



**CHILD CARE**  
State Capacity Building Center

# Guide for Measuring Web Traffic and Engagement

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# Guide for Measuring Web Traffic and Engagement

The Consumer Education Website Guide series aims to help state and territory staff develop effective, accessible, family-friendly consumer education websites. This series is designed to support the efforts of states and territories as they enhance their consumer education websites to help families understand the full range of child care options and resources available to them.

These guides share best practices and tips that state and territory staff can use to improve the user experience, make all information clear, and prepare for common accessibility barriers—such as limited English proficiency, limited literacy skills, and disability. They will help to ensure that all families have easy access to accurate, understandable information as child care consumers.

## Overview

This guide introduces digital analytics to lay audiences with limited experience in digital strategy, including Child Care and Development Fund Administrators and other child care professionals who have a stake in ensuring their consumer education website effectively serves their constituency. The guidance enables states and territories to convey the importance of digital analytics to information technology (IT) teams and web or digital marketing vendors, and it includes approaches that experts from those types of teams can implement. We also offer a glossary and examples to help illustrate what different terms and data points mean in the context of a larger digital strategy, marketing efforts, and organizational goals.

## Digital Analytics

Generally, the term “analytics” is a catchall that refers to data and associated processes used to measure something. Some organizations also use the term “metrics” to refer to the broad category of data points used in measurement frameworks. Subsets of metrics may include key performance indicators, engagement metrics, and other more specific measures, which will be defined and discussed more in this resource brief. We will focus primarily on three common sources of digital analytics data:

- Websites (including search engines)
- Social media
- Email marketing

While there are both free (called “organic”) and paid ways to generate reach and engagement online, this playbook will focus on organic metrics used to gauge the performance of consumer education websites and related properties, including those used in organic campaigns (such as increasing signups for a webinar series).

In this section, we discuss how to get started with measuring digital performance as well as what software and reporting methods are commonly used.

## Why Are Analytics Important, and What Can We Do with the Data?

Analytics provide the data in evidence-based user experience. We use metrics data to accomplish the following goals:

- Identify successes and failures
- Inform design and development
- Validate design decisions and test new ideas
- Spend resources smartly and appropriately
- Continuously make improvements that benefit the organization and its users

Web managers should focus on three important questions that analytics can help answer:

- Where are the opportunities to optimize the user experience?
- Where are the opportunities to generate better outcomes that align with our goals?
- Did our work-to-date have the desired effects?

## What Are the Components of an Analytics Program?

Without collecting, contextualizing, and planning for action using digital metrics, states and territories lose the ability to understand how to improve the online experience and outcomes for their users. Furthermore, measuring the state's return on its digital outreach investments is critical to understanding where it's best to spend resources in the future.

A digital analytics program should have these three components:

1. **Configuration** ensures analytics tools (for example, Google Analytics) are being used and are properly capturing the right data at the right time. Consult your IT staff to make sure you have implemented this configuration or can implement it.
2. **Measuring and monitoring** establish baselines for improvement efforts, then continuously measure what users are doing in relation to baselines and goals. States and territories will need to interpret the data based on measures of success on the site (for example, child care search tool interaction or digital toolkit submission).
3. **Analyzing and action planning** allow regular delivery of data to stakeholders in an understandable, contextualized way and help these data inform actionable recommendations for improvements. Generating monthly reports is not enough. Reporting should be ongoing as part of monitoring, and an analytics expert can regularly conduct more in-depth analyses to help explain data anomalies to stakeholders. The analysis should include an action planning component that uses findings from metrics data to encourage or discourage certain actions in the context of the organization's goals.

## Evolving an Analytics Capacity Over Time

If states and territories are capturing and reporting on metrics, it is possible that they do what many organizations do—generate a monthly report that consists of an analytics software export to PDF or a dump of data tables into a Word document. Often, someone downloads the data monthly, puts it in a document, and emails it to stakeholders with little to no interpretation or resulting action planning. This is common practice, but it will not result in truly leveraging the power of data to improve the consumer experience.

For analytics reporting, states and territories should move away from a pure presentation of numbers going up or down to a more contextualized system of reporting that describes why data show various trends and how those trends impact users.

# Guide for Measuring Web Traffic and Engagement

Identifying these trends in the data can help you decide if you should do more or less of a particular action in order to improve outcomes for users and further one's goals. Ultimately, you should make strategic recommendations that lead to action planning for future content, design, and development sprints.

A digital team (or vendors serving in such a capacity) should have an expert who can explain what the analytics data show and how they relate to the IT work needed to optimize the site's usefulness. For example, analytics may show that no users are using a search tool that is located on the home page, but many users are downloading resources from interior pages. Why? Upon further analysis, an analytics expert finds that users are primarily entering the site through Google searches, bypassing the home page altogether. They therefore never see the search tool. If the state or territory measures success based on the use of the search tool it built, it would make sense to test placing the search tool in a persistent location (for example, the header) across the whole website, so users entering on interior pages will know it is available. Without the additional contextualization and analysis of two separate data points in relation to each other, the state or territory may never have understood the root cause of its issue and deemed the search tool a failure when, in fact, not enough people knew of its existence.

