Making Data-Driven Decisions with GA4

Digital Marketing Workshop

April 2025

A Few Starting Details

+ 45-minute sessions, including time for questions and conversation at the end

+ Session recordings shared with attendees via email at later this week

+ Use the Zoom Chat and Q+A panels to engage with attendees and submit questions

+ Need help? Use Whova's "Ask Organizers Anything" section in the Community Board or email us at **conferences@carnegiehighered.com**

Presenter

Elizabeth Glass
Director, Google Analytics

Archetype Persona
The Industrious and
Investigative Researcher

Driving data-informed decisions
by uncovering website user
behavior insights in Higher Ed.
Marketing experience in Higher
Ed and e-commerce.

Agenda

1   **Organize: Develop a Measurement Plan**

2   **Take Action: Creating GA4 Events in GTM**

3   **Measure: Getting Insights from GA4**

4   **Questions + Answers**

1

Develop a Measurement Plan

Determine what behaviors to track

+ Ensure accurate data tracking
+ Create a plan
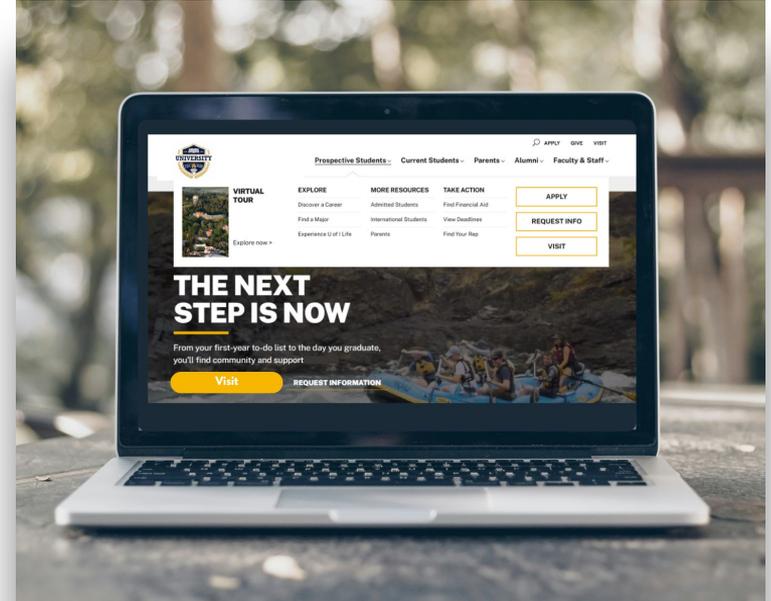+ Organize your list

Ensure GA4 is Accurately Collecting Data

+ Before you configure GA4 event tracking or begin analysis, make sure GA4 is collecting data accurately

+ Ensure Google Tag Manager (GTM) and Google Analytics 4 (GA4) tagging is set up correctly

+ Verify data settings in GA4

+ Optimize report settings

+ Resource: **How to set up GA4**
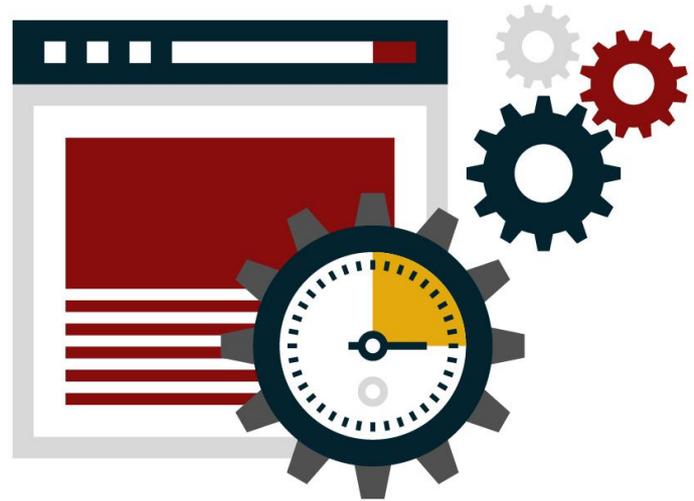
GA4 Event Tracking

Enhanced Measurement Events

+ page_view events: All Page view

+ scroll: 90% down the page

+ view_search_results: Site search when configured for your query parameter

+ Video engagement through video start, progress and complete

+ File download

+ Form Interactions through form start and submit

+ click: clicks to external sites

+ Acquisition dimensions

+ Engagement Metrics: active and new users, sessions, user engagement time, event count

Create a Plan: Organize Your List

Create a Spreadsheet where you can organize the GA4 events you want to configure in GTM.

+ Tag Name

    + Create a standard naming convention

    + Ex: "GA4 - Clicks to Common App"

+ Event Name

    + 40 Character limit, lower case with no spaces or special characters

    + Ex: "common_app_click"

