

U.S. Scorecard for Mobile Advertising Reach and Targeting (SMART)

March 2009 (data compiled from 3/1/09 to 3/31/09)



Millennial Media's new monthly SMART is designed to provide brand advertisers data and insights to drive decisions on mobile advertising campaign spend. Secondly, this Scorecard provides a more comprehensive picture of the U.S. mobile advertising market and device trends.

It is our belief that monthly impressions and handset penetration do not provide the leading indicators of the health and growth of mobile advertising. In fact, reach and engagement are two of the most critical factors in establishing initial advertising campaign goals; while the additional metrics included in this SMART also provide guidance for other, more specific campaign-related decisions.

2009 Mobile Internet Highlights at a Glance:

- **Mobile is the most effective channel for spend.** Lift is 5x higher than Internet across several brand measurement criteria (source: InsightExpress®).
- By Evaluating Cost Per Engaged User (CPEU™) across numerous targeting methods, **the most efficient spend is in mobile.**
- **Rich media has greater, earlier mobile penetration** when compared with online adoption.
- The number of **advertisers using third-party ad tracking tools continued to grow.**
- **Non-iPhone touch screen devices had five times the traffic than iPhone,** while QWERTY devices had seven times the traffic. iPhone continued to have the largest single device representation.

Millennial Media March SMART Contents

Section One:

U.S. Mobile Internet Reach Page 2

U.S. Mobile Advertising Engagement Data Pages 3-6

Campaign Tracking/Actions
Cost Per Engaged User (CPEU™)/Targeting Mix
Mobile Campaign Key Statistics
Top U.S. Mobile DMAs

Section Two:

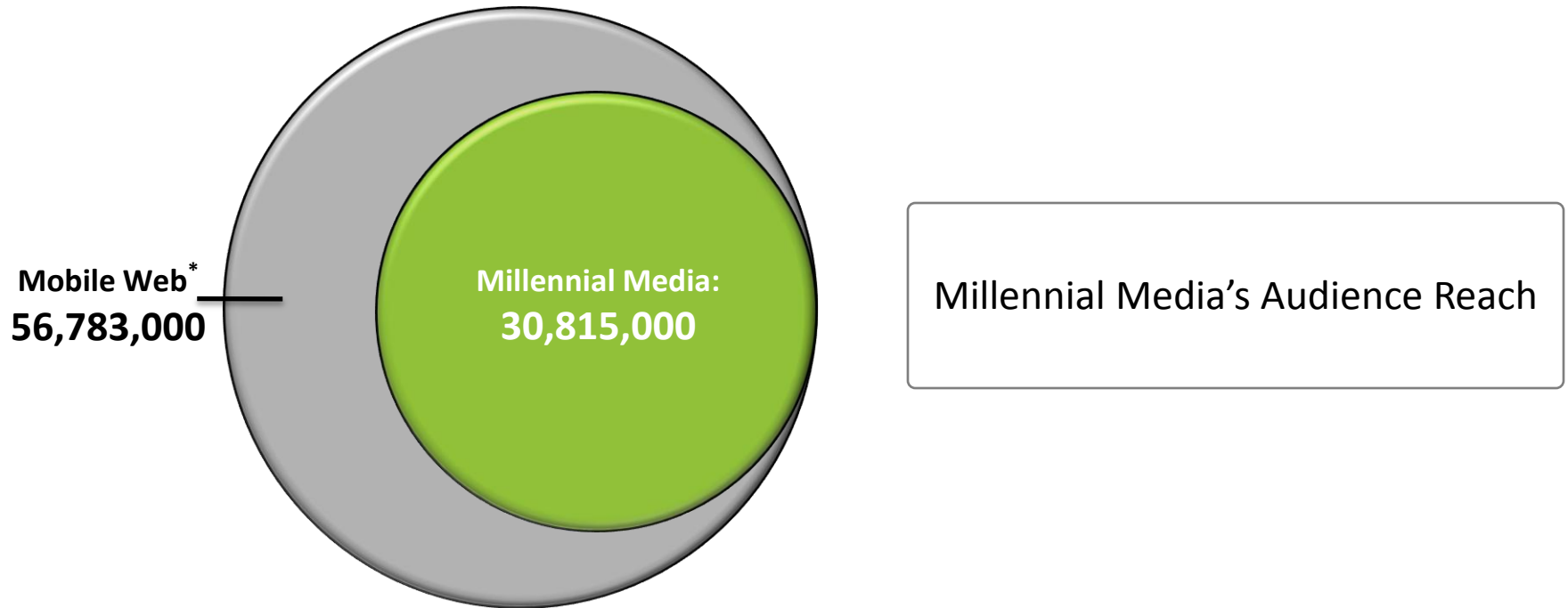
U.S. Handset and Carrier Data Page 7

Top Mobile Phones/Manufacturers
Carrier Mix by Percentage
Device Input Mix

Section Three:

Summary and Reporting Methodology Page 8

U.S. Mobile Internet Reach – March 2009



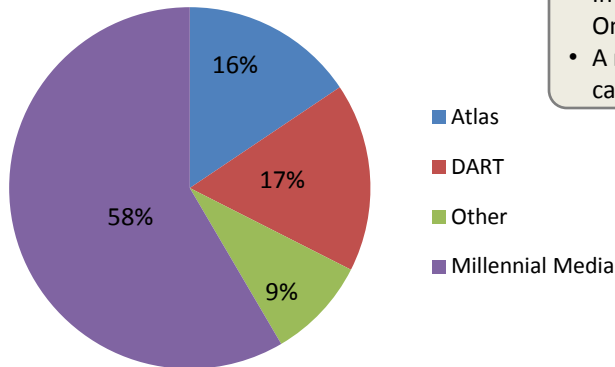
*The Mobile Web number was extracted from the Nielsen Mobile Report: Standard Metrics (Internet Applications included), February, 2009, All Carriers.

Key Takeaways:

- The U.S. mobile audience is growing rapidly month over month. With this growth, ad network reach becomes increasingly relevant; however, without engagement capabilities, reach alone will not ensure campaign success.
- According to Nielsen's mobile audience reach tool, which does not include all sites and services in the company's networks, Millennial Media's networks have the largest survey-based reach of the mobile ad networks at 24.05 MM.

U.S. Mobile Advertising Engagement Data – March 2009

Campaign Tracking Mix



Source: Millennial Media 3/09

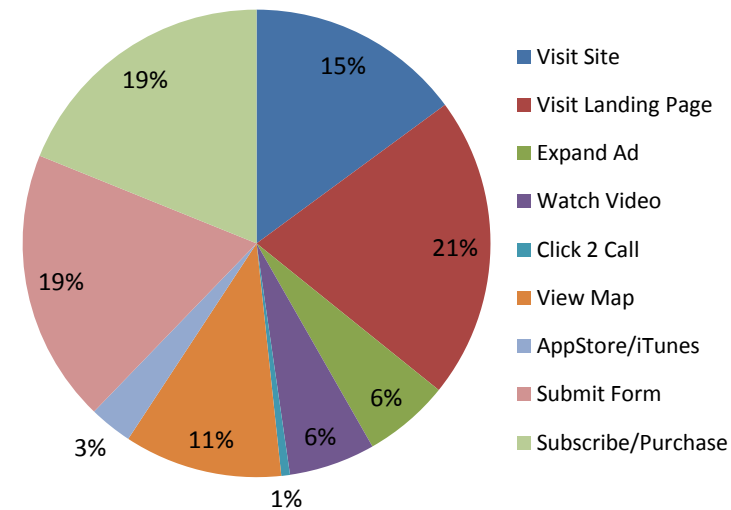
Analysis:

- Advertisers using traditional ad tracking and serving tools such as Atlas and DART continued to grow.
- In the chart to the left, the category 'Other' includes other third-party tracking such as Omniture, Bango, Ringleader Digital, and others.
- A majority of advertisers continued to rely on Millennial Media to provide detailed campaign tracking.

Analysis:

- While the percentage of campaigns driving users to other mobile web pages were 60%, the percentage of campaigns that solely drove traffic to their destination site or mobile Web page has declined consistently over the past 12 months, in favor of rich user interactions and direct response campaigns.

