

## HOW VALID ARE MODELED NEWSPAPER READERSHIP ESTIMATES BEING USED IN THE UNITED STATES?

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### Background

Like other countries, advertising is big business in the United States. Newspapers have historically been the advertising revenue leader; however their position has been challenged in recent years as the last remaining “mass media” in a time when advertisers are seeking highly efficient and demographically targeted options for their investments. To continue to be a premiere advertising media, it’s clear that newspapers must change their business practices.

In 2004, the industry accounted for \$263.867 billion in media expenditures led by direct mail (19.78 %), newspapers (17.69 %) and broadcast television (17.67 %). Just ten years earlier the rankings were newspapers (22.77%), broadcast television (20.92%) and direct mail (19.79%)<sup>i</sup>. When considering the following information, it is essential to understand that in the United States several factors uniquely combine to make the newspaper industry distinctive from its international peers.

**First**, newspapers are almost exclusively a local media. Aside from a half-dozen publications marketed at national audiences, the nearly 1,400 dailies in the United States are editorially targeted to serve their local communities. With a population of nearly 297 million people covering 3.5 million square miles, most newspaper competition for readership is from adjacent, not directly overlapping markets. Nielsen delivers audience ratings for 1,361 television stations from 210 markets. Arbitron supplies audience ratings for 13,838 radio stations in 298 markets.

If someone were to calculate the number of newspaper markets in the United States, they probably would find that reader expectations, newspaper competition and financial needs have combined to create more than 1,000. As is true of the local population, the demographic segmentation of each newspaper market also varies significantly from the national average, including age, gender, ethnicity, household composition and income.

**Second**, audited paid circulation is the established advertising currency. According to *Editor & Publisher*, the circulation of U.S. daily newspapers in 2003 was 55,185,351. Sunday circulation was 58,494,695 copies. In many newspaper markets, publishers have funded and supplied their advertising partners with readership estimates showing the size and composition of their readers for more than forty years. The hesitation from the buying community in embracing readership as an advertising metric has been due to concerns regarding the credibility, reporting consistency and convenient access to the results because newspapers have relied on more than thirty different suppliers to field the research and tabulate the findings.

It is important to note that all of the research suppliers in this field (custom and syndicated), to varying degrees, fail to comply with the Advertising Research Foundation’s *Guidelines for Newspaper Audience Studies*<sup>ii</sup>. As a result, the advertisers have continued to look to a uniformly available, credible metric for negotiating their investments... audited paid circulation. The good news is that shareholder expectations of constant improvements in the effectiveness and efficiencies of their advertising campaigns caused companies to switch to a media-neutral approach to planning and buying. While paid circulation is a dependable metric for comparing two newspapers, it under-represents the media’s effectiveness when compared to television viewers or radio listeners. Given these conditions, it is likely that in the near future there will be two newspaper advertising metrics, (verified & standardized) readership and (audited) paid circulation.

**Third**, pre-printed free standing insert advertising (FSI) accounts for the majority of newspaper advertising expenditures in the United States. In 1981, advertisers invested 19.2% of their newspaper budget in preprints. That share grew rapidly and in 1997 it overtook display/run-of-press (ROP) advertising with 51.1%<sup>iii</sup>. Many professionals believe this shift coincides with a change in marketing strategies, away from a heavy use of mass reach vehicles and towards highly efficient, low waste, targeted media aimed at specific demographic segments. For 2003, the Newspaper Association of America (NAA) estimated the preprint insert volume at 87.023 billion for daily newspapers. And since these levels are increasing, even a one percent change can have a major financial impact on an advertiser’s weekly printing expenditures.

These factors are clearly not exclusive to the United States, but their combination and subsequent interaction creates a unique situation. However, the research insights provided by this paper and presentation can be used to create constructive discussions on local applications.

### Modeling Newspaper Readership

As explained earlier, U.S. publishers frequently operate in markets without direct local newspaper competition. While the cost of funding an audience study for viewing can be spread across numerous television stations and listening can be spread across dozens of radio stations, in most cases the expense of readership research is the burden of a single newspaper. Custom readership research tends to be conducted infrequently and to widely varying degrees of accuracy given the competition amongst thirty-plus suppliers operating in the industry. At the same time, advertiser access to syndicated and custom readership research can be spotty, slow and inconsistently calculated or reported when finally available.

