



WE KNOW THAT MEDIA HAS AN IMPACT ON THE PUBLIC, SHAPING DISCUSSION and action on important issues. How can we use data to trace these connections from the stories that appear in print, online or in broadcast, to how members of the public consume, subscribe, amplify and contribute to the conversation?

This guide is the first in the USC Media Impact Project's *Understanding Media Metrics* series of publications. The purpose of the series is to help media organizations understand digital measurement tools and the data they can provide to help illuminate parts of the process of media impact that occur online.

We'll start with looking at a few basic metrics of a news site, including the following:

- **Basic site metrics: Users, sessions, pageviews, bounce rate**
- **Looking at data by day versus data by week**
- **Segmenting by geography and/or traffic source or channel (e.g., organic search, direct, referring sites and links from social media)**
- **Comparing the basic metrics of one story versus another**

Other publications in the series will examine metrics for other website components, email newsletters, Facebook, Twitter, offline indicators of impact and other forms of media such as documentary films.



A NOTE ON DIGITAL METRICS TOOLS

This guide uses Google Analytics to illustrate the types of software tools used to gather and report metrics data. Each digital media platform has its own metrics and tools.

Data from one tool usually can't be combined with data from another. Also, data from one organization sometimes can't be compared with another, even if both are using the same tool.

- Each tool uses different methodologies and sometimes different terms.
- Unlike Nielsen ratings or Audit Bureau of Circulation numbers, newsrooms can customize the way data is gathered.
- The data gathered by a news organizations for its own internal use is proprietary and differs from data gathered by external sources such as comScore.

Google Analytics, Adobe SiteCatalyst (formerly Omniture), Chartbeat and WebTrends are just some of the free or paid tools a newsroom can use. All of the reports from these tools are designed to be used by non-technical users.



BASIC QUESTIONS ABOUT YOUR WEBSITE

Getting Started: Overall, how is our website doing?



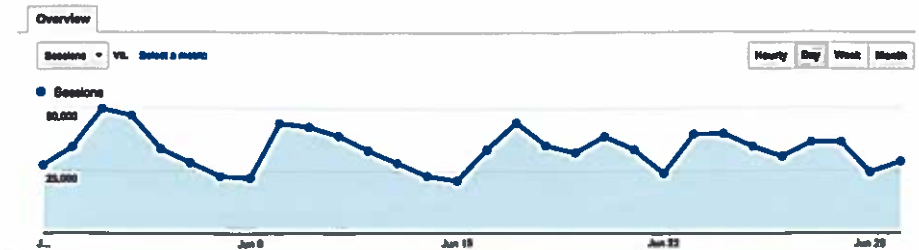
Meet Jenny. She's a seasoned reporter who hadn't really given much thought to web metrics ("Isn't that just for the SEO guy and the advertising salespeople?") until one day she saw one of her colleagues looking at Google Analytics.

All of those numbers and charts intrigued her. What do they say about who's seen her work? So one day she asks her editor if she could get access to Google Analytics ("Sure! Have at it.

Let me know if you make heads or tails of it.")

So she dives in, putting her journalistic instincts to work to start asking questions, beginning with the big picture: Overall, what's going on with the website?

- 1 After Jenny logs into Google Analytics, she clicks on one of the websites and sees the Audience Overview report, which gives a broad overview of a site's sessions, or visits.



This page has a lot of data, but the chart on the top draws her attention first.

This report shows the last 30 days—that's the default in Google Analytics. Because Jenny wants to look at the big picture, she decides to look at the last three months of data.

