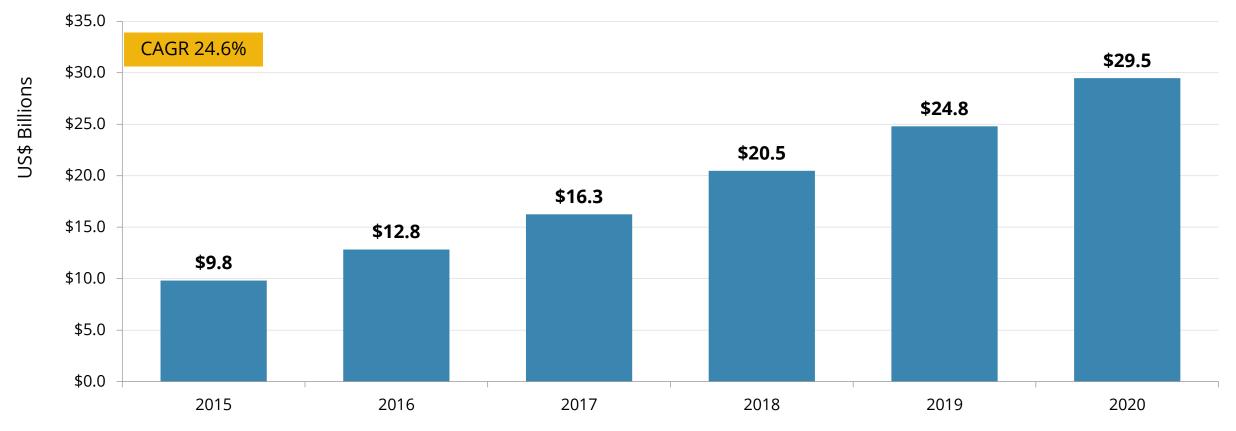
^{*}Rationale for BIA/Kelsey's separation of smartphone and tablet ad revenues is explained here.



Location-Targeted Mobile Ad Spend:



Five-Year Forecast



Note: Numbers are rounded.



Location-Targeted Mobile Ad Revenues:



- U.S. location-targeted mobile ad revenues are projected to grow from \$9.8 billion in 2015 to \$29.5 billion in 2019, a 24.6% CAGR.
- Location-targeted mobile advertising is based on a user's location or includes proximity-relevant content to trigger local offline conversions.
- It includes large national advertisers, SMBs and local advertisers that are not SMBs.
- Location-specific ad copy or calls to action (e.g., call local store) will classify a given ad as location targeted.



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 Google AdWords and Facebook (pull).
 - Local media companies such as YP will also accelerate adoption through innovation, 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 and proprietors' familiarity with the platform based on personal use.



Location-Targeted Mobile Ad Revenues:



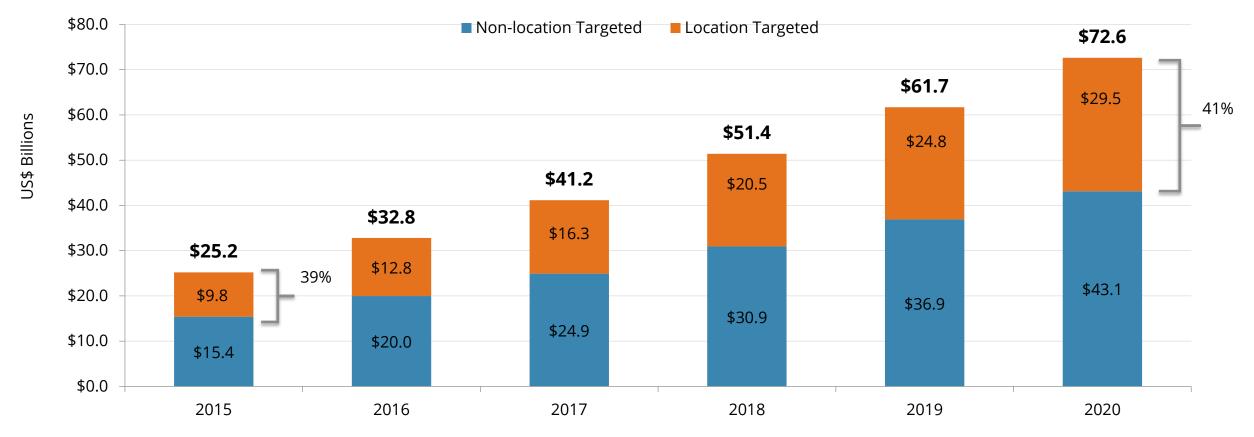
- Localized mobile ad share will also grow as a result of premium ad rates.
- Premiums will come mostly from higher performance (e.g., clickthrough rates, phone calls and store visits).
- Performance deltas are in turn a function of:
 - Higher relevance, immediacy and alignment with consumer local buying intent, all of which are more prevalent in mobile than in other digital and print media.
 - For example, roughly half 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 click-to-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 ad revenues are largely attributable to mobile, with about 82% coming from mobile.)*
 - Both companies are evolving their mobile ad models and innovating with new formats and ad targeting features.
 - The evolution of these formats will have an impact on Google and Facebook market shares in the coming
 years and influence the direction of the rest of the mobile ad ecosystem.