Campaign Actions Mix



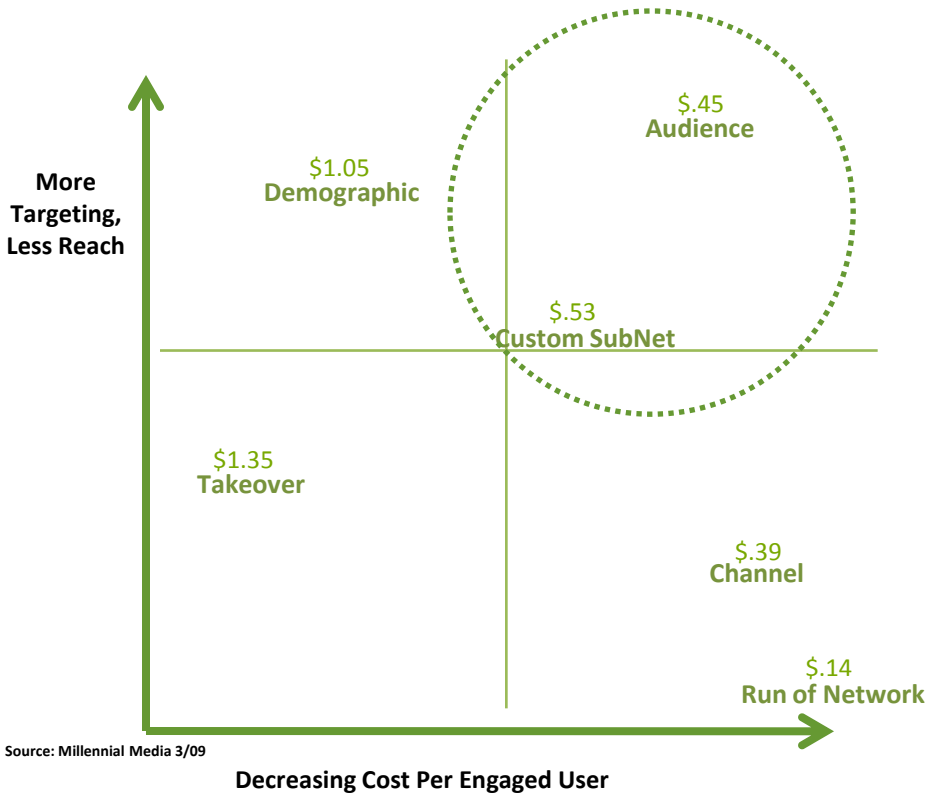
Source: Millennial Media 3/09

Key Takeaways:

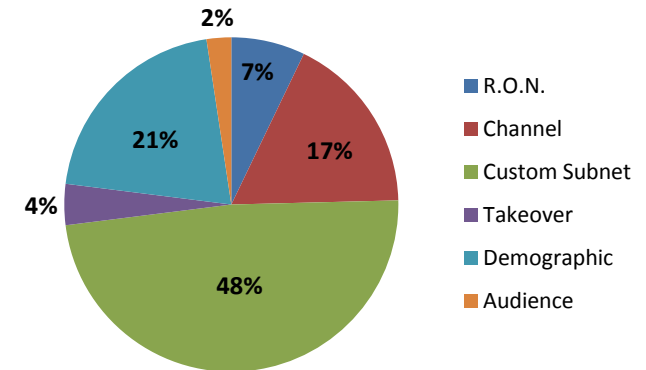
- Engagement is defined as a user interaction triggered by a campaign action (example: clicked on a banner, clicked on an expandable banner, watched a video, clicked to call, etc); versus an impression, which counts a user who landed on a page that contained an ad. An impression cannot accurately determine whether the user actually saw that particular ad; therefore, engagement is a more relevant measurement.
- Increased trusted third-party mobile ad tracking is additional validation that mobile is becoming a critical extension of advertiser's digital reach.
- Advertisers continued to move beyond static mobile sites and provided more engagement opportunities (view map, subscribe, submit form, etc), seizing acquisition or interaction opportunities for their campaigns in March.

U.S. Mobile Campaign Relevancy and Engagement – March 2009

Observed Cost Per Engaged User (CPEU)[™] by Targeting Method



Campaign Targeting Mix – March 2009



Source: Millennial Media 3/09

Key Analysis:

- Custom SubNets and Audience targeting represent the most efficient spend on mobile (engagement & relevancy).
- More campaigns used mobile to reach a relevant audience, with numerous targeting capabilities based upon campaign goals.
- Mobile campaigns are no longer just an extension reach from online; they are showing a lower cost per unique user and higher interaction rate.