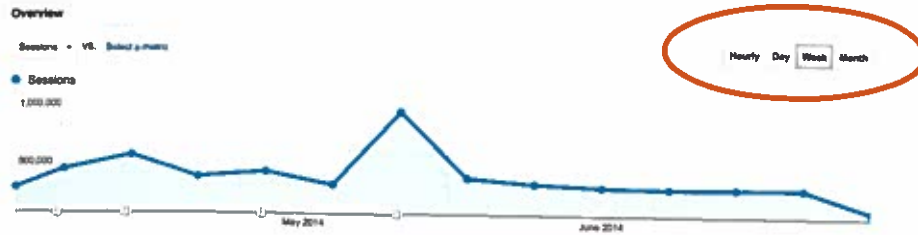


- 2 She clicks on the calendar drop-down at the top right, selects the start date and the end date, then clicks Apply. Now she sees the last three months.

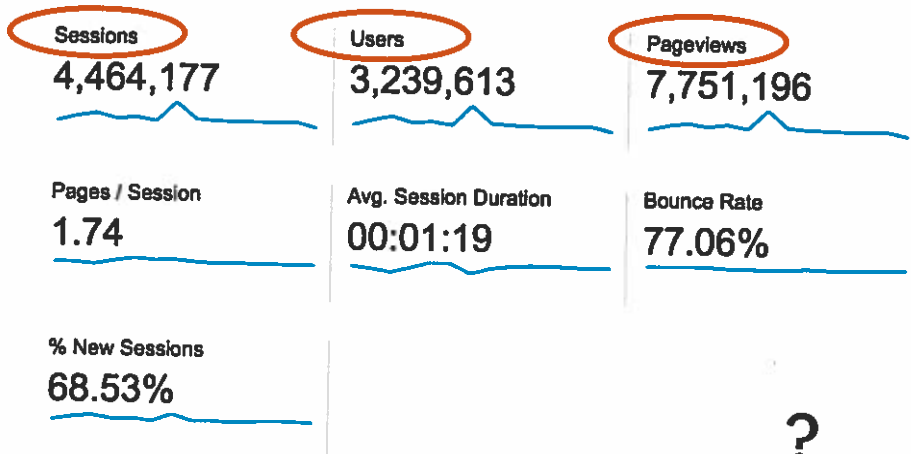
There are a lot of ups and downs on the chart on Jenny's screen. It's pretty typical for sites to show some hills and valleys in traffic over the week and weekend and seeing a spike when something especially popular happened. But looking at traffic by day makes it hard to see the overall trend.

3 So, Jenny clicks on the "Week" button in the top right to see the data by week.

Now she can more clearly see the trend over time.



4 Next Jenny scrolls down and sees some other metric names and numbers below the chart.



Jenny is curious about the additional metrics below the chart when she scrolls down. Three of these are the most basic measurements for web analytics: Sessions, users and pageviews.



PAGEVIEWS are exactly what they sound like: a count of each time someone views a page by any method such as clicking on a link, hitting the back button or refreshing the page. Every time the page loads in a web browser, it's a pageview.



A **SESSION** is a series of pageviews in a single interaction with your website. Maybe someone viewed just Article A and then left the site, but another person viewed Article A, then Article B, the home page and Article C. The first session has one pageview, while the second has four. Sessions are the metric shown by default in most charts in Google Analytics.



A **USER** might interact with the site over multiple sessions. The same person could come to the site once on Monday and again on Tuesday, or once in the morning and once in the afternoon. It sounds as though "user" is a "person." That's how we typically think of it, but it's not quite true. Google Analytics is really only measuring a specific device. Jenny could visit once on her mobile phone, another time on her laptop and yet another on her tablet. If she doesn't log in to the site on each device then we wouldn't know that all of these sessions were from the same user. So Jenny would be counted as three users.

Jenny now has a sense of the overall trend of traffic to the website. She sees that the recent peak in sessions corresponds to the date a particular local news story broke. Now she's interested in more specifics. These questions come to her mind:

How many sessions came from people in our local area?

How did people find our site? How did people find my story?

Was the peak in sessions driven by regulars, or by people who had never been to the site?

Jenny decides to look at the four main types of standard reports in the left navigation bar.