Given this environment, some professionals have suggested a simple modeling method to arrive at a total readership estimate for specific newspapers, either overriding available local estimates or filling in gaps for missing data. The concept is to weight national figures to a local level by factoring a specific newspaper’s circulation by the current national average readers-per-copy (RPC).

#### MODELED NEWSPAPER AUDIENCE APPROACH

<b>specific newspaper’s paid circulation</b> (supplied by publisher)	x	<b>national average readers-per-copy</b> (produced by Newspaper Association of America)	=	<b>specific newspaper total audience</b> (Total Readership)
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The Newspaper Association of America reports the current national average readers-per-copy at 2.338 for daily (see figure 1) and 2.561 Sunday (see figure 2). As an example, a publisher with a claimed paid circulation of 100,000 daily would yield 233,800 (100,000 x 2.338) adult readers daily and 256,100 on Sunday (100,000 x 2.561). The approach immediately begs for an answer to the question, “How valid are the modeled newspaper estimates being used in the United States?” Is RPC truly a national constant which can be accurately applied to specific newspapers or is a local market variable?

### ABC’s Reader Profile

The Audit Bureau of Circulations (ABC) is a non-profit, tri-partite association founded in 1914. The mission of the company is to function as a self-regulatory auditing organization, responsible to advertisers, advertising agencies and the media they use, for the independent verification and dissemination of members’ circulation, readership and audience information. While several other countries have local ABC’s, only Canada’s is overseen by the same Board of Directors and management team as the United States.

At the request of ABC members, ABC developed and launched Reader Profile in 1999 to increase the use of publisher supplied readership research as a complement to the trusted audited circulation metric. The program was specifically designed to overcome inherent weaknesses that newspapers working independently and individually would not be able to overcome: data credibility, report comparability, improving end-user access to the information and increasing the visibility of the research findings. At the voluntary request of a member newspaper, ABC verifies their readership research study (custom and syndicated) before, during and after fieldwork for compliance with a set of minimum standards that are under the continual review of an industry-wide advisory committee<sup>iv</sup>. ABC does not conduct the research fieldwork.

Approximately 80% of the readership research used by publishers is from proprietary studies funded by a single newspaper. While conducted through independent third-parties, there is a strong concern from the ad buying community that the customer can expend a great deal of influence on the final results. Syndicated research is limited to major markets with half of the newspaper-specific readership estimates reported either “relatively unstable” or “unreliable.” The widely used syndicated databases do not produce readers-per-copy estimates.

Currently, Reader Profile includes participation from more than 300 newspapers in the United States including 2/3 of the newspapers with 50,000+ average paid circulation as well as 80 of the 100 largest newspapers. The insights provided by this paper were developed from a free library of more than 550 verified readership studies relying upon more than 775,000 completed telephone interviews.

## Readers-Per-Copy (RPC)

Because of the individual newspaper and voluntary approach of ABC's Reader Profile, it should not be considered a substitute for national averages as it does not include all 1,400 dailies. However, a major benefit of this approach is that the reported readers-per-copy (RPC) is newspaper specific, opposite of the modeled newspaper audience method. This is extremely important because advertisers rarely buy newspapers for national coverage, instead selecting the individual newspapers and locations that support their current marketing strategies.

Since 1999, ABC has released more than 550 individual reports, but this includes duplication, with some newspapers releasing multiple reports. For this exercise, we looked at the most recently released report for each participating newspaper. For daily newspapers, even a quick review of the verified readers-per-copy quickly answers the underlying question- *is RPC is a national constant or local market variable?* ABC's Reader Profile reports clearly show that RPC is a local market variable.

### ABC's READER PROFILE APPROACH

<b>newspaper specific readership estimate</b> (syndicated or custom research, fielded by third-party supplier, verified by ABC)	÷	<b>paid circulation</b> (audited by ABC)	=	<b>newspaper specific RPC</b> (calculated by ABC)
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The industry's current national readers-per-copy estimate for daily newspapers is 2.338. A review of 237 Reader Profile reports shows a range in individual newspapers of between 1.8 and 4.4 RPC (see figure 3). From this base, 38 daily newspapers confirm 2.3 readers-per-copy, but 46 report a lower RPC and 153 newspapers show a higher RPC.