Key Takeaways:

- Targeting maturity continued to progress with more advertisers selecting Audience and Custom SubNets in March. Audience targeting will continue to grow and costs will continue to decline as more advertisers choose this option.
- Mobile's targeting capabilities already rival that of online, and offer more dimensions based on handset and other mobile-specific segmentation.
- All four quadrants represent more effective spend than online, as cost per engaged user with greater than 90% share of voice on a per-page basis.

U.S. Mobile Campaign Key Statistics – March 2009

42% Campaigns utilized frequency capping

15% Campaigns used rich media creatives

58% Requests used some level of geo info

1.09 Number of ad requests per page view

97% Image ads vs. text ads

96 Average monthly page views per user

4:48 90th percentile of average user session time (seconds)

Source: Millennial Media 3/09

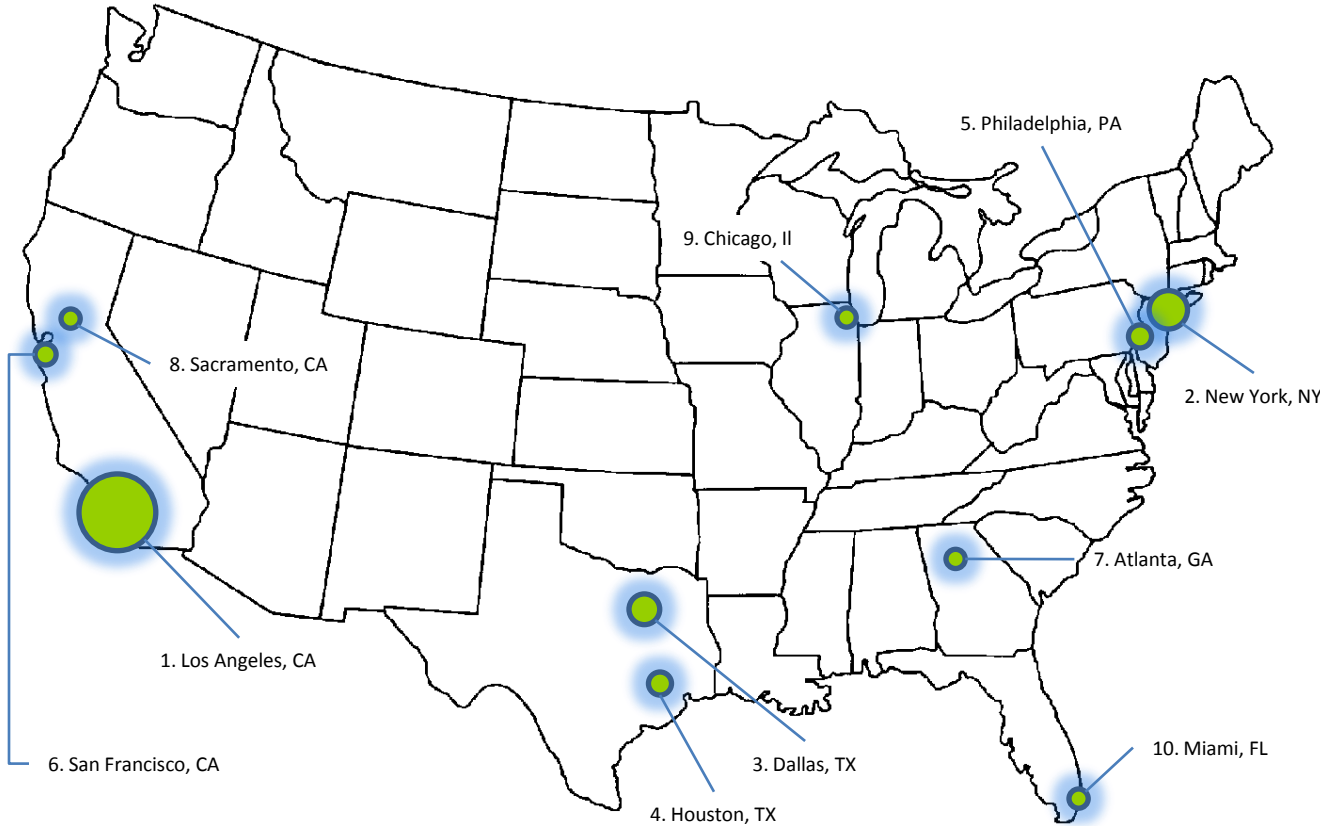


Key Takeaways:

- Frequency capping continued to be a top priority for brand advertisers using mobile.
- Page views per user continue to steadily increase as a result of the growth in wi-fi devices.
- Mobile Web users show comparatively short session times in comparison to online users.
- The vast majority of ads served across the Millennial Media network were displayed as images in March, with only a few advertisers opting to use text ads.