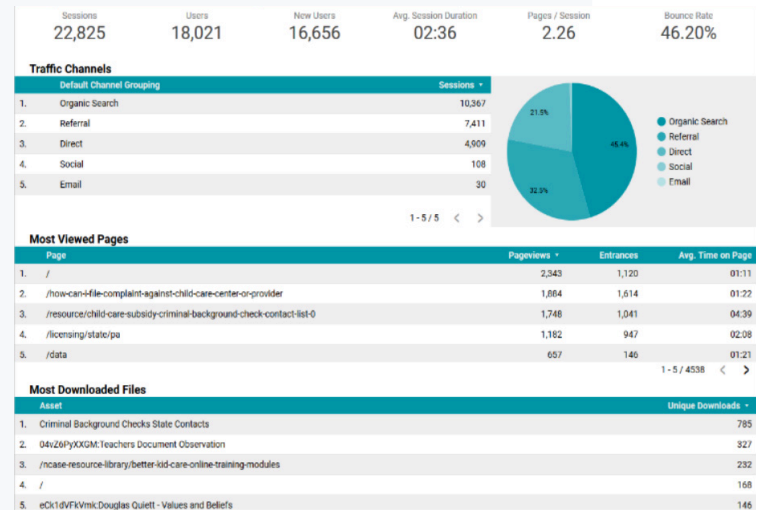
As states and territories become more sophisticated and have the capacity to add staff with analytics experience, they may want to consider launching a real-time analytics dashboard that helps monitor performance between regular reporting cycles (see the Digital Analytics Tools section for more information). Configuring alerts in analytics software for if traffic falls outside of normal ranges is also recommended as part of real-time monitoring to quickly identify any problems with software configuration, content, or design that is causing either data to be recorded improperly or users to turn away from (or surge to) the site in large numbers.

## Digital Analytics Process

While the exact configuration processes will vary based on the tools an organization decides to use, the following steps outline how to start measuring digital analytics for digital properties (for example, consumer education websites, mobile apps, and so on):

1. Define what will be measured (for example, digital goals and definitions of success).
2. Choose, install, and configure analytics software (for example, Google Analytics).
3. Allow time for data collection to occur; typically, one month's worth of data is a good starting point for initial analysis.
4. Analyze and contextualize the data based on the defined goals. Potential data points to begin looking at include the following:
  - a. Traffic sources: How are users coming to the consumer education website—through social media, direct search (through bookmarking the consumer education website, for instance), email campaign, or another site or search engine?
  - b. Traffic overall and by page: How many visitors come to the website overall? Also look at specific web pages to understand what content people are visiting more or less frequently.

Figure 1. Google Data Studio Dashboard



Source: Google. (n.d.). Dashboard showing real-time web analytics data across multiple categories [Data visualization tool]. Google Data Studio. Retrieved from <https://datastudio.google.com/navigation/reporting>. Google and the Google logo are registered trademarks of Google LLC, used with permission.

# Guide for Measuring Web Traffic and Engagement

- c. Search engine terms: What words or phrases are driving users to the consumer education website when they perform a search (for example, “quality child care”). This information can be found by integrating Google Search Console with your analytics account.
  - d. Goals and events triggered: What do users interact with on the consumer education website? For example, completing a request for ordering a toolkit is an example of a goal. Downloading a PDF or clicking on a link to share information from the consumer education website on the user’s own social media page are examples of event tracking.
  - e. User paths: What pages did users visit while on the consumer education website?
5. Compare the data to benchmarks over time and create more content that performs well and less content that does not perform as well.

For email marketing, most platforms will include analytics tools built into the administrator dashboard that load upon login. These metrics, too, should be analyzed in the context of state and territory goals.

The most commonly reviewed metrics include open rates and clickthrough rates. By using campaign URLs, states and territories can see whether users are coming to the website from marketing emails, as this action can be tracked by analytics software. Google’s Urchin Tracking Module URLs are an example of this, and they offer [a free tool to help build those URLs](#).

Campaign URLs can also be used with social media platforms. While most platforms (for example, Facebook and Twitter) offer analytics tools that provide administrators with data on link clicks, states and territories can go a step further and track how many users click a link on a social media post by using the campaign URL (thereby allowing more targeted user-behavior analysis).

Other common social media metrics provided by analytics tools include reach and engagement. Overall, the best measure of how social media content is performing is the engagement rate because it shows users’ degree of interest. Essentially, it is the rate at which users took an action after seeing the content (whether it’s something low effort, such as a “like,” or a higher-effort action, such as a “share” or link click). The engagement rate is measured as the total number of engagements out of the total number of impressions. However, state and territory goals may vary, and stakeholders may determine that certain types of engagement are more important to goal achievement than others. For example, a clickthrough to the website using a shared link may be more important to a desired result than generating a comment on a post.

## Digital Analytics Tools

The following tools are commonly used among government and nonprofit sector clients and are free or have free versions. These—and similar tools—may increase the ability to effectively collect, analyze, and report on digital analytics data. The right tool is dependent on state and territory goals and resources.