If you look at the percentage of daily newspapers with 2.3 RPC, the modeled approach to newspaper audiences in these cases would be accurate 16% of the time (see figure 4). Further, in the majority of these cases (65%) modeling RPC produces audiences which underestimate daily individual newspaper readership by as much as 91%. Finally, analysis indicates that daily RPC is also a variable within circulation sizes as each of the ranges failed to produce a majority for a single estimate.

With the accuracy of modeling daily newspaper audience estimates shaken, what about Sunday? The industry's current national readers-per-copy estimate for Sunday newspapers is 2.561 (rounded to 2.6 for this exercise). A review of 217 reporting Sunday readership shows a range between 1.8 and 7.1 RPC (see figure 5).

A specific review of the newspaper with 7.1 RPC shows that the circulation strategies of the newspaper resulted in a large amount of printed and distributed newspapers which could not qualify as paid circulation. As a result, the small base (paid circulation) yielded a high RPC. As an anomaly, the 7.1 RPC was eliminated from the sample for further analysis.

If you look at the remaining Sunday newspapers, the modeled approach to newspapers audiences would be accurate just 14% of the time (see figure 6). However, in the opposite direction of the daily RPC review, the majority (65 %) of Sunday newspapers are below the 2.6 national averages. In these cases, modeling readership could overestimate the newspaper audience by as much as 44%. As with the daily RPC, Sunday RPC is also a variable within circulations sizes as each range failed to produce a majority for a single estimate.

## Advertiser Application and Financial Implications

Due to concerns over the accuracy of modeled newspaper readership estimates, the authors believed it would be highly beneficial to examine the financial implications through a case study of a specific advertiser. Confidentially agreements prevent disclosing the complete identity of the advertiser, but it is a major national company in the highly competitive telecommunications industry. This company does not model readership, but it is a leading newspaper advertiser.

The review began with the company's 2004 newspaper advertising investments. The authors eliminated all insert (FSI) advertising and expenditures in newspapers without a Reader Profile report. The net result was an advertising investment sample of \$107 million (\$66,335,000 daily- \$40,220,000 Sunday) (see figure 7). This included 140 newspapers from 87 U.S. markets with an average paid circulation ranging from 10,163 to 1,113,470 daily (157,746 mean) and 10,304 to 1,647,476 Sunday (226,626 mean).

The total daily paid circulation in the sample was 22,242,204 copies (see figure 8). Applying the readership model, the newspapers would be expected to have 52,936,446 total daily readers (22,242,204 × 2.380). However, using verified newspaper specific information the total readership was actually 58,230,800 adults or 9.1% higher than the modeled estimate. For Sunday copies, the total paid circulation in the sample was 29,008,147 (see figure 9). Applying the readership model, a user would expect to have a total Sunday readership of 71,650,123 adults (29,008,147 × 2.470). Again, this estimate was inaccurate as the Reader Profile reports showed a total of 76,809,800 readers or 6.7% higher than the modeled estimate.

Finally, to determine the economic impact that would have been encountered if a readership model had been used, the media schedule for the sample newspapers was reviewed. This process included considerations for number of advertisements and the days utilized in each newspaper. The financial impact was dramatic. If the advertiser had used a modeled approach, they would

have expected to yield an annual daily CPM of \$13.60, but the actual daily CPM was \$11.46 or 15.7% lower (see figure 10). The expectation for modeled Sunday readership would have been \$13.63 CPM for the year, but actual Sunday CPM was \$12.01 or 11.9% lower. Based on the advertiser's spending in the sampled newspapers, the combined model CPM would have been expected to yield a \$13.61 CPM, but the actual combined CPM was \$11.69 or 14.1% lower.

Whether viewed from either the perspective of the newspapers or from the advertiser, in this application modeling readership was clearly lose-lose proposition. For the newspapers, modeling readership would have under-estimated the true reach of their products, yielding a higher CPM. In a true media neutral planning and buying environment, this would make newspapers appear to be a more expensive investment than they actually were and drive advertising business to other media. In the case of the advertiser, if the target was to hit the readership levels as projected in the model, the goal was realized far earlier than expected leading to an over-investment. In any competitive industry, shareholders would not appreciate such a dramatic misallocation of funds.