Top U.S. Mobile DMAs By Ad Requests – March 2009

Total U.S. Requests: 3,389,243,006 (excludes International)



Location	% of Requests
1. Los Angeles, CA	17.0%
2. New York, NY	7.1%
3. Dallas, TX	6.2%
4. Houston, TX	4.2%
5. Philadelphia, PA	3.9%
6. San Francisco, CA	3.4%
7. Atlanta, GA	3.1%
8. Sacramento, CA	3.0%
9. Chicago, IL	2.9%
10. Miami, FL	2.6%
11. Washington, D.C.	2.6%
12. Phoenix, AZ	2.4%
13. Tampa, FL	2.2%
14. Orlando, FL	1.9%
15. San Antonio, TX	1.9%
16. Detroit, MI	1.8%
17. Baltimore, MD	1.6%
18. Las Vegas, NV	1.5%
19. San Diego, CA	1.5%
20. Boston, MA	1.3%

Source: Millennial Media 3/09

Key Takeaway:

According to our ad requests, 10 of the top 20 locations were concentrated in the following three states: California, Texas, and Florida. Additionally, 7 of the top 10 DMAs were located in the South, West, and Southwestern U.S.

U.S. Device and Carrier Data – March 2009

Total U.S. Requests: 3,389,243,006 Average Requests/Page: 1.09*

Top 15 Manufacturers (All Devices)	Share	% Change
Samsung	21.60%	0.46%
LG	12.52%	-0.24%
Apple	11.35%	-0.43%
Motorola	10.50%	-0.70%
Research In Motion	9.82%	0.53%
Sony	7.63%	-1.31%
Danger	7.54%	3.07%
HTC	4.97%	1.16%
Palm	2.96%	-1.28%
Nokia	2.45%	-0.58%
Kyocera	1.99%	-0.02%
SonyEricsson	1.63%	0.20%
UTStarcom	0.99%	-0.05%
Sanyo	0.78%	-0.22%
HUAWEI	0.43%	-0.14%