+ Parameters

    + Include details for the event such as page title, link text or link url

+ Trigger Overview
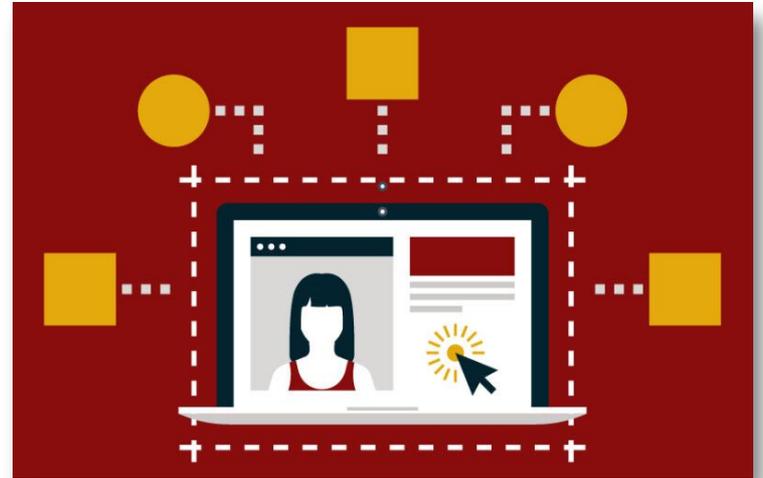
# Create a Plan: Determine Custom Events to Track

CUSTOM SCROLL TRACKING

+ Understand where users are dropping off on the page more than just the 90% mark. Include 25%, 50% and 75% tracking.

CAMPUS VISITS

+ Whether virtual or in-person visits, know where users have intent to learn more about the campus.

PROGRAM INTERACTIONS

+ Understand what website users are searching for in the program finder, what links they click on from navigation or program pages, or what program details they investigate more.
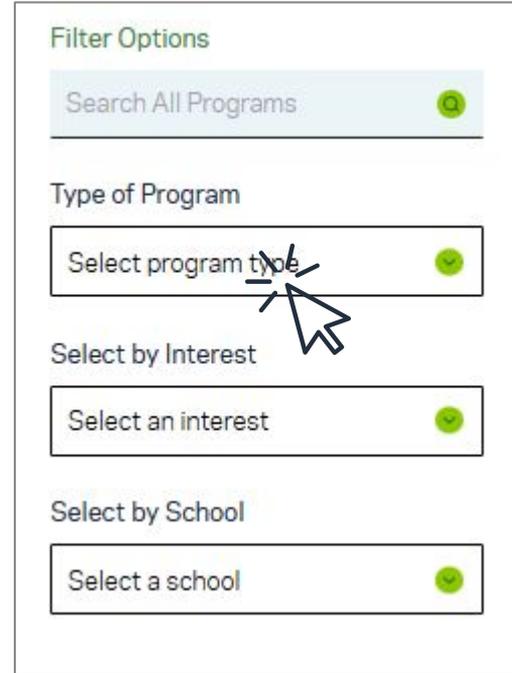
Filter Options

Search All Programs 🔍

Type of Program

Select program type ⌄

Select by Interest

Select an interest ⌄

Select by School

Select a school ⌄

Create a Plan: Determine Custom Events to Track

REQUEST FOR INFORMATION FORMS

+ Follow your users through the application funnel. Know when they are taking more interest in a program, and what marketing activities are contributing to the funnel.

+ Make sure to include Landing page RFI forms in addition to regular RFI forms.

CLICKS TO 3rd PARTY APPLICATIONS

+ User clicks to Common Application

ACCOUNT CREATION

+ Know when users are creating an account to start the application journey.

APPLICATION SUBMISSION

+ Know when users have submitted an application, giving you the ability to track user behavior from acquisition to applicant.

WELCOME TO YOUR DAY ONE

APPLY
and see your education
DIFFERENTLY.

Start your application today!

2

Take Action: Creating GA4 Events in GTM

Tips for Setting up Events Tags

+ Tag organization
+ Creating GA4 Event tags
+ Event configurations
+ Data Layer parameters

# Keep GTM Containers Organized

Tips for organizing GTM:

+ Create a GTM account for the site under a university email centrally located

    + Verify permissions for additional users

+ Create a container for the website to house all the tags

+ Organize the tags into folders
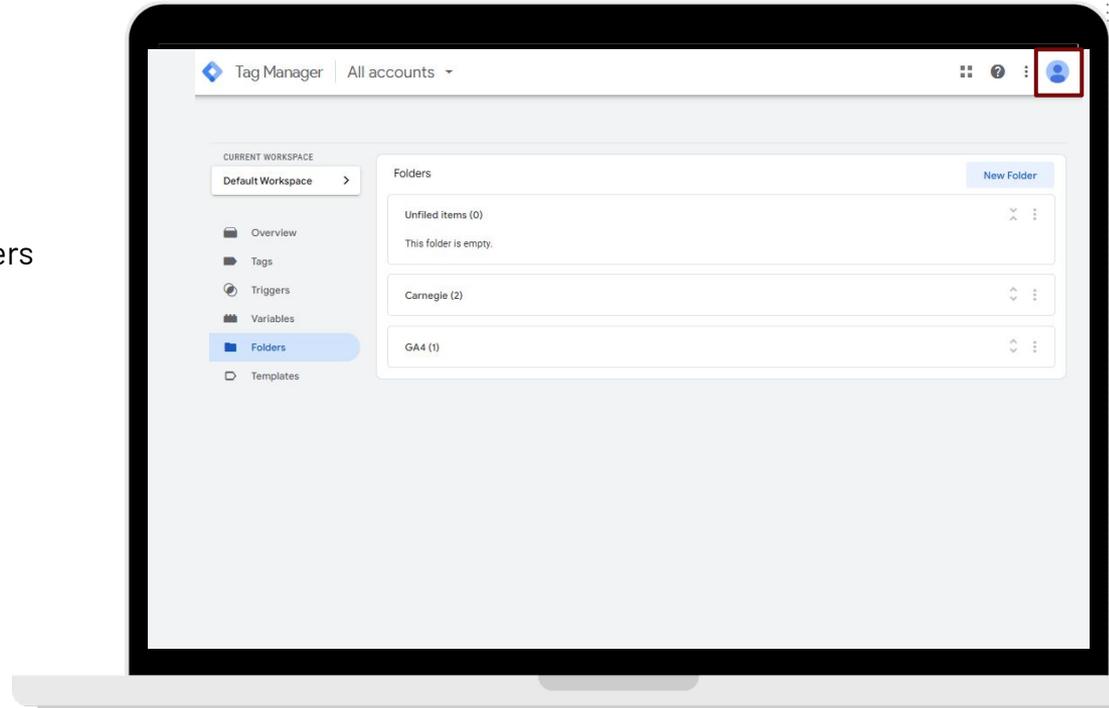
# Create GA4 Tracking Tags