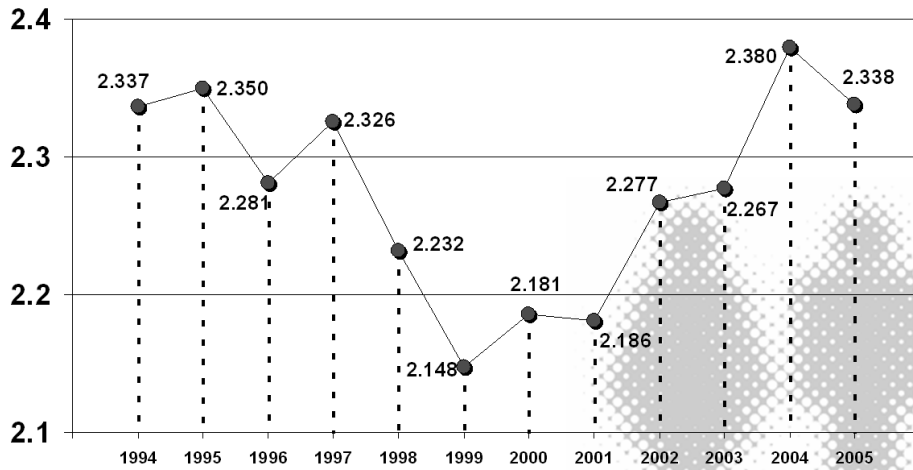
## **Conclusion**

Newspapers are a local market media deserving of accurate comparisons with their broadcast peers for advertising budget allocations. Audited paid circulation remains an excellent method to compare the distribution strategies and quantities of two (or more) newspapers and for advertisers to accurately gauge their FSI printing needs. However, it greatly underestimates the value of newspapers in a truly media-neutral environment. As a result, it is unlikely newspapers are currently getting their fair share of advertising revenue.

In the age of increasing accountability and accuracy, the authors believe financially responsible professionals can not make sound investments using modeled readership estimates. If U.S. newspapers want to continue to be a premiere media it is essential that they change their business practices. Modeling newspaper readership is as financially damaging as it is inaccurate in estimating results. Even if it means a larger upfront financial investment to quantify and qualify their readership, enabling newspapers to operate in a truly media-neutral environment will generate substantial additional advertising revenues in the long-term.

FIGURE 1.

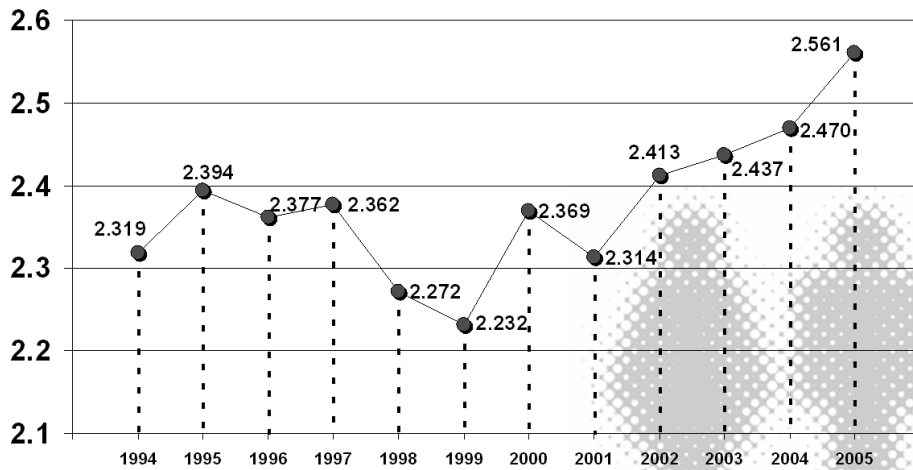
*Newspaper Association of America  
Daily Readers-Per-Copy Trend*



Simmons Market Research Bureau (1994-1997)  
Mediamark Research Inc. (1998-present)

FIGURE 2.

*Newspaper Association of America  
Sunday Readers-Per-Copy Trend*



Simmons Market Research Bureau (1994-1997)  
Mediamark Research Inc. (1998-present)

FIGURE 3.