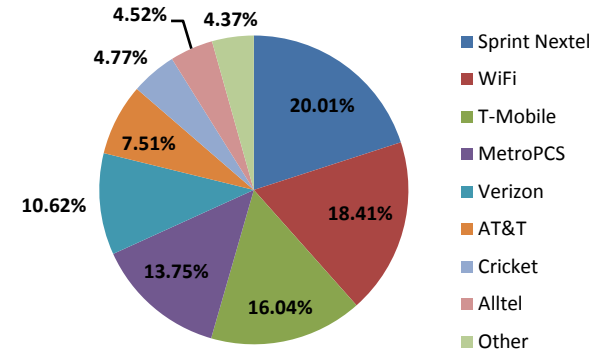
Source: Millennial Media 3/09

*Average ad requests per page view

**Does not include non-phone Wi-Fi devices such as iPod Touch, Sony PSP, Nintendo DS, and Amazon Kindle

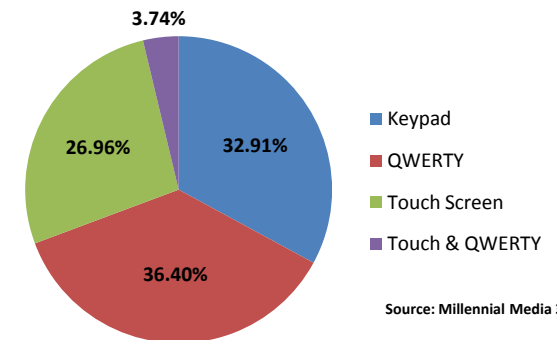
Top 20 Mobile Phones**	Share	% Change
iPhone	5.82%	0.14%
SPH-M800 (Instinct)	5.07%	-0.14%
Blackberry 8300	3.77%	-0.37%
SCH-R450	3.69%	1.79%
Sidekick 2008	2.81%	-0.54%
Sidekick LX	2.26%	-1.08%
Centro	2.05%	-0.54%
Blackberry 8100	2.02%	-1.09%
VX9700 (Dare)	1.68%	0.02%
LX260	1.67%	-0.08%
CU920 (Vu)	1.49%	0.28%
Sidekick Slide	1.43%	1.27%
Q9	1.41%	-0.47%
G1 (Dream)	1.33%	0.28%
VX10000 (Voyager)	1.22%	-0.14%
SCH-R430	1.22%	-0.14%
CU720	1.07%	-0.05%
S1300	1.07%	0.57%
SGH-R210	1.05%	0.20%
SGH-I617 (BlackJack II)	0.99%	-0.10%
	43.13%	

U.S. Carrier Mix - March 2009



Source: Millennial Media 3/09

Device Input Mix – March 2009



Source: Millennial Media 3/09

Key Analysis:

- **Samsung** has strong distribution across GSM and CDMA carriers. While the iPhone is the leading mobile phone on the Millennial Media network, QWERTY devices still outnumber touchscreen devices—33% to 27%.
- The top 20 mobile devices featured above represent less than half of the total ad request base.
- For overall mobile device input, **traditional keypad** remains a dominant input mechanism; however, it is showing steady declines against QWERTY and touch screen devices (see chart at right).

Key Analysis:

- **MetroPCS** is significantly over-represented versus its user base, likely driven by pricing plans.
- **Sprint** shows historic strength, based on flat rate data pricing.
- **Wi-Fi continues to grow**, due to rapid advanced device adoption and higher frequency among users.

Summary and Reporting Methodology



About Millennial Media

Millennial Media is the leading mobile advertising networks company in the U.S. With the greatest U.S. audience reach, we deliver engaging mobile advertising campaigns on the highest quality publisher network—at a scale that is unequalled in the mobile marketplace. As pioneers that helped shape an entire industry, we're at the cutting edge of innovation, providing the premier end-to-end advertising platform for mobile devices. Please visit www.millennialmedia.com for more information.

About SMART

The Scorecard for Mobile Advertising Reach and Targeting (SMART) delivers monthly insights on key trends in mobile advertising based on actual campaign and network data from Millennial Media, Inc. Millennial Media partners with major carriers, media networks, and top-tier publishers to deliver the largest audience reach of any third-party U.S. mobile advertising network. As such, we are uniquely able to collect a rich set of carrier, device and ad campaign data and accompanying analysis gathered over billions of monthly ad requests. Elevating and driving the whole mobile ecosystem forward is central to our company mission. Visit www.millennialmedia.com/research to receive Millennial Media-related news. The SMART was designed to speak to brand advertisers; however, for information on our performance product, Decktrade™, please contact us directly or visit our website.

Nielsen Reach Methodology:

Nielsen Mobile, a service of The Nielsen Company, is the world's largest independent provider of syndicated consumer research to the telecom and mobile media markets. Nielsen Mobile focuses exclusively on tracking the behavior, attitudes and experiences of mobile consumers. Their reports also provide up to seven years of data on internet, video, gaming, audio and advertising trends for mobile phone users. Mobile user behavior information is derived from general U.S. population samples under established and accepted rules. For more information, please visit www.nielsenmobile.com.

Millennial Media Methodology:

Network reach is calculated from the count of unique users across our entire network. Millennial Media uses proprietary techniques to uniquely identify at least 75% of our user base persistently across our network, and tracks the unique reach over the course of the month-long period. For the remainder, the unique user data is used to calculate the average frequency of views that a user consumes in a month. We apply that average frequency to the remaining impressions to determine our network-wide reach. Data provided is derived from Millennial Media server log activity for the time period indicated. Cost Per Engaged User (CPEU™) averages overall campaign spend against the number of unique users who engaged with the campaign creative. CPEU is derived by applying the overall media spend to the total number of users that engaged in any one of the actions which campaigns provided, such as expanding a rich media creative, visiting a landing page, watching a video, etc.

For questions about the data in this report, or for recommendations for future reports, please contact us at research@millennialmedia.com.