 Audience

AUDIENCE: Basics about who users are

 Acquisition

ACQUISITION: How people found the site

 Behavior

BEHAVIOR: Pages people viewed and how they interacted with the content

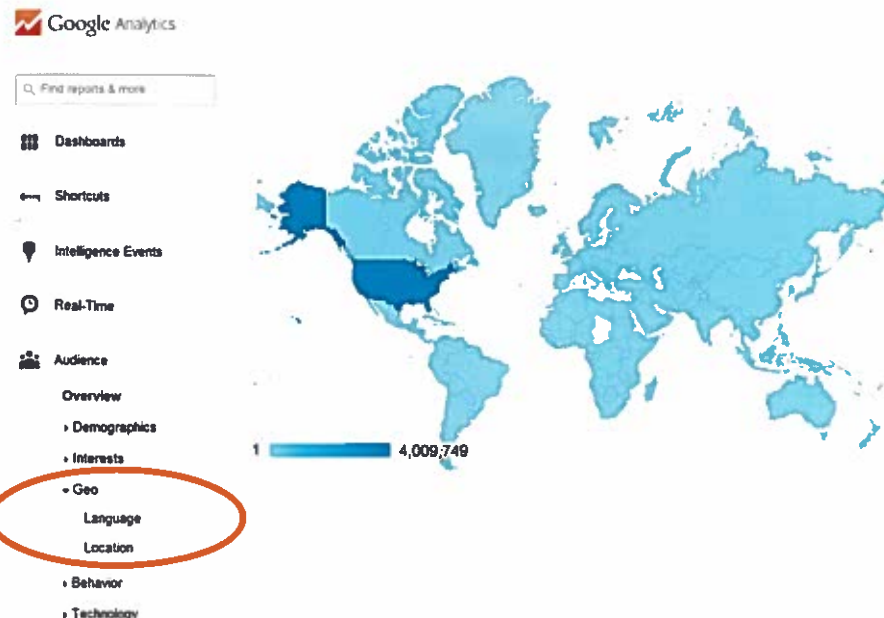
 Conversions

CONVERSIONS: Whether specified goals were reached, such as the number of email newsletter sign-ups

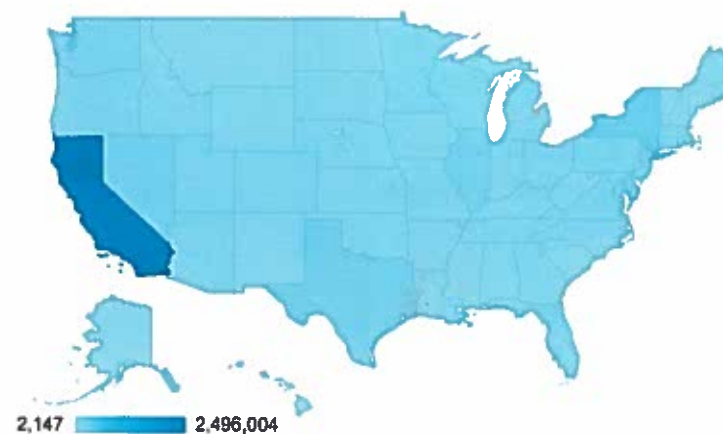
We'll look at a few of the reports in these four main areas as we answer Jenny's questions.

Getting Specific: How many sessions came from people in our geographic area?

1 In the left-hand navigation, Jenny clicks on Audience > Geo > Locations. She sees a report with a map of the world.



2 She clicks on United States and the map shows just the U.S.



There are three levels of detail in this report. Jenny can switch between them in the Primary Dimension selector at the top of the table.

REGION: U.S. states

CITY: Incorporated cities

METRO: Metropolitan areas that include a collection of incorporated cities and unincorporated communities

Primary Dimension: Region City Metro Other		
Secondary dimension		
Region	Acquisition	
	Sessions	% New Sessions
	930,855 % of Total: 91.62% (1,013,789)	59.74% Site Avg: 61.53% (-2.91%)
1. California	831,108 (87.80%)	51.02%
2. New York	43,823 (4.71%)	69.88%
3. Texas	22,897 (2.37%)	81.54%
4. Virginia	18,541 (1.99%)	90.25%

By clicking on a region, Jenny can drill down further into specific incorporated cities.