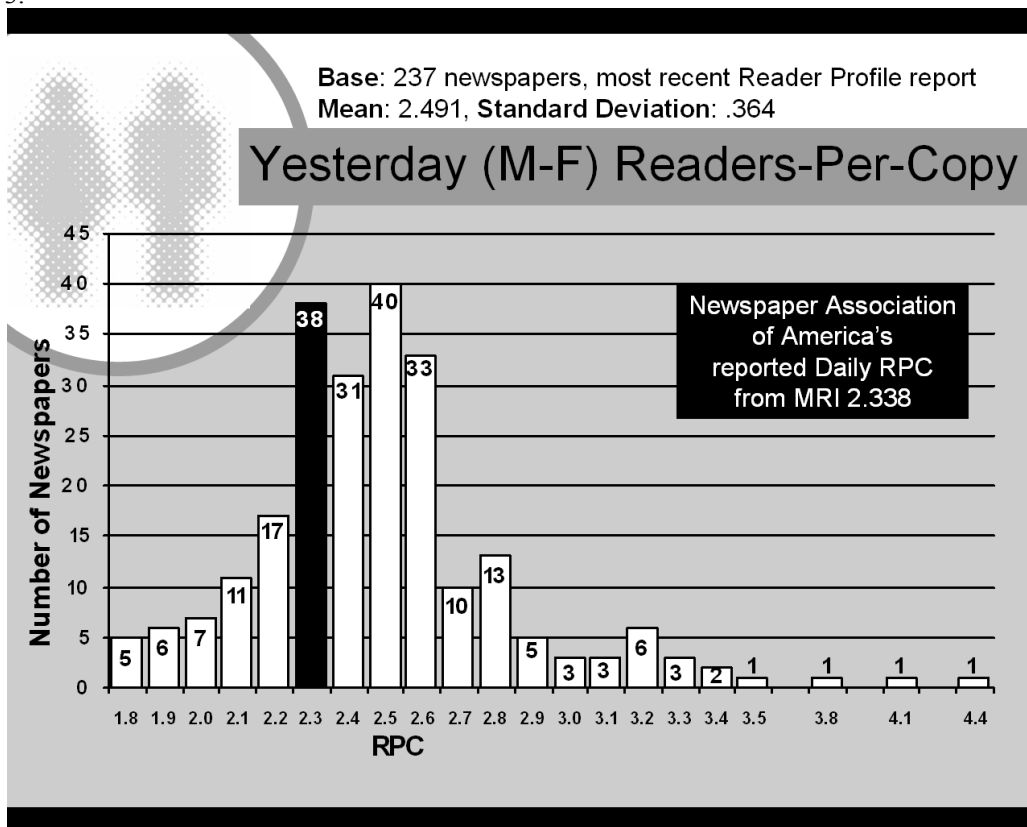


FIGURE 4.