^{*}These segmentations will be the subject of separate drill-down reports and can be provided on request.



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, including Google Assistant.
 - 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



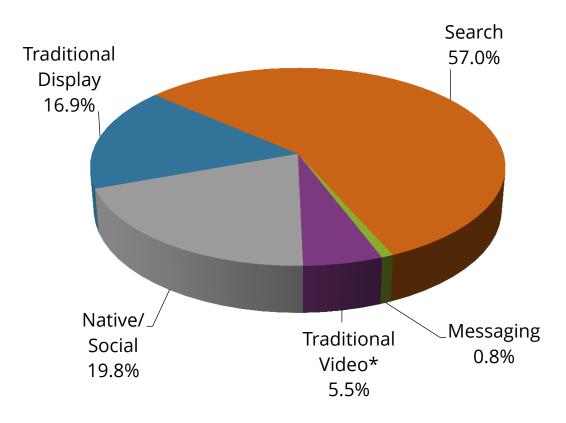
- Another effect of ad blockers will be to motivate advertisers, publishers, agencies and ad tech players to innovate or adopt more effective mobile ad formats.
- This will include, most notably, sponsored content or native social advertising, which are immune to ad blockers.
- Native social advertising 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 and also its increasing desirability.
- Native social's advantages also stem from high performance compared with other mobile ad formats and benchmarks, and from alignment with mobile device realities. These include:
 - Sub-six-inch screens, which favor in-feed units over banners
 - The growing consumer influence and buying empowerment of millennials, who are more receptive to native social advertising than other formats
 - 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.

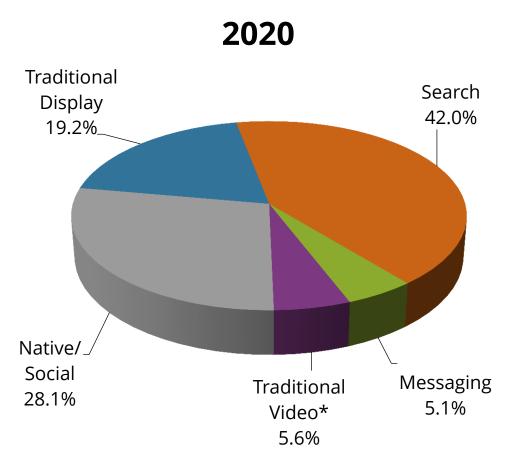


Local-Targeted Mobile Ad Spend by Format









^{*}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 71), which could temper search's share in the longer term.
- The search category in this forecast includes 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.*

^{*}These segmentations will be the subject of separate drill-down reports and can be provided on request.



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 on this concept can be seen here.



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 (900 million users in the U.S.).
- This exploding usage is beginning to show signs for commerce and advertising and is known as "conversational commerce." *
- 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 5% of the local-targeted mobile ad spend pie by 2020 (as seen in slide 73).

^{*}See BIA/Kelsey analysis for more detail and background on this trend.