Each report has the same columns of metrics as some of the previous reports — the number of sessions, the percentage of sessions from users who were new, the average number of pages viewed and time spent.

Most newsrooms should look at traffic by metro and/or state ("region" in Google Analytics) to ensure they're capturing all of their potential audiences. For example, analyzing only a session from people in the city of Los Angeles would exclude traffic from places such Pasadena, Long Beach and East Los Angeles, an area of Los Angeles County.

Getting Specific: How did they find our site?

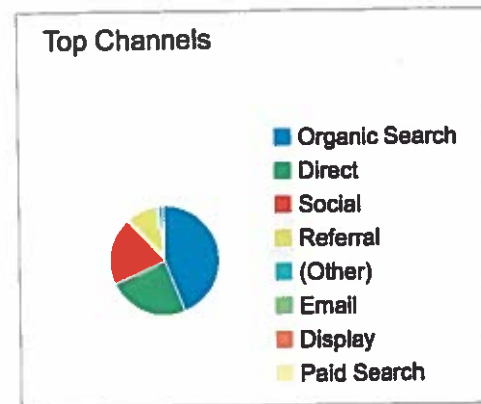


Jenny wonders: *When people came to our site, did they type in our URL or click on a bookmark? Or did they come through a search engine or from social media?*

1 In the left-hand navigation, Jenny clicks on Acquisition > Overview.



This describes the different "channels" that people used to get to the site. It includes channels like the following:





ORGANIC SEARCH: Sessions that came from search engines such as Google, Yahoo or Bing. Organic search traffic doesn't include sessions that come from paid search ads.



DIRECT: Sessions from people who typed in a URL, clicked on a bookmark, or copied and pasted a URL in a browser.



SOCIAL: Sessions from links in a social network such as Facebook or Twitter. This channel includes all traffic from social networks, not just traffic from the news organization's social network accounts.



REFERRAL: Sessions from links from another site such as the *Huffington Post*, Wikipedia or any other site that's not a search engine or a social network.



Others could include channels customized by a news organization such as **EMAIL** and paid search advertising.

Getting Specific: How did people find my story?

1 Next, Jenny clicks on Behavior > Site Content > Landing Pages.



This creates a report that shows the first page each user saw during a session.

The layout of the report is typical of most of the reports in Google Analytics: Jenny sees that it has a chart over time at the top, followed by a table full of data. The rows and columns of the table change in different reports.

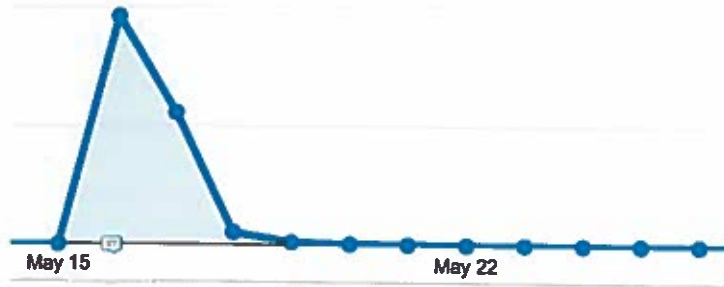
2 Jenny was interested in her story about campaign fraud.

She doesn't find the URL to her story in the top ten, so she goes to the search box at the top of the table and types in the URL.



Jenny finds that the article was viewed a lot in the first few days and did indeed contribute to the peak of sessions she saw in that time period.

After a few days, it really dropped off.