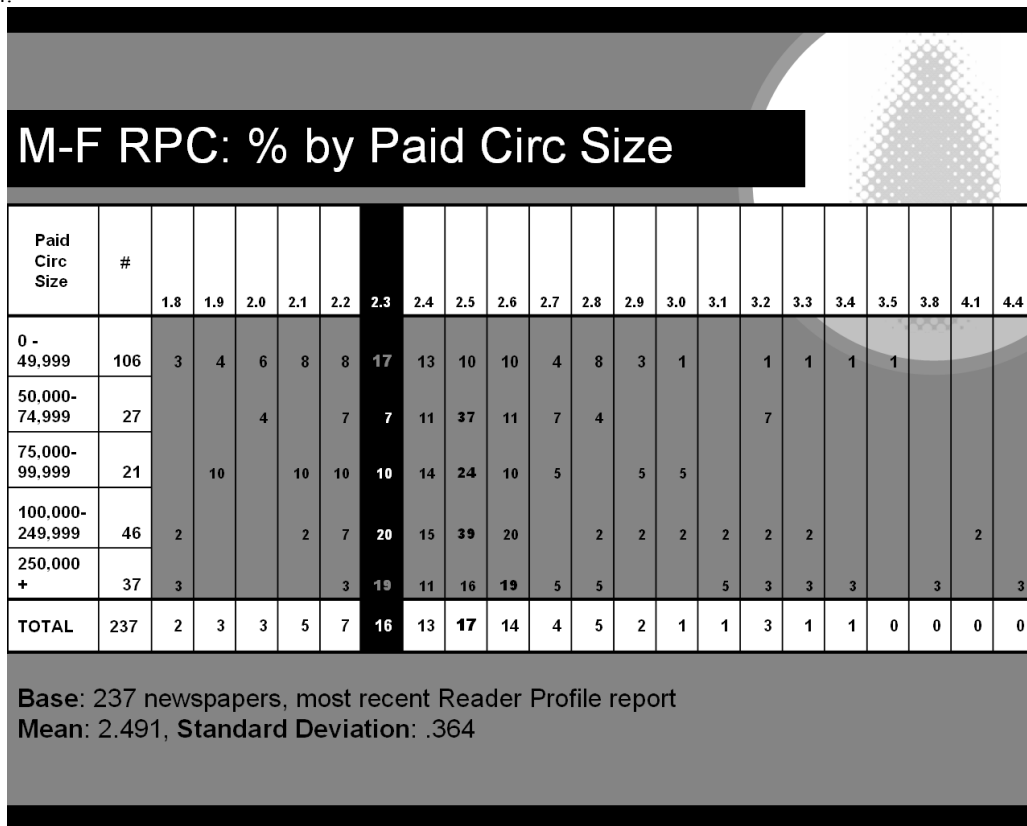


FIGURE 5.

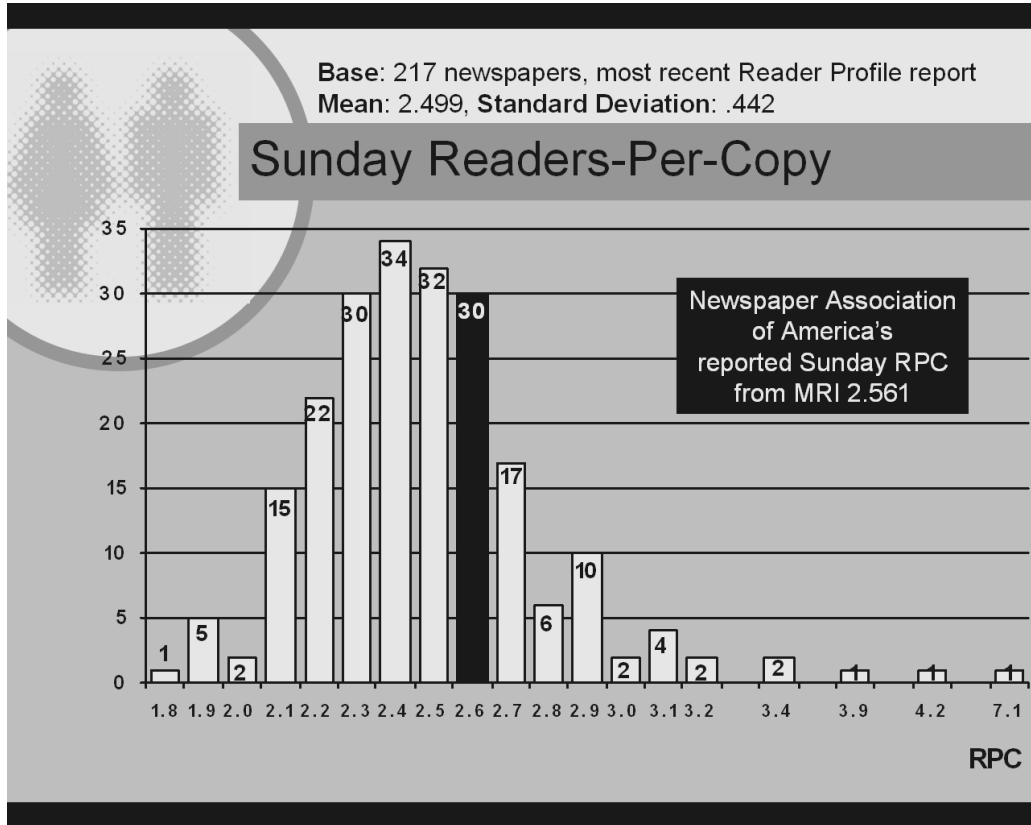


FIGURE 6.