Tips for creating tags in GTM

+ Be sure to create a Google Tag to send events to GA4

+ Create a tag for each event using the GA4 event configuration format

+ Create a Variable with a Constant for the GA4 Property Measurement ID

+ Use your Spreadsheet plan for the Tag and event name

+ Add parameters that would give more information about the event; click text, click url, scroll depth, etc.

+ Set a trigger to fire on the website for the user behavior you want to track in GA4. You can use multiple triggers for 1 event

+ Save your tag

+ Test tags in Preview mode
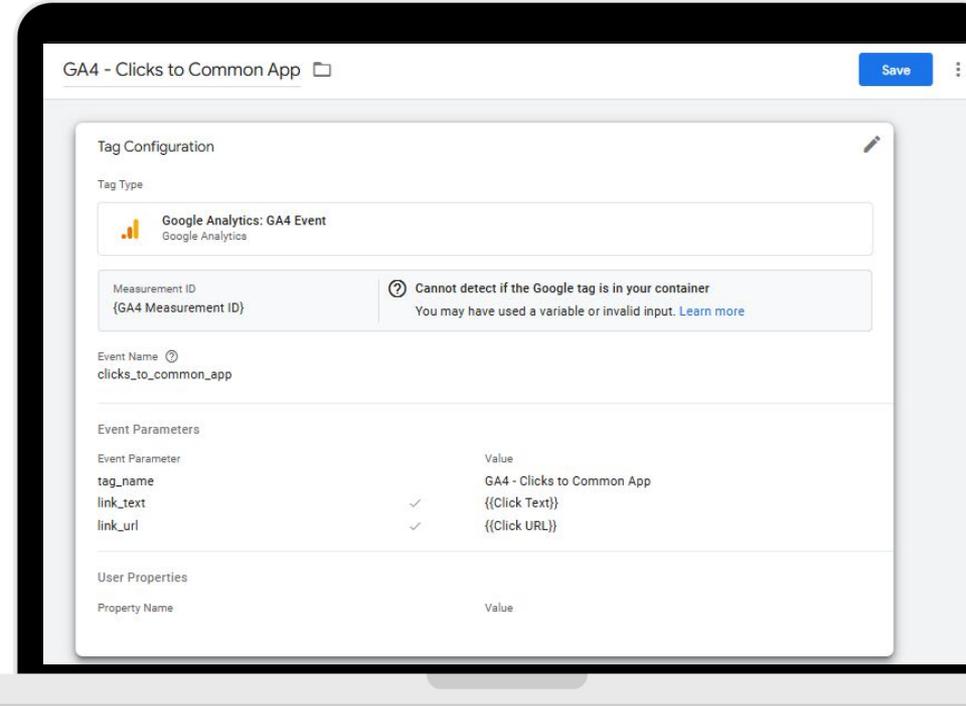
Event Configuration in GA4

Navigate to GA4 console for additional settings

+ Test events in debug mode

+ Mark important events as key events

    + If events are new and not collected, add manually

    + If events are in GA4 then you can toggle to key event

+ Add custom dimensions used as parameters in events that you want to see in GA4

    + Add page title, link_url, etc to see parameters in GA4 reports
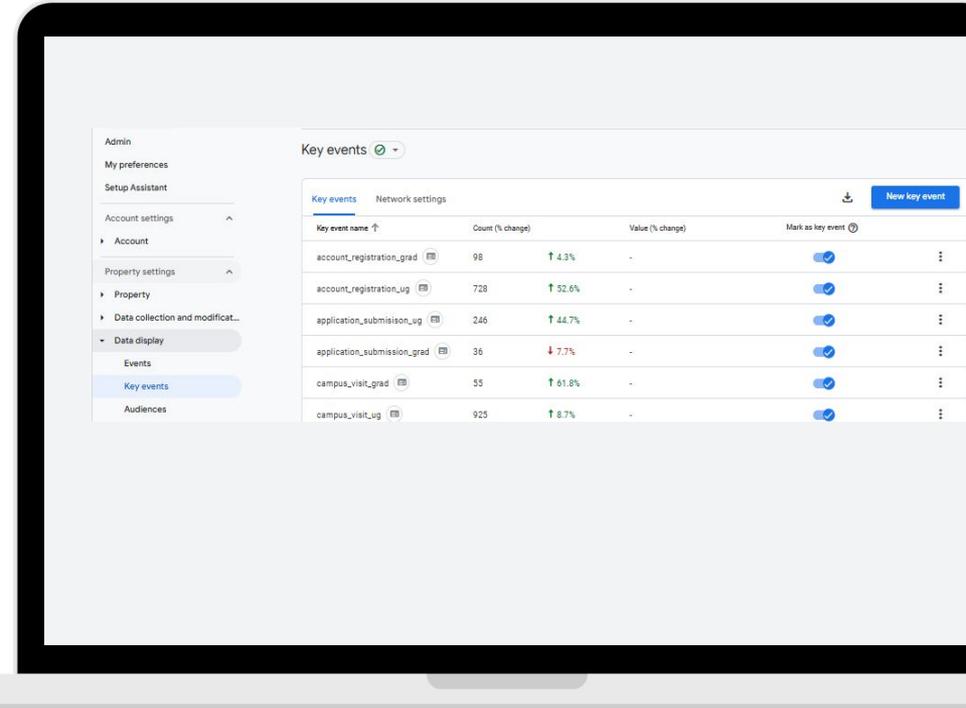
Level up your events
with data layer parameters