3 Now that she can see the number of sessions from people who looked at her story, she wants to know how they got there.

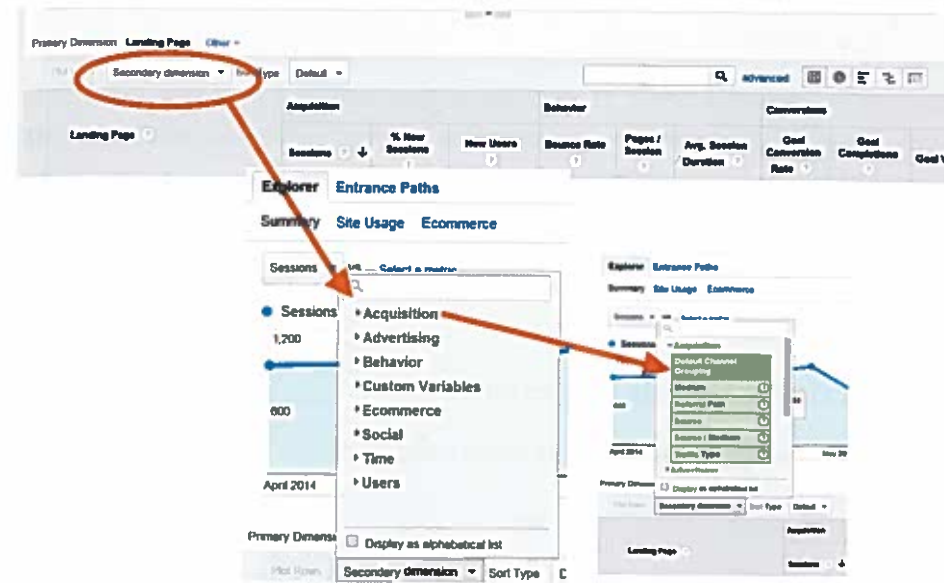
In many cases, the answers to the most interesting questions involve two different types of reports in Google Analytics. For example, Jenny wants to know how users arrived at the site (Acquisition) for a particular page (Behavior). Fortunately there are several tools for looking at the intersection of these pieces of data.

One way Jenny can do it is to add a second set of labels to the rows of the report.

Google Analytics calls the labels in the rows of a report “dimensions.” The default dimension depends on the report being viewed. In this case, the dimension is called **LANDING PAGES**. Right below that, there’s a drop-down to add a secondary dimension, Jenny uses that to add another column with another set of labels.



Clicking on the Secondary Dimension drop-down shows a list of possibilities.



After clicking on the Acquisition category to expand it, Jenny chooses **DEFAULT CHANNEL GROUPING**. (Default Channel Grouping includes Acquisition categories such as Organic Search Paths and Social.)

Now Jenny sees what number and percent of people who landed on the article came from search engines, social media sites and so on. She can click on the pie chart button at the top right of the table for a visual.

Jenny finds that the traffic to her campaign fraud story came largely from search engines, with smaller but significant portions from referring sites and social media.

In addition, she can compare metrics. One of the metrics in the table is **BOUNCE RATE**. A “bounce” is when someone comes to the site, views one page and then leaves.



Jenny finds it pretty interesting to compare her story to others, looking at which ones drew in the most new users, which ones had the lowest bounce rate and which attracted the most viewers through social media. Jenny’s article, which had an interactive feature, has a really low bounce rate! She’s glad to see that.

Getting Specific: Was the peak in sessions driven by regulars?

Comparing different types of sessions is essential to using web metrics to understand media audiences. We can see a number — like 500 sessions — but is 500 a big number or a small one?

We can use a feature called **SEGMENTS** in Google Analytics to make comparisons. Segments are simply groups of users based on some set of criteria, such as people who:

- were located in the Los Angeles metro
- came from Facebook
- were first-time visitors to the site

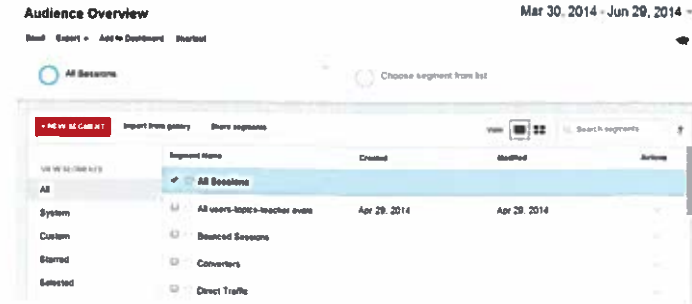
Jenny is interested in seeing whether new users acted differently than returning ones and which group accounted for most of the total traffic.