Mobile: Annual Revenue Changes



Media	2015	2016	2017	2018	2019	2020	CAGR (2015- 2020)
Location-Targeted Mobile	40.2%	30.7%	26.6%	26.0%	21.1%	18.9%	24.6%
Mobile Traditional Display	33.0%	32.4%	30.1%	28.2%	25.8%	24.0%	28.1%
Mobile Search	32.4%	21.8%	16.5%	16.8%	12.9%	10.3%	15.6%
Messaging	12.0%	50.0%	110.0%	100.0%	91.3%	77.8%	84.6%
Mobile Traditional Video*	63.7%	59.3%	37.6%	26.3%	17.6%	14.2%	30.0%
Mobile Native/Social	84.2%	52.7%	46.4%	40.8%	28.3%	23.3%	37.9%
Total Local Adv.	0.1%	4.5%	2.4%	5.1%	3.4%	5.7%	4.2%
GDP	3.5%	4.2%	4.5%	4.6%	4.8%	5.0%	4.6%

^{*}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.





Directories (Yellow Pages)





Directories (Yellow Pages) Majority 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

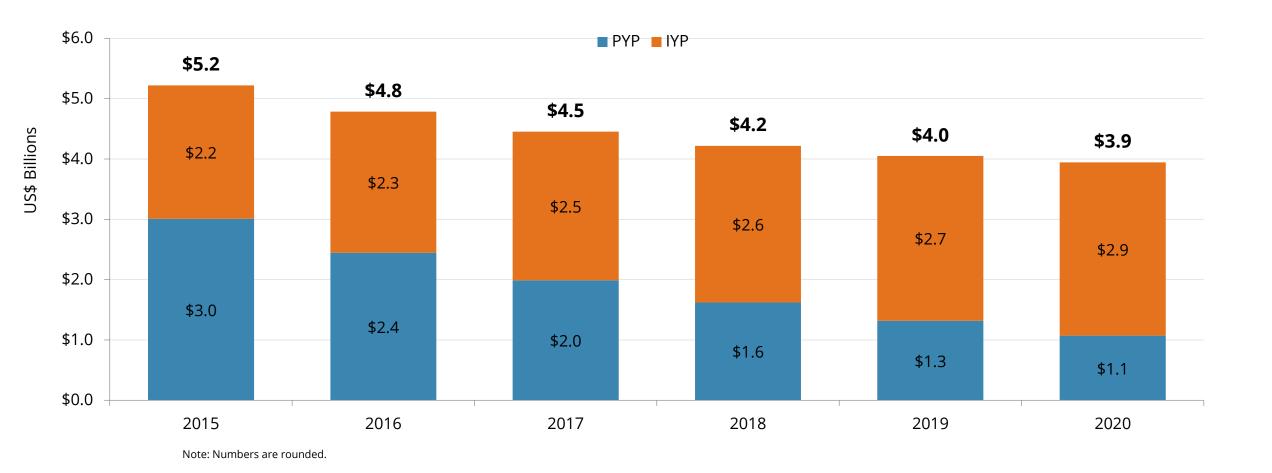


- Print revenue declines will continue to accelerate. The print CAGR will be -18.7% for the 2015-2020 timeframe. Wave 19 of BIA/Kelsey's Local Commerce Monitor tracking study of SMB advertisers shows 25.3% of Yellow Pages advertisers plan to decrease their print spend in the coming year, compared with 13.0% that plan to increase print spend. The "net decreaser" figure is 12.3%.
- We expect to see positive growth on the digital side of the business over the forecast period, with a 5.4% CAGR for 2015-2020.
 - 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 2020 digital will account for 73% of yellow pages total revenues.