When tracking application submissions, include data layer information to add parameters for what program or level for the prospective student.

Event: application_submission   Parameter: program_level   Parameter value: bachelors

More about upgrading your GA4 Tracking

Custom Data Layer Dimensions

Session source / medium ▾	Application program ▾ ✕	↓ Sessions	Engaged sessions	Engagement rate	Average engagement time per session	Events per session	Event count All events ▾
Total		2,521 100% of total	2,469 100% of total	97.94% Avg 0%	1s Avg 0%	1.11 Avg 0%	2,787 100% of total
google / organic	Social Work	MSW	33 (1.31%)	33 (1.34%)	100%	0s	1.21	40 (1.44%)
google / organic	Biological Sciences	31 (1.23%)	31 (1.26%)	100%	1s	1.19	37 (1.33%)
google / organic	Counseling Psychology w/ Specialization in Child and Adolescents	MS	31 (1.23%)	31 (1.26%)	100%	0s	1.10	34 (1.22%)
google / organic	Psychology	30 (1.19%)	30 (1.22%)	100%	0s	1.17	35 (1.26%)
google / organic	Clinical Psychology	PsyD	25 (0.99%)	25 (1.01%)	100%	0s	1.04	26 (0.93%)
google / organic	Psychology«	25 (0.99%)	25 (1.01%)	100%	1s	1.20	30 (1.08%)
bing / organic	Nursing Transfer	BS	24 (0.95%)	24 (0.97%)	100%	0s	1.00	24 (0.86%)
google / organic	Family Nurse Practitioner	MSN (Entry-Level)	23 (0.91%)	23 (0.93%)	100%	0s	1.13	26 (0.93%)
google / cpc	Social Work	MSW	22 (0.87%)	22 (0.89%)	100%	0s	1.09	24 (0.86%)
google / cpc	Nursing	MSN (Entry-Level)	21 (0.83%)	21 (0.85%)	100%	0s	1.05	22 (0.79%)

3

Measure: Insights from GA4

Where to find data in GA4?

+ Campaign Dimensions and Metrics
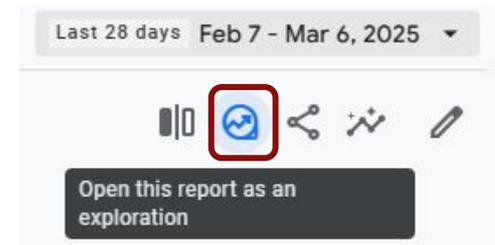+ Standard Reports
+ Explorations

How to Evaluate Campaign Effectiveness?

Look at the user journey from acquisition to events

+ Acquisition **dimensions**:

    + Session source/medium, session campaign for session scoped acquisition

    + If using manual utm tagging you can use session manual source/medium and session manual campaign name

+ Engagement **metrics**:

    + Engagement rate, session key event rate, average engagement time, event count

Where to find campaign data?

+ Review campaign performance in standard reports for Traffic Acquisition, Landing page, Event metrics, etc.

+ Send a Standard report to an Exploration to add additional dimensions and metrics

Standard Report: Traffic Acquisition

Navigate to GA4 console

+ Location:

  + Reports > Life cycle > Acquisition >
    Traffic acquisition

+ Purpose:

  + Where the user journey starts; session source /
    medium, session campaign, session primary
    channel group

  + Locate campaigns driving the most sessions,
    highest engagement rate, high average engagement
    time per session, session key event rate