### Sunday RPC: % by Paid Circ Size

Paid Circ Size	#	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.4	3.9	4.2	7.1
0 - 49,999	74		4	3	9	8	18	16	16	11	5	1	5		1		1			
50,000-74,999	28				4	14	14	11	21	18	4	4	4	4						4
75,000-99,999	25		4		8	8	28	12	8	8	12		8			4				
100,000-249,999	40	3			10	15	5	15	13	10	13	5	5		5	3				
250,000 +	50		2		2	8	8	20	14	22	8	4	2	2	2		2	2	2	
<b>TOTAL</b>	<b>217</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>7</b>	<b>10</b>	<b>14</b>	<b>16</b>	<b>15</b>	<b>14</b>	<b>8</b>	<b>3</b>	<b>5</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>

Base: 217 newspapers, most recent Reader Profile report  
 Mean: 2.499, Standard Deviation: .442

FIGURE 7.

## Advertiser Application

- Confidentiality agreements prevent disclosure of identity
- National advertiser in competitive telecommunications industry
- Does not model readership, but is a leading newspaper advertiser
- Review of 2004 newspaper advertising investments
  - eliminated all FSI (insert) advertising
  - eliminated expenditures in newspapers without a Reader Profile report
- Net result: Advertising Investment from sample \$107 million
  - \$66,335,000 daily
  - \$40,220,000 Sunday
  - 140 newspapers from 87 markets
  - daily paid circulation 10,163 to 1,113,470 (157,746 mean)
  - Sunday paid circulation 10,304 to 1,647,476 (226,626 mean)

FIGURE 8.

## National vs. Local

### Daily (M-F) Readership

Modeled		Reader Profile
140	Newspapers	140
22,242,204	Total Paid Circulation	22,242,204
2.380	RPC	1.8 to 4.4
52,936,446	Readership	58,230,800
	<b>Actual Results</b>	<b>9.1% higher</b>



FIGURE 9.