Yellow Pages: Five-Year Forecast

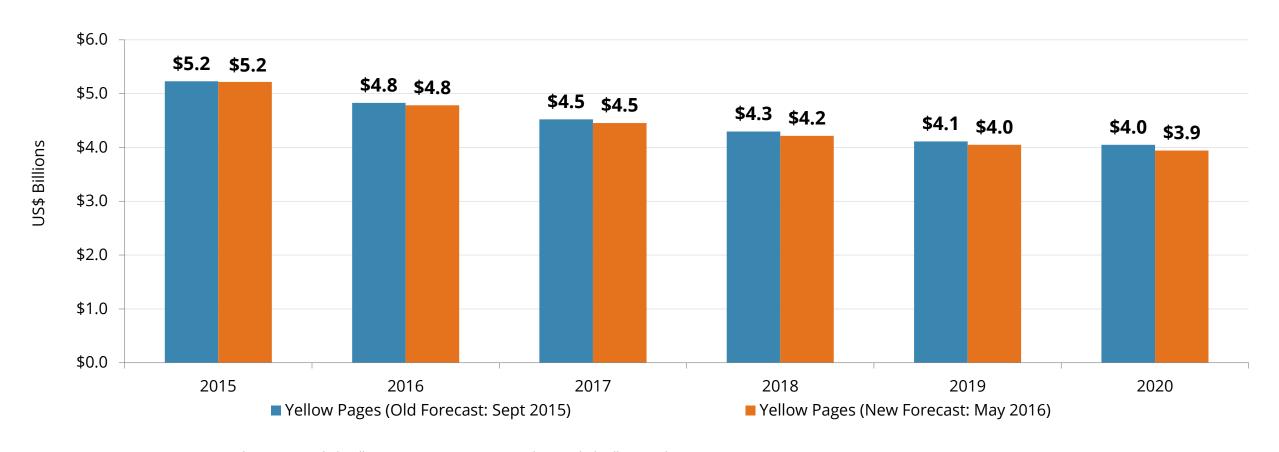






Yellow Pages Five-Year Forecast:

September 2015 vs. May 2015

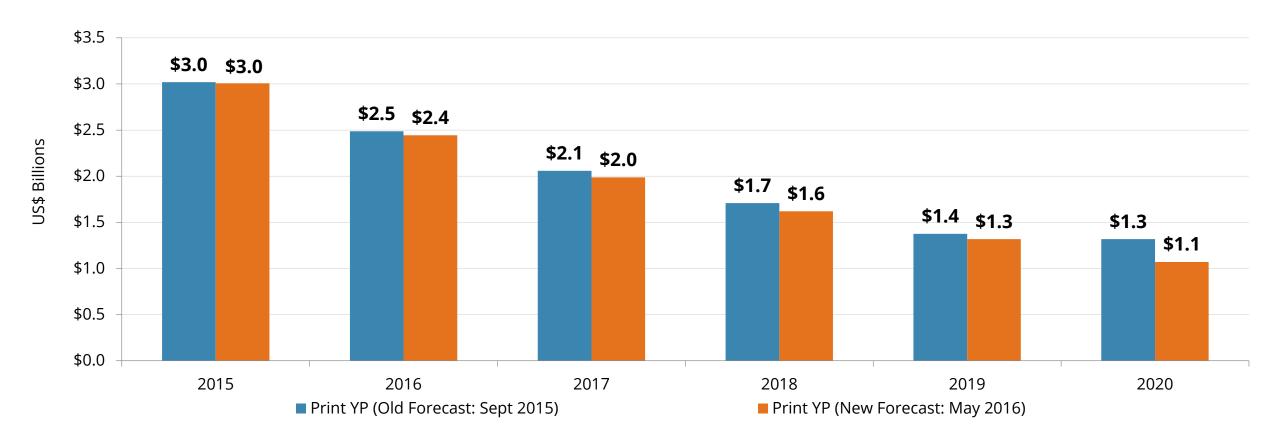


Note: Numbers are rounded. Yellow Pages revenue estimates above include all PYP and IYP revenues.



Print Yellow Pages Five-Year Forecast:

September 2015 vs. May 2015

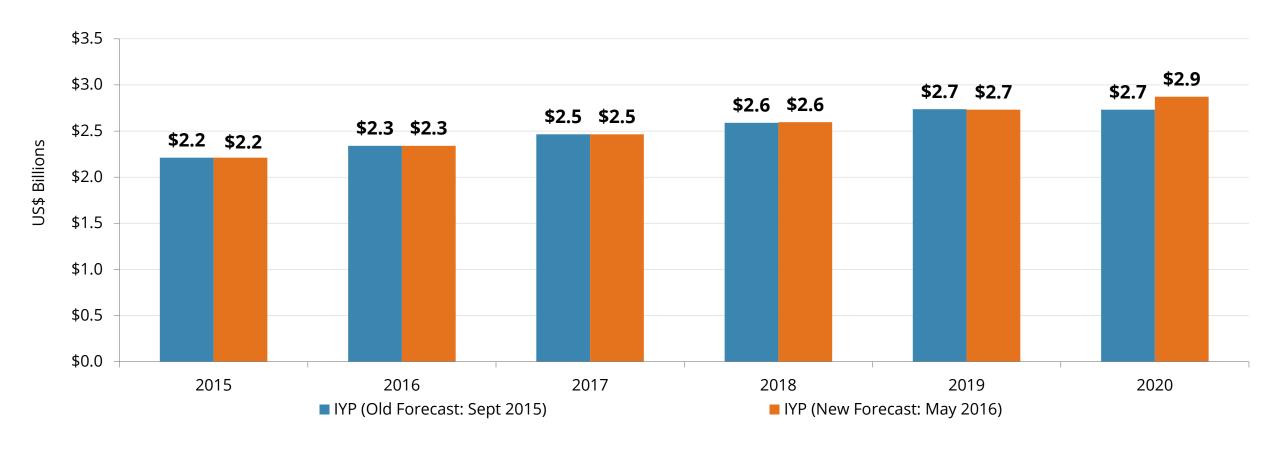


Note: Numbers are rounded.



Internet Yellow Pages Five-Year Forecast:

September 2015 vs. May 2015



Note: Numbers are rounded. The category "Internet Yellow Pages" reflects all digital revenues for directory publishers, including search marketing, websites, video, mobile and other.



Directories: Annual Revenue Changes



Media	2015	2016	2017	2018	2019	2020	CAGR (2015- 2020)
IYP	8.0%	5.9%	5.3%	5.3%	5.2%	5.2%	5.4%
Print YP	-18.4%	-18.7%	-18.7%	-18.5%	-18.7%	-18.8%	-18.7%
Yellow Pages	-9.0%	-8.3%	-6.9%	-5.3%	-4.0%	-2.6%	-5.5%
Total Local Adv.	0.1%	4.5%	2.4%	5.1%	3.4%	5.7%	4.2%
GDP	3.5%	4.2%	4.5%	4.6%	4.8%	5.0%	4.6%





Social Media





Social Media Advertising

Revenue rocketing higher, more than tripling by 2020



Social Media Advertising Definition



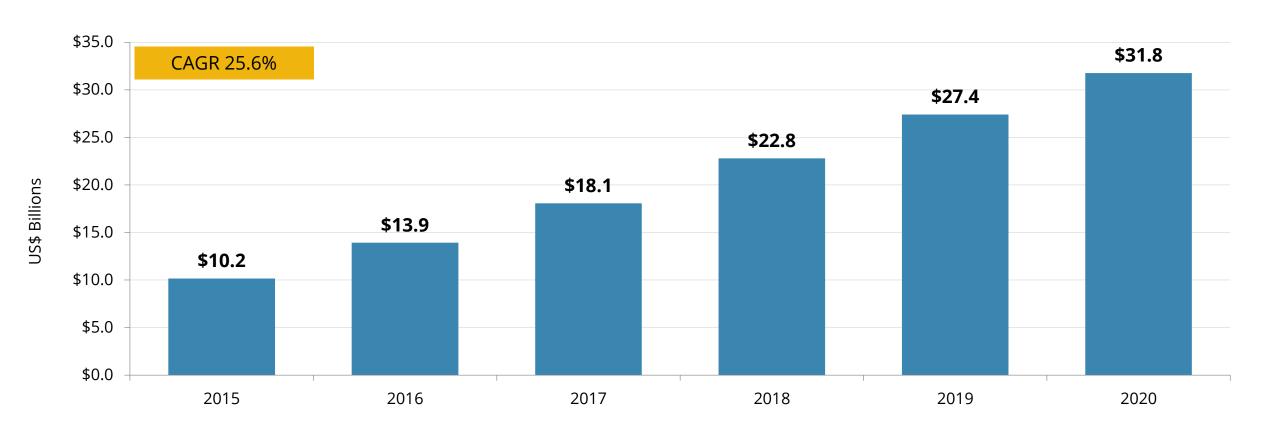
- Social media advertising is defined as money spent on advertising formats across social networks.
- Social advertising is included in BIA/Kelsey's display revenue forecast, which falls within the online/interactive advertising category.
- BIA/Kelsey's definition of social advertising does not include 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.