+ Add Event name (filtered to specific event) to see
  where users started to complete events
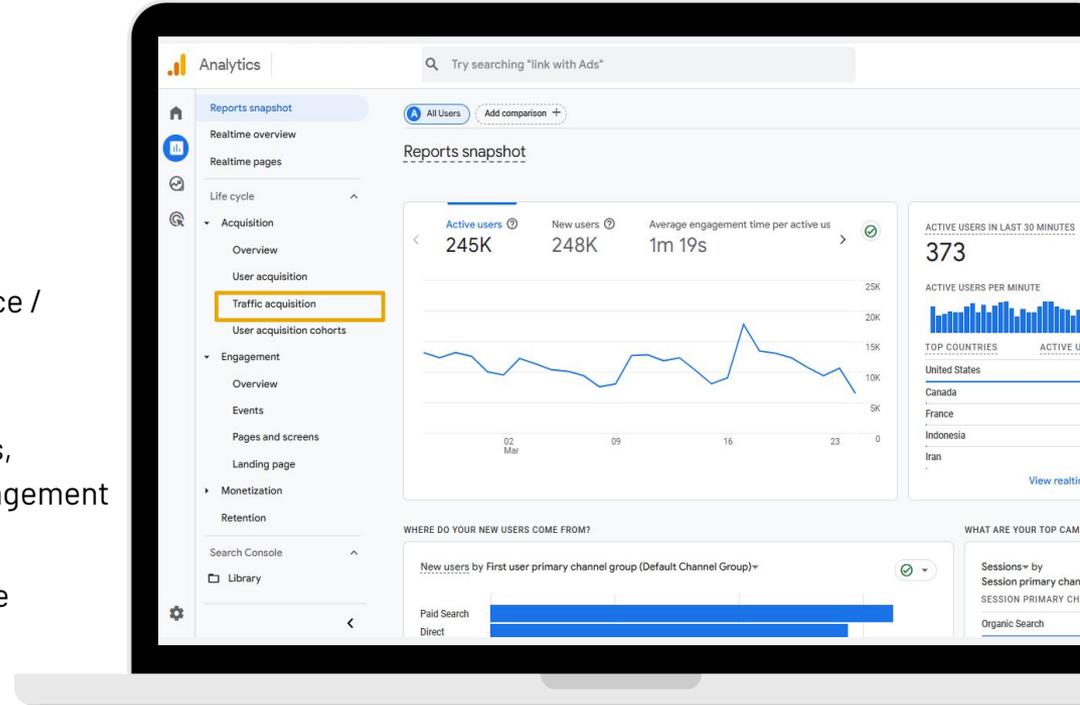
Standard Report: Traffic Acquisition

Last 28 days Feb 7 - Mar 6, 2025 ▼

Open this report as an exploration

Session primary...Channel Group) ▼ +	↓ Sessions	Engaged sessions	Engagement rate	Average engagement time per session	Events per session	Event count All events ▼	Key events All events ▼
⇕ SHOW ALL ROWS							
Total	1,867,725	1,097,695	58.77%	56s	6.54	12,222,508	22,416.00
	vs. 1,623,671	vs. 882,862	vs. 54.37%	vs. 1m 05s	vs. 6.33	vs. 10,278,668	vs. 6,038.00
	↑ 15.03%	↑ 24.33%	↑ 8.09%	↓ -13.95%	↑ 3.37%	↑ 18.91%	↑ 271.25%
Organic Search							
Jan 1 - Jan 31, 2025	1,186,882 (63.55%)	764,789 (69.67%)	64.44%	1m 07s	6.95	8,250,839 (67.51%)	14,187.00 (63.29%)
Jan 1 - Jan 31, 2024	1,149,354 (70.79%)	675,472 (76.51%)	58.77%	1m 08s	6.40	7,360,884 (71.61%)	4,297.00 (71.17%)
% change	3.27%	13.22%	9.64%	-1.62%	8.55%	12.09%	230.16%
Direct							
Jan 1 - Jan 31, 2025	482,014 (25.81%)	206,642 (18.83%)	42.87%	31s	5.41	2,609,855 (21.35%)	5,660.00 (25.25%)
Jan 1 - Jan 31, 2024	334,449 (20.6%)	158,116 (17.91%)	47.28%	54s	6.15	2,056,007 (20%)	1,261.00 (20.88%)
% change	44.12%	30.69%	-9.32%	-41.96%	-11.92%	26.94%	348.85%
Referral							
Jan 1 - Jan 31, 2025	62,843 (3.36%)	41,181 (3.75%)	65.53%	1m 06s	7.33	460,681 (3.77%)	627.00 (2.8%)
Jan 1 - Jan 31, 2024	53,401 (3.29%)	30,443 (3.45%)	57.01%	1m 34s	7.58	404,625 (3.94%)	163.00 (2.7%)
% change	17.68%	35.27%	14.95%	-29.4%	-3.25%	13.85%	284.66%
Paid Search							
Jan 1 - Jan 31, 2025	56,250 (3.01%)	49,433 (4.5%)	87.88%	55s	8.56	481,388 (3.94%)	1,586.00 (7.08%)
Jan 1 - Jan 31, 2024	16,732 (1.03%)	9,627 (1.09%)	57.54%	1m 09s	7.39	123,568 (1.2%)	241.00 (3.99%)
% change	236.18%	413.48%	52.74%	-19.83%	15.88%	289.57%	558.09%

Session primary channel group (Default Channel Group)
Session default channel group
Session source / medium
Session medium
Session source
Session source platform
Session campaign