- Google Analytics or similar web metrics tools: Tracks what users are doing on a website and how they got there by installing a snippet of tracking code on the site.
- Google Data Studio: Allows visualization of web analytics through custom reporting dashboards. This tool can also pull in data from other sources in addition to Google Analytics.
- Google Optimize: Runs tests on your website’s content to learn what works best for your visitors, including A/B, multivariate, and redirect tests.
- Google Search Console: Offers tools and reports to help measure a site’s traffic and performance and helps fix issues related to search rankings. This tool offers a way to understand organic search terms and queries that drive traffic to web properties.
- Google Tag Manager: Tracks custom events and performs conversion tracking on websites.

# Guide for Measuring Web Traffic and Engagement

- **Native social media analytics:** Tools that are built into each social media platform to provide engagement and reach information.
- **Other social media tools:** Some tools have the ability to manage social media content and may also provide metrics data and social media listening (conversations) data. Sometimes multiple tools are used for the best results, such as a tool that focuses on content management and others that focus on metrics or listening.
- **Native email service provider analytics:** Email service providers offer their clients varying levels of metrics. To decide which email provider is suitable for your organization, evaluate each service's ability to offer metrics related to organizational goals balanced with cost and the ability to manage data and content in a way that is right for the organization.
- **Optimization tools:** These tools go beyond page-level data to deliver behavioral observations by looking at scrolling, heatmaps, clicks on non-clickable content, and other interactions. These tools can visualize page interactions and are helpful for understanding behavior and what people click on. They can also help you make page optimizations and develop testing ideas to help optimize your site goals.

## Glossary

The following are common terms used when discussing digital analytics and optimization for the web.

- **A/B testing:** A test that evaluates a single variable's effect on the user. (Also see multivariate testing.)
- **Analytics:** In the context of digital performance, this is a catchall term referring to the gathering and analysis of data points related to engagement with digital outreach assets such as websites, social media, and email. Also commonly called "metrics" when referring to collective data points.
- **Bounce rate:** A bounce is when a user enters and leaves a website on the same page. The bounce rate, therefore, is the percentage of users bouncing from a particular website or page. This is sometimes viewed as a negative metric because it means users are not spending time exploring the site. However, it can also be a positive metric, as it's possible that the content is designed in such a way that a user was able to quickly and easily complete their task or was able to get a question answered. A bounce also sometimes refers to an email that was undeliverable (in other words, the email address was incorrect or no longer in use); therefore, bounce rates related to email marketing lists are used to indicate how current or accurate the list is.
- **Clickthrough rate:** The percentage indicating how often a link is clicked (any hyperlinked content, such as text, a banner advertisement, or a download icon).
- **Conversion:** When a user performs an intended action. This is often measured by calculating the conversion rate, or the percentage of users who perform the action. For example, a conversion rate could be a measure of users who signed up for a webinar out of the total users who landed on the signup page.
- **Engagement:** A conversion or click, amplification (such as sharing), or a form of applause (such as liking or reacting to a post) that takes place with a piece of content. There are many individual kinds of metrics that count as engagement.
- **Engagement rate:** A term typically used in social media measurement to show the calculation (expressed as a percentage) of interactions (engagements) from users out of the total number of possible users who saw the content (impressions).
- **Impression:** A metric that counts every time a piece of content is loaded and presumably (though not definitively) viewed by a user.
- **Key performance indicator:** Also called a KPI, a key performance indicator is a metric that is directly tied to the success of an organization's goals. Not all metrics are KPIs. Visits to the website are often treated as a KPI by organizations with low maturity levels in digital performance optimization. In reality, the organization typically has a goal such as increasing downloads of particular resources—therefore, downloads would be a better KPI.

# Guide for Measuring Web Traffic and Engagement

- **KPIs framework:** A model used to map metrics in order to determine which ones are truly most important to organizational success and deserve to be treated as KPIs.
- **Multivariate testing:** Testing multiple variables' effects on users, such as an email that tests both hero images and calls to action.
- **Open rate:** Typically expressed as a percentage that signifies how many users out of the total recipients opened the email.
- **Organic search and organic search referral:** Occurs when a user conducts a search through an engine such as Google or Bing and is given a link in the results that they follow to the site. "Organic" refers to the fact that these occurrences are unpaid and do not result from pay-per-click search ads.
- **Page view:** Occurs each time a page is loaded. The number of page views and users will be different because a single user could view a page multiple times over a selected reporting period. This term is sometimes called an impression.
- **Path, user path, or path analysis:** The pathway a user follows through a site from the time they enter until they leave; path analysis helps organizations understand how to improve content findability and discoverability.
- **Reach:** The number of users who have loaded a particular piece of content. Reach is different from impressions because one user can generate multiple impressions, but the reach would still be one for that user.
- **Referrer:** A web entity that sends a user to another website (for example, a ChildCare.gov link sends a user to the Michigan consumer education website; in this case, ChildCare.gov is a referrer).
- **Session:** Record of a single visitor browsing the site (along the entire user path).
- **Visitor:** A single web user who interacts with a website.



**CHILD CARE**  
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ADMINISTRATION FOR  
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