1 She goes back to Audience > Overview in the left-hand navigation.

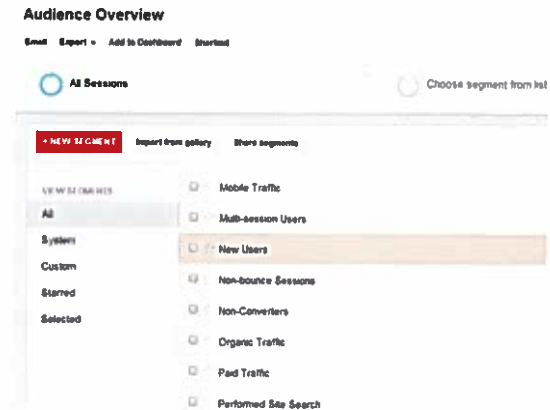
At the top, she sees the box that says “All Sessions.” This is the default segment, which shows all the traffic to a site.



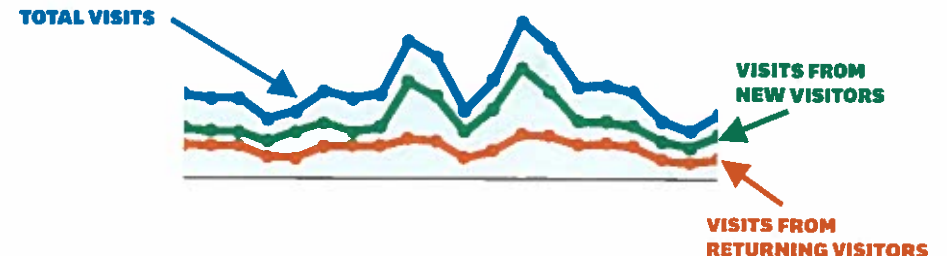
2 She clicks on the area that says + Add Segment and sees options.



3 She scrolls down and checks the boxes for both New Users and Returning Users, then clicks Apply.



The report reloads and shows the comparison of new users to the total traffic, both in the chart at top and the metrics below.



This report can answer some of the following questions:

Is the traffic to this site primarily driven by new users or returning ones? Do new users view more or fewer pages during their sessions?

Jenny finds that new users tend to account for the overall traffic, especially the peaks when stories are especially popular.

The **SEGMENTS** function is one of the most powerful tools news organizations can use to understand the audience groups that matter most to them.



SUMMARY

ASKING THE RIGHT QUESTIONS IS THE KEY TO FINDING INSIGHTS FROM WEB analytics tools such as Google Analytics. There's a lot of data, but every news organization — and every department within an organization — will have different questions.

This guide covered some of the basic site metrics and approaches that can address a variety of questions:

- Basic site metrics: Users, sessions, pageviews, bounce rate
- Looking at data by day versus data by week
- Segmenting by geography and/or traffic source or channel (e.g., organic search, direct, referring sites and links from social media)
- Comparing the basic metrics of one story versus another



TAKING MEASUREMENT TO THE NEXT LEVEL

FUTURE PUBLICATIONS WILL EXPLORE METRICS THAT ANSWER QUESTIONS SUCH as:

Did users actually read a story?

If someone spends a lot of time on a site does it mean that the content and/or the site is more valuable to them? What are the differences between the standard time measures in Google Analytics versus others used by companies such as Chartbeat?

How often did someone visit? What do regular readers do on the site versus one-time visitors?

What are the different ways stories are shared on social media? Does sharing differ by story type and/or topic?

Any suggestions for future topics? We would love to hear from you! Please send your questions and comments to us at media.impact@usc.edu.