Standard Report: Traffic Acquisition

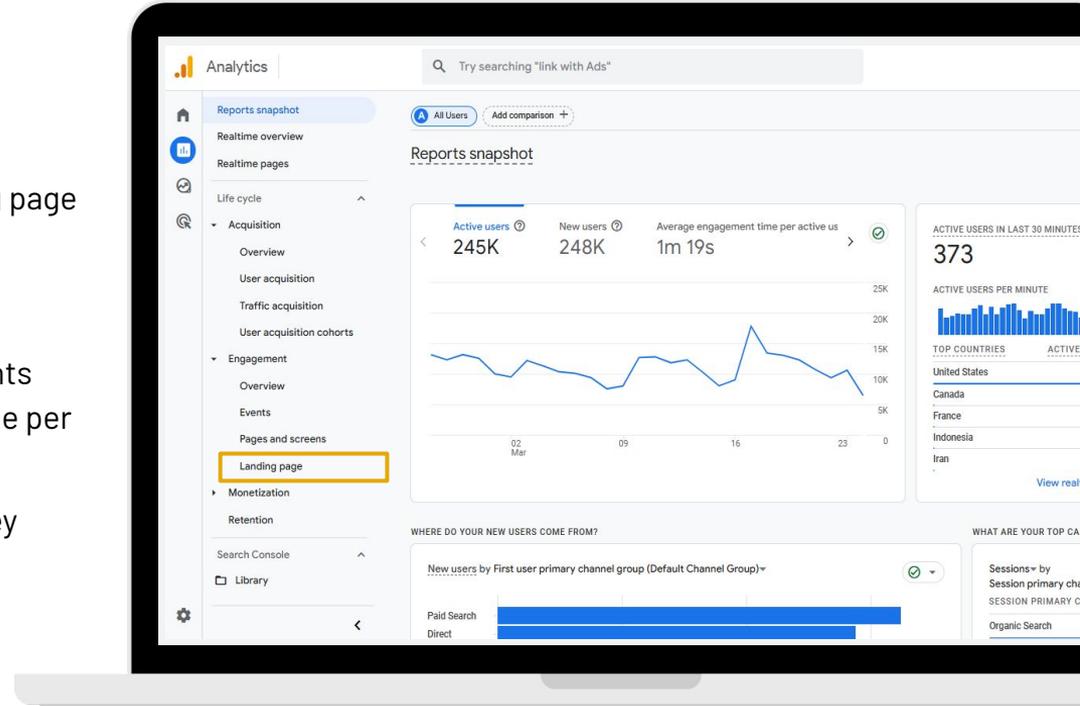Last 28 days Feb 7 - Mar 6, 2025 ▾

Open this report as an exploration

Session source / medium ▾	Session campaign ▾ ✕	↓ Sessions	Engaged sessions	Engagement rate	Average engagement time per session	Events per session	Event count All events ▾	Key events All events ▾	Session key event rate All events ▾
Total		13,392 100% of total	4,334 100% of total	32.36% Avg 0%	44s Avg 0%	5.77 Avg 0%	77,210 100% of total	374.00 100% of total	1.19% Avg 0%
1 google / cpc	ug	4,784 (35.72%)	1,126 (25.98%)	23.54%	44s	5.54	26,516 (34.34%)	128.00 (34.22%)	0.96%
2 carnegie-digital / display	ug-yield-25	2,760 (20.61%)	60 (1.38%)	2.17%	0s	3.11	8,589 (11.12%)	0.00 (0%)	0%
3 google / cpc	ug-cphs	1,391 (10.39%)	907 (20.93%)	65.2%	56s	7.81	10,867 (14.07%)	24.00 (6.42%)	1.37%
4 google / cpc	ug-cas	1,208 (9.02%)	785 (18.11%)	64.98%	59s	7.85	9,485 (12.28%)	24.00 (6.42%)	0.58%
5 google / cpc	ug-sjmc	842 (6.29%)	523 (12.07%)	62.11%	49s	6.46	5,437 (7.04%)	13.00 (3.48%)	1.07%
6 google / cpc	ug-zcob	771 (5.76%)	503 (11.61%)	65.24%	54s	7.53	5,806 (7.52%)	23.00 (6.15%)	1.17%
7 carnegie-digital / display	ug	479 (3.58%)	23 (0.53%)	4.8%	1s	3.16	1,516 (1.96%)	0.00 (0%)	0%
8 tik-tok / paid-social	ug	138 (1.03%)	5 (0.12%)	3.62%	2s	3.22	444 (0.58%)	0.00 (0%)	0%
9 carnegie-digital / lightbox	ug-apply	137 (1.02%)	90 (2.08%)	65.69%	5m 34s	12.55	1,719 (2.23%)	57.00 (15.24%)	16.06%
10 carnegie-digital / custom-content	ug-oos-apply	132 (0.99%)	89 (2.05%)	67.42%	3m 05s	12.96	1,711 (2.22%)	27.00 (7.22%)	8.33%

Standard Report: Landing Page

Navigate to GA4 console

+ Location:

    + Reports > Life cycle > Engagement > Landing page

+ Purpose:

    + The first page the users lands on

    + View metrics for the entire session; key events during the session, average engagement time per session
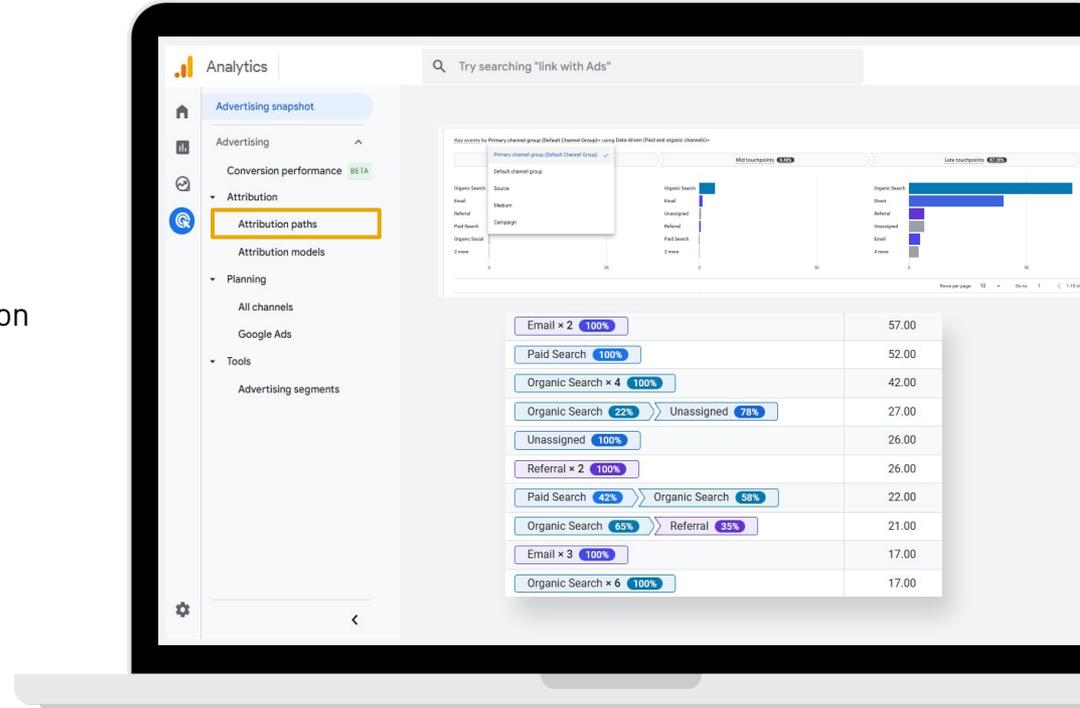
    + Locate pages that drive the most users to key events

Standard Report: Landing Page

	Landing page	Event name ▼ ✕	↓ Sessions	Active users	New users	Average engagement time per session	Key events
	Total		569 0.13% of total	541 0.22% of total	0 0% of total	18s Avg -59.34%	619.00 9.48% of total
1	/	rfi_submission_key	109 (19.16%)	108 (19.96%)	0 (−)	24s	114.00 (18.42%)
2	/nursing	rfi_submission_key	51 (8.96%)	50 (9.24%)	0 (−)	23s	53.00 (8.56%)
3	/register/RFI	rfi_submission_key	39 (6.85%)	39 (7.21%)	0 (−)	39s	40.00 (6.46%)
4	/programs/lvn-to-bsn	rfi_submission_key	24 (4.22%)	23 (4.25%)	0 (−)	11s	24.00 (3.88%)
5	/programs/entry-level-masters-in-nursing	rfi_submission_key	22 (3.87%)	21 (3.88%)	0 (−)	1s	24.00 (3.88%)
6	/programs	rfi_submission_key	18 (3.16%)	18 (3.33%)	0 (−)	0s	18.00 (2.91%)
7	/programs/school-psychology-specialist-degree	rfi_submission_key	16 (2.81%)	16 (2.96%)	0 (−)	2s	17.00 (2.75%)
8	/programs/bsn-transfer	rfi_submission_key	15 (2.64%)	15 (2.77%)	0 (−)	2s	17.00 (2.75%)
9	/programs/msn-np	rfi_submission_key	11 (1.93%)	11 (2.03%)	0 (−)	4s	11.00 (1.78%)
10	/admissions	rfi_submission_key	10 (1.76%)	10 (1.85%)	0 (−)	7s	10.00 (1.62%)

Plot rows   Q rfi_submission   Rows per page: 10 ▼   Go

Standard Report: Attribution Path

Navigate to GA4 console

+ Location:

    + Advertising > Attribution > Attribution paths

+ Purpose:

    + How paid channels are working in combination with organic and owned ones

    + The average touchpoints it takes users to complete ***key events***

Advertising Report: Attribution Path

Explorations: Free Form

Navigate to GA4 console

+ Location:

    + Explore > Blank or Free form

+ Purpose:

    + View multiple dimensions and metrics as you need

    + Create multiple tabs in the same report to have a variety of reports in one place

    + Return to reports easily with your configurations

   + Analyze traffic with segments

Explorations: Free Form

Explorations: Funnel Report

Navigate to GA4 console

+ Location:

    + Explore > Blank or Funnel Exploration

+ Purpose:

    + Funnel Exploration reports are useful for following a user journey, tracked through events, to discover where users are dropping off in the funnel.

    + Are users completing the steps in the funnel as you expect?