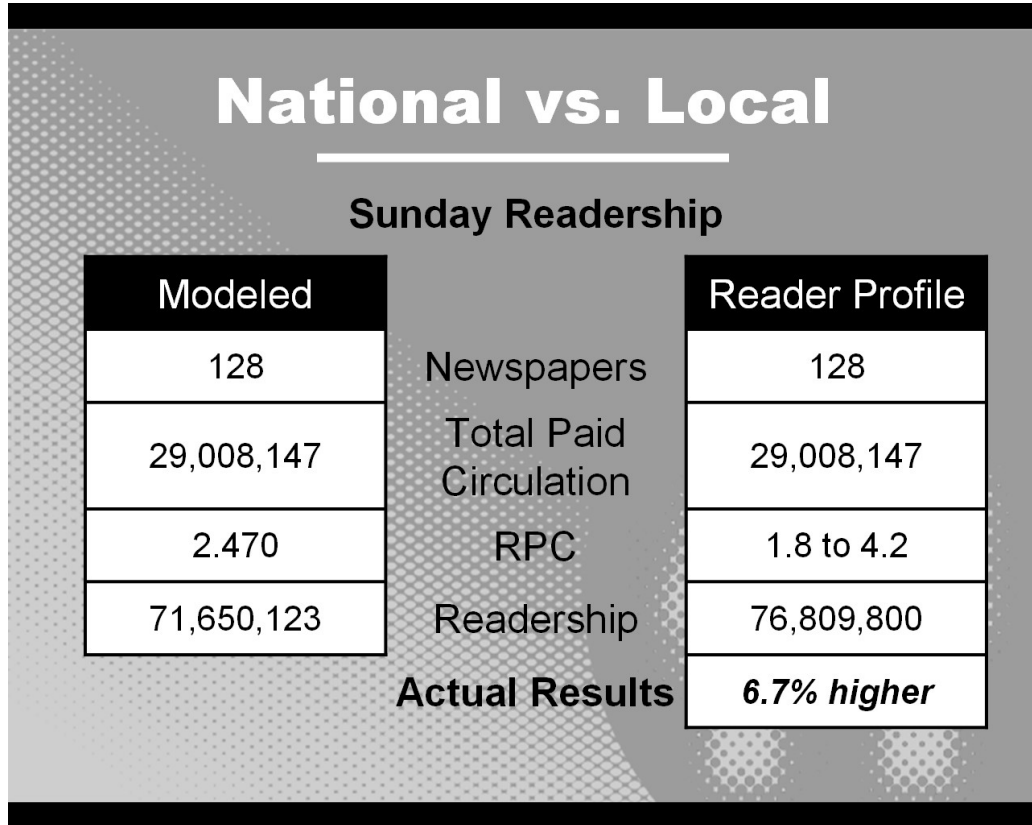
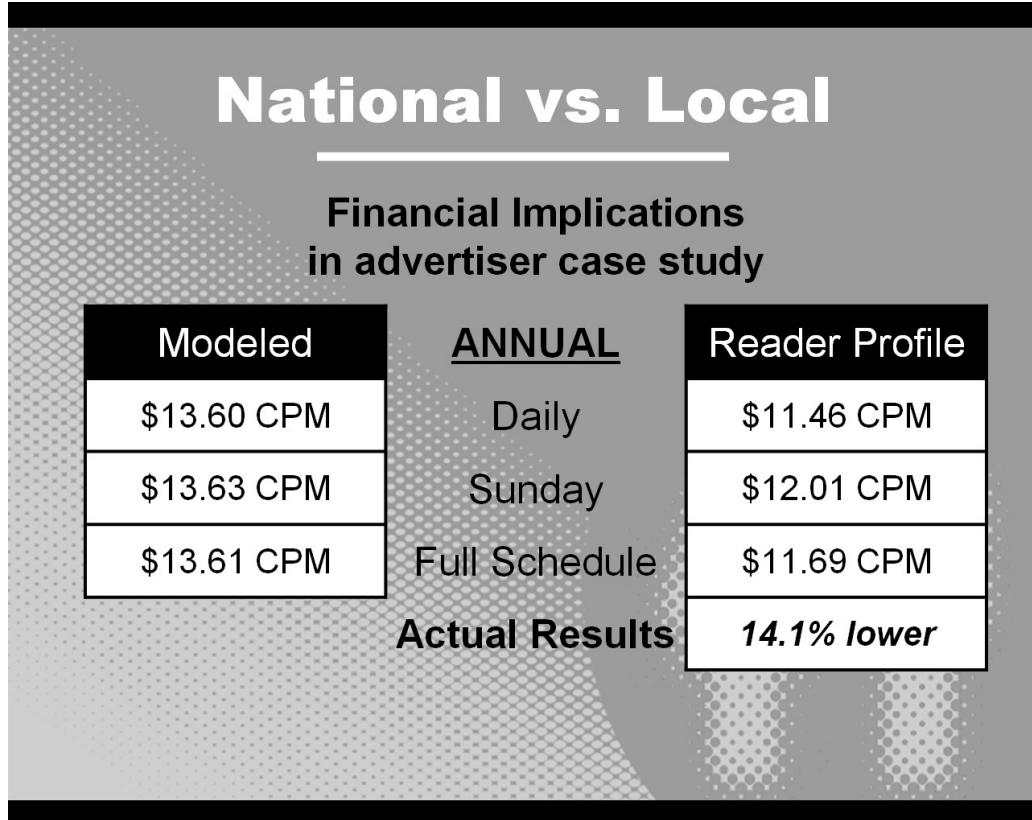


FIGURE 10.



### **Additional Resources**

Audit Bureau of Circulations ([www.accessabc.com](http://www.accessabc.com)).

ABC's Reader Profile ([www.readerprofile.com](http://www.readerprofile.com)).

Advertising Research Foundation ([www.thearf.org](http://www.thearf.org)).

Newspaper Association of America ([www.naa.org](http://www.naa.org)).

*ARF Guidelines Handbook: The Advertising Research Foundation Compendium of Guidelines to Good Advertising, Marketing and Media Research Practice* (1990).

*2004 Facts About Newspapers: A Statistical Summary of the Newspaper Industry*. Newspaper Association of America (2005).

*Maximizing the Daily and Sunday Audience Reports for Sales Presentations*. Newspaper Association of America (2005).

**<sup>i</sup>Endnotes**

*Total U.S. Advertising Volume.* Newspaper Association of America.

<sup>ii</sup> *The Effect of ABC's Reader Profile on U.S. Newspaper Research.* Neft, George & Campbell. Advertising Research Foundation's Week of Workshops. (2002)

<sup>iii</sup> *Preprint vs. ROP- Advertiser Spending in Daily and Sunday Newspapers.* Newspaper Association of America.

<sup>iv</sup> *ABC's Reader Profile: Telephone Research Verification Standards.* Audit Bureau of Circulations (2005).