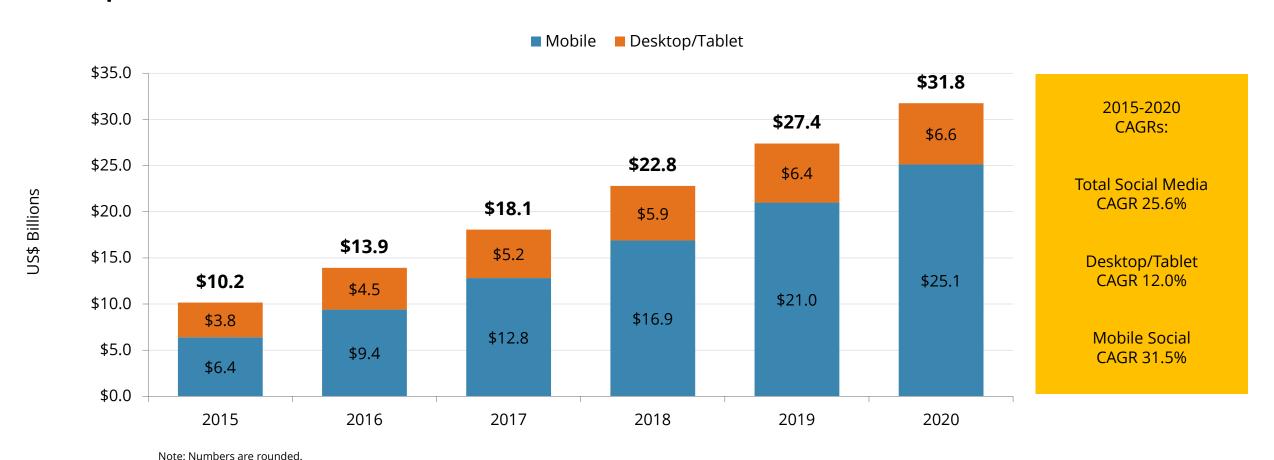
Mobile Social Advertising Growing at a 31.5% CAGR through 2020



U.S. Mobile Social vs. Desktop/Tablet

2

Ad Spend: Five-Year Forecast





Social Media Advertising Forecast Summary



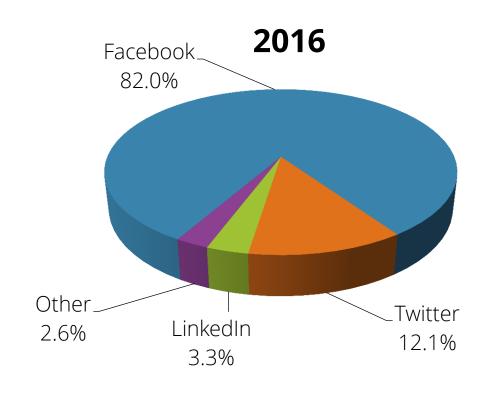
- The social media advertising industry as a whole in the U.S. will grow to \$31.8 billion by 2020, from \$10.2 billion in 2015.
- Social media players have been devoting more resources to optimizing their mobile platforms for both advertisers and users alike; now mobile has become their primary source of both revenues and user traffic.
- Driven largely by Facebook and Twitter, U.S. mobile social ad revenues will grow nearly 4x the 2015 level by 2020, reaching \$25.1 billion a 31.5% CAGR.
- Facebook has been particularly resilient at maintaining its user base and quickly adjusting its service
 offerings to match or exceed its competition. As a result Facebook users now spend nearly an hour on its
 properties, up from about 40 minutes a year ago. The increasing stickiness is another reason advertisers are
 flocking to the platform.
- Facebook commands 80% of the market, a strong lead that will likely continue in the foreseeable future since making software modifications or acquisitions of smaller competitors are both relatively easy for the team to maintain its edge.

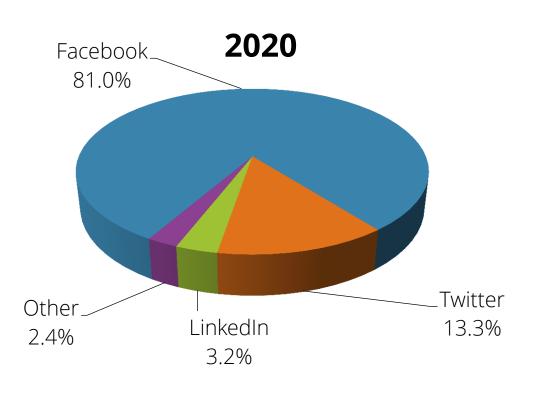


Social Media Advertising by Company:



2015 & 2020





*Other includes ad revenues from all other U.S. social networks (e.g., Pinterest, Tumblr, Foursquare)





Local Social Media Advertising As social media spending expands, a larger portion will be targeted to local audiences