    + Viewing the admission journey through a funnel report can identify friction points users are experiencing on the site and can lead to website optimization opportunities.
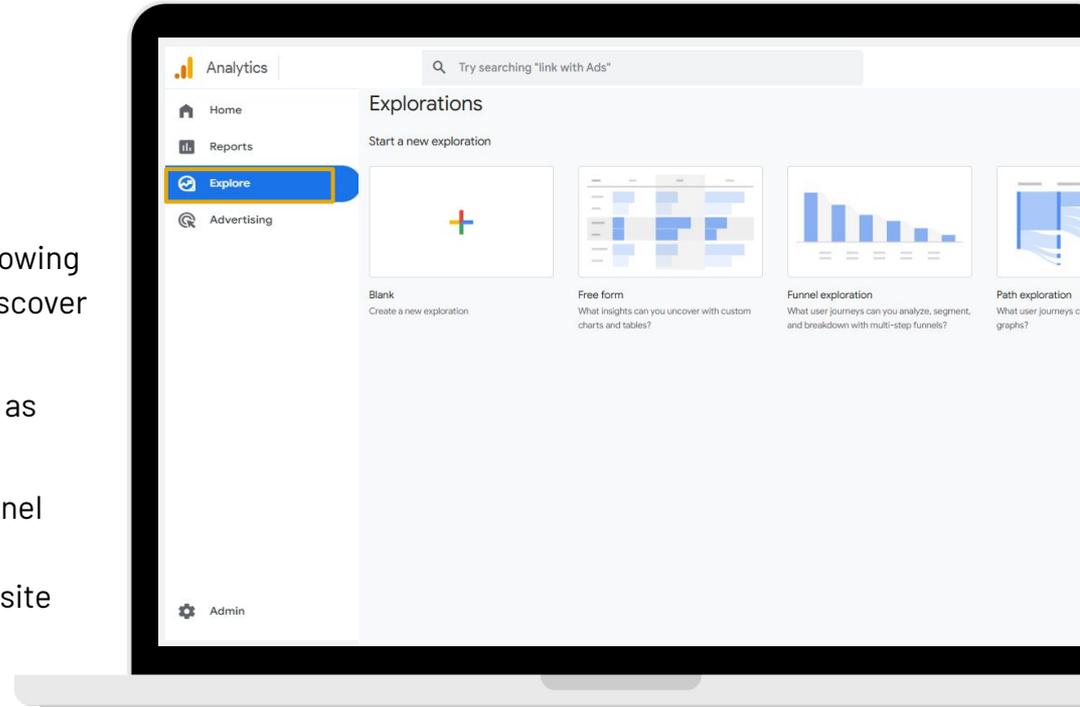
Explorations: Funnel Report
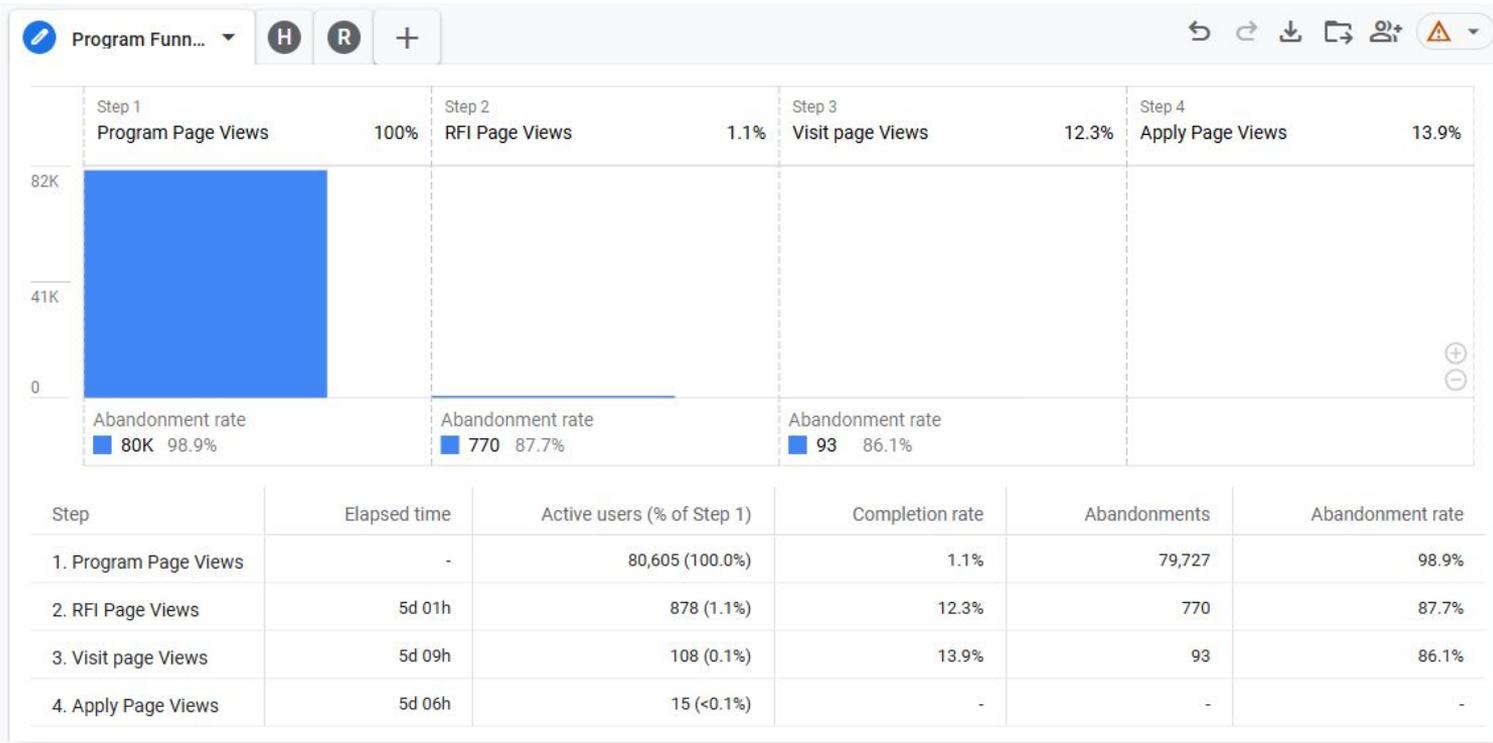
Resources

How to Set-up GA4
Tips for Setting-up and Auditing Your Property

Learn More about Data Layers
Level Up Your Reporting

Explore
Partner with Carnegie

Scan the QR code for a 20% discount on a 12-month Conversion Rate Optimization package

Thank You!

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