U.S. Social Local vs. National Ad Spend:



Five-Year Forecast





Social Media Advertising: Annual Revenue Changes



Media	2015	2016	2017	2018	2019	2020	CAGR (2015- 2020)
Social Media	50.3%	37.0%	29.7%	26.2%	20.2%	15.9%	25.6%
Desktop/Tablet	25.6%	19.8%	16.1%	12.6%	8.4%	3.9%	12.0%
Mobile	70.0%	47.1%	36.3%	31.7%	24.3%	19.6%	31.5%
Local Social	65.8%	42.7%	38.5%	34.5%	24.7%	20.1%	31.8%
Total Local Adv.	0.1%	4.5%	2.4%	5.1%	3.4%	5.7%	4.2%
GDP	3.5%	4.2%	4.5%	4.6%	4.8%	5.0%	4.6%





Local Magazines





Local Magazines

Print suffering from decreased subscriptions and readership



Local Magazines Forecast Summary

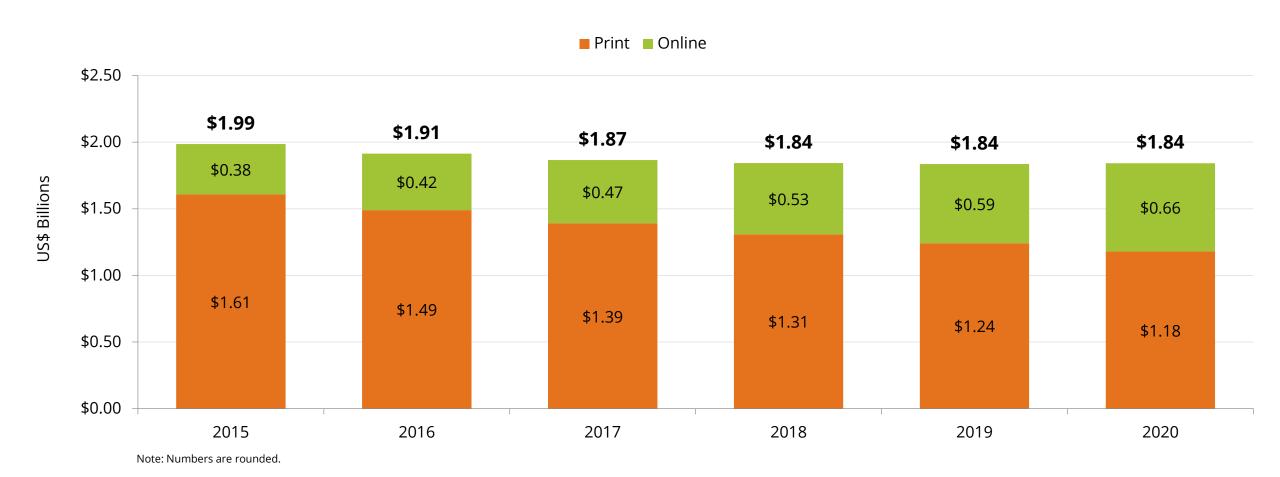


- The number of local/regional print magazines declined by about 1% in the past year as consumers continue to shift away from print.
- Print revenues for local magazines declined 11.0%, driven by fewer ad pages and low growth in ad revenues per page.
- Digital revenues growth of 16.3% helped to offset a portion of the decline in print. However, overall magazine ad revenues declined nearly 7%.
- The trend of declines in print and growth in digital is likely to continue, with digital revenues becoming an increasingly important component for the industry and expected to contribute 35.9% of total revenues by 2020, nearly double the present level.



Local Magazines: Five-Year Forecast







Local Magazines: Annual Revenue Changes



Media	2015	2016	2017	2018	2019	2020	CAGR (2015- 2020)
Online	16.3%	12.1%	11.9%	12.4%	11.3%	11.3%	11.8%
Print	-11.0%	-7.3%	-6.6%	-5.9%	-5.1%	-4.9%	-6.0%
Local Magazines	-6.8%	-3.6%	-2.5%	-1.2%	-0.4%	0.3%	-1.5%
Total Local Adv.	0.1%	4.5%	2.4%	5.1%	3.4%	5.7%	4.2%
GDP	3.5%	4.2%	4.5%	4.6%	4.8%	5.0%	4.6%





Guiding Media. Inspiring Innovation. Leading